



Department of Energy
Western Area Power Administration
P.O. Box 281213
Lakewood, CO 80228-8213

April 1, 2019

VIA eTARIFF

Honorable Kimberly D. Bose
Office of the Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Room 1A, East
Washington, DC 20426

Re: Western Area Power Administration
Docket No. NJ19-_____

Dear Secretary Bose:

Pursuant to 18 C.F.R. § 35.28(e) and 18 C.F.R. § 385.207, Western Area Power Administration (WAPA) hereby submits revisions to its non-jurisdictional Open Access Transmission Tariff (OATT) and petitions the Commission for a declaratory order finding that these modifications to WAPA's OATT substantially conform to, or are superior to the Commission's *pro forma* OATT and that these WAPA modifications satisfy the requirements for reciprocity status. The purpose of the filing is to modify WAPA's OATT, Large Generator Interconnection Agreement (LGIA), and Small Generator Interconnection Procedures and Agreement (SGIP and SGIA, respectively) in order to address the Commission's Order Nos. 676-H,¹ 764,² 784,³ 792,⁴ and 828,⁵ which

¹ *Standards for Business Practices and Communication Protocols for Public Utilities*, Order No. 676-H, FERC Stats. & Regs. ¶ 31,359, *as modified, errata notice*, 149 FERC ¶ 61,014 (2014), *order on reh'g*, 151 FERC ¶ 61,046 (2015).

² *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g and clarification*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on clarification and reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013).

³ *Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, Order No. 784, FERC Stats. & Regs. ¶ 31,349 (2013), *order on clarification*, Order No. 784-A, 146 FERC ¶ 61,114 (2014).

⁴ *Small Generator Interconnection Agreements and Procedures*, Order No. 792, 145 FERC ¶ 61,159 (2013), *as modified, errata notice*, 146 FERC ¶ 61,019 (2014), *as modified, errata notice*, 148 FERC ¶ 61,215 (2014), *clarified*, Order No. 792-A, 146 FERC ¶ 61,214 (2014).

⁵ *Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities*, Order No. 828, 156 FERC ¶ 61,062 (2016).

WAPA is currently in a position to incorporate into its OATT, and to address certain other issues such as removal of the transmission capacity reassignment price cap under section 23.1 of WAPA's OATT. WAPA posted notice of this proposed filing on its Open Access Same-Time Information System (OASIS) sites and also held a public meeting on January 11, 2019, to ensure notification of these proposed changes to WAPA's current and prospective interconnection and transmission customers, and to obtain input from affected stakeholders.⁶

As explained further below, WAPA will need to defer its OATT revisions for the Commission's outstanding Order Nos. 827,⁷ 842,⁸ 845,⁹ and 1000¹⁰ until a later date. Accordingly, this filing does not propose to address the *pro forma* revisions promulgated in those orders.

I. BACKGROUND

WAPA is a Federal power marketing administration that markets Federal power and owns and operates transmission facilities in fifteen western and central states, encompassing a geographic area of 1.3 million square-miles. WAPA was established pursuant to section 302 of the DOE Organization Act.¹¹ WAPA's primary mission is to market Federal power and transmission resources constructed pursuant to congressional authorization. The Federal generation marketed by WAPA resulted from the construction of power plants by the Federal generating agencies, principally the Department of the Interior's Bureau of Reclamation and the Army Corps of Engineers. The power and transmission requirements of project use loads, which are designated by Congress and carry out purposes such as pumping of irrigation water, must by law be met first for the life of those projects. Power in excess of these requirements is available for marketing by WAPA to its preference customers.

WAPA owns and operates over 17,000 miles of high-voltage transmission lines and has entered into long-term transmission contracts for widespread distribution of this generation to project use

⁶ See, e.g., <https://www.wapa.gov/newsroom/NewsReleases/2018/Pages/oatt-revision-webinar-materials-available.aspx>.

⁷ *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, FERC Stats. & Regs. ¶ 31,385 (2016), *order on clarification and reh'g*, 157 FERC ¶ 61,003 (2016).

⁸ *Essential Reliability Services and the Evolving Bulk-Power System – Primary Frequency Response*, Order No. 842, 162 FERC ¶ 61,128 (2018), *order on clarification and reh'g*, 164 FERC ¶ 61,135 (2018).

⁹ *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *order on reh'g*, Order No. 845-A 166 FERC ¶ 61,137 (2018).

¹⁰ *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S. C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014).

¹¹ 42 U.S.C. § 7152(a) (2017).

and preference customers comprised of non-profit entities such as electric cooperatives, municipal utilities, Indian tribes, and Federal and state government entities. WAPA has four Regional offices located in Phoenix, Arizona (Desert Southwest Region), Loveland, Colorado (Rocky Mountain Region), Sacramento, California (Sierra Nevada Region), and Billings, Montana (Upper Great Plains Region), as well as the Colorado River Storage Project Management Center located in Salt Lake City, Utah (collectively, Regions), and a Headquarters Office located in Lakewood, Colorado. WAPA's Regions have reserved sufficient transmission capacity on the systems they manage to meet their existing statutory obligations regarding project use and preference power deliveries. Those obligations are accounted for in each Federal project's marketing plan, which is, in turn, implemented through existing contracts for the provision of hydroelectric capacity and/or energy. In addition, WAPA's transmission system is used by third parties for network and point-to-point transmission service purposes; therefore, WAPA has contractual obligations it must meet under a myriad of existing transmission agreements which were executed before and after WAPA's OATT became effective.

WAPA is not a public utility subject to the Commission's jurisdiction under sections 205 and 206 of the Federal Power Act (FPA).¹² WAPA is, however, a transmitting utility subject to FPA sections 210-213,¹³ and has provided open access transmission service since its inception in 1977. As discussed previously, the purpose of this filing is to address the Commission's Order Nos. 676-H, 764, 784, 792, and 828, and to address certain other issues such as removal of the transmission capacity reassignment price cap under section 23.1 of WAPA's OATT. This filing letter outlines the proposed revisions and briefly explains why they are necessary.

II. PROPOSED REVISIONS

A. OATT Revisions for Certain Commission Rulemaking Orders

1. Order No. 676-H

Order No. 676-H adopted Version 3 of the North American Energy Standards Board (NAESB) Wholesale Electric Quadrant (WEQ) business practice standards, the most significant of which involved the administration of service across multiple transmission systems and implementation of Network Integration Transmission Service (NITS) on the OASIS. In so doing, Order No. 676-H provided two options for compliance. First, a Transmission Provider may revise its OATT to eliminate the individual NAESB WEQ standards references previously incorporated into its

¹² 16 U.S.C. §§ 824d and 824e (2017).

¹³ 16 U.S.C. §§ 824i-824l (2017).

OATT, and, instead, obligate itself to comply with the current and future standards by adding the following language in its OATT: “The current versions of the NAESB WEQ Business Practice Standards incorporated by reference into the Commission’s regulations as specified in Part 38 of the Commission’s regulations (18 CFR Part 38) are incorporated by reference into this tariff.”¹⁴ Alternatively, a Transmission Provider not electing the first option must revise its OATT to explicitly incorporate the modified business practice standards references adopted by and listed in Order No. 676-H.

WAPA chose the second option above to address Order No. 676-H, i.e., to revise Attachment N to its OATT to explicitly incorporate the modified *pro forma* business practice standards references promulgated in Order No. 676-H, as corrected by the pertinent errata notice dated October 3, 2014. In this manner, WAPA can avoid possible future conflicts with its governing statutes, regulations, and orders, by reviewing future standards that the Commission incorporates by reference into its regulations rather than having them automatically incorporated into WAPA’s OATT. WAPA has reviewed the NAESB WEQ business practice standards references promulgated in Order No. 676-H and determined that WAPA can implement those standards without conflicts to its governing statutes, regulations, and orders, and therefore WAPA made proposed revisions to its OATT Attachment N to include the updated references.

2. Order No. 764

Order No. 764 revised the *pro forma* OATT to allow Transmission Customers to submit transmission schedules at 15-minute intervals rather than hourly, and revised the *pro forma* LGIA to require new Interconnection Customers who’s Generating Facilities are Variable Energy Resources to submit meteorological and forced outage data if the Transmission Provider is performing power production forecasting. WAPA’s Regional Transmission Providers previously responded to portions of Order No. 764 by implementing business practices in January 2015 to allow Transmission Customers to submit transmission schedules intra-hour and at 15-minute intervals. Consequently, to fully address Order No. 764, WAPA made the following proposed revisions to its OATT and LGIA:

- Inserted language in OATT section 13.8 (Scheduling of Firm Point-To-Point Transmission Service) and section 14.6 (Scheduling of Non-Firm Point-To-Point Transmission Service) to accommodate intra-hour scheduling comprised of four intervals of 15-minute schedules.

¹⁴ Order No. 676-H at P 87 and n. 147.

- Revised LGIA Article 1 (Definitions) to include the new term “Variable Energy Resource,” meaning a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.
- Added a new LGIA Article 8.4 (Provision of Data from a Variable Energy Resource) requiring new Interconnection Customers whose Generating Facilities are Variable Energy Resources to, among other things, provide meteorological and forced outage data to the Transmission Provider to the extent necessary for the Transmission Provider’s development and deployment of power production forecasts for that class of Variable Energy Resources.

3. Order No. 784

In accordance with Order No. 784, WAPA added *pro forma* language to its OATT Schedule 3 (Regulation and Frequency Response Service) requiring the Transmission Provider to, among other things, take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements.

In addition, to help Transmission Customers make an “apples-to-apples” comparison of regulation resources, Order No. 784 required each public utility Transmission Provider to post on its OASIS historical one-minute and 10-minute area control error data for the most recent calendar year and to update this posting once per year.¹⁵ WAPA’s Regional Transmission Providers began posting such data on their OASIS sites on or before the date that Order No. 784 became effective.

Finally, Order No. 784 revised the accounting and reporting requirements under the Commission’s Uniform System of Accounts and its forms, statements, and reports for public utilities to better account for and report transactions associated with the use of energy storage devices in public utility operations. However, these revisions are not applicable to WAPA insofar as it is not a public utility, and, thus, it does not utilize the affected Commission Form Nos. 1, 1-F, and 3-Q.

¹⁵ Order No. 784 at P 116.

4. Order No. 792

Order No. 792 amended the *pro forma* SGIP and SGIA with the intention of reducing the time and cost to process Small Generating Facility Interconnection Requests, and to remove barriers to the development of new energy resources. Therefore, WAPA made the following proposed revisions to its SGIP and SGIA in accordance with Order No. 792:

- Appended language to SGIP section 1.1 (Applicability) indicating that if the Interconnection Customer wishes to interconnect its Small Generating Facility using Network Resource Interconnection Service, it must do so under the LGIP and execute the LGIA.
- Added numerous provisions to SGIP section 1.2 (Pre-Application) requiring the Transmission Provider to provide to the Interconnection Customer, upon its submission of a written formal request along with a non-refundable fee of \$300, a non-binding pre-application report regarding the transmission facilities likely to serve and system conditions at the proposed Point of Interconnection. Furthermore, because WAPA’s Commission-approved SGIP does not contain the *pro forma* section 2,¹⁶ WAPA modified the new *pro forma* subsection 1.2.3.8 to include language from Order No. 792’s new *pro forma* subsection 2.4.4.1.1, as follows: “Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load ~~as described in section 2.4.4.1.1 below~~ and absolute minimum load, when available. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.”
- Added language to SGIP section 4.10 (Capacity of the Small Generating Facility) allowing the Interconnection Customer to propose to limit the output of its Small Generating Facility through use of a control system, power relay(s), or other similar device settings or adjustments, subject to the Transmission Provider’s agreement.
- Modified SGIP Attachment 1 (Glossary of Terms) to include the terms “Network Resource” and “Network Resource Interconnection Service” from the LGIP, and

¹⁶ See WAPA’s filing submitted on March 1, 2007, in Docket No. NJ07-2-000 at p 14 (explaining that “. . . the abbreviated procedures applicable to the Fast Track Process do not accommodate the need to perform a substantive environmental review under NEPA.”); and *Western Area Power Administration*, 119 FERC ¶ 61,329 at P 20-21 (2007).

modified SGIP Attachment 1 and SGIA Attachment 1 (Glossary of Terms) to include electric storage devices in the definition of “Small Generating Facility.”

- Modified SGIP Attachment 1 (Glossary of Terms) to also include the non-*pro forma* term “Interconnection Service” for completeness given that the term “Network Resource Interconnection Service” added to address Order No. 792 includes a reference to that capitalized term within its definition. The additional term is defined as follows:

“Interconnection Service – The service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Small 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 Small Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.”

- Added provisions to SGIP Attachment 5 (Facilities Study Agreement) that, among other things, allow the Interconnection Customer to provide written comments on upgrades required for interconnection, which the Transmission Provider shall include in the final report.
- Corrected a grammatical error in SGIA Article 3.3.6.

In WAPA’s previous filing with the Commission incorporating the SGIP and SGIA into WAPA’s OATT, WAPA proposed—and the Commission approved—omission of the SGIP’s Fast Track and 10 kW Inverter Processes from WAPA’s SGIP partly based on the fact that WAPA provides open access transmission service only over its high-voltage transmission facilities, and, therefore, WAPA would be unable to process requests under the SGIP and SGIA for interconnection to distribution-level facilities.¹⁷ For the same reason here, WAPA omitted from its SGIP section 3.1 (Study Process – Applicability) the *pro forma* phrase “or Distribution System” that Order No. 792 inserted into the provision.¹⁸

5. Order No. 828

In accordance with Order No. 828, WAPA added a new SGIA article 1.5.7 requiring frequency ride-through capability and voltage ride-through capability for a new or modified Small

¹⁷ *Id.*

¹⁸ Order No. 792 at Appendix C, p 20.

Generating Facility. Specifically, the new *pro forma* language provides that the Small Generating Facility shall not disconnect automatically or instantaneously for a defined under- or over-frequency condition or a defined under- or over-voltage condition, with the conditions to be defined in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other Generating Facilities on a comparable basis.

WAPA's modifications include two minor differences from the revised *pro forma* language insofar as the latter contains an erroneous internal reference to "section 2.1 of this agreement" that WAPA corrected to state "article 2.1 of this agreement [emphases added],"¹⁹ and the reference to "Balancing Authority" was corrected to "Balancing Authority Area" for consistency throughout article 1.5.7.

6. Deferral of OATT Revisions for Other Rulemaking Orders

As discussed hereafter, WAPA will need to defer its OATT revisions for the Commission's outstanding Order Nos. 827, 842, 845, and 1000 until a later date.

- Order No. 827: With respect to Order No. 827, due to the extensive geographical size of WAPA's transmission system and the diversity of its Interconnection and Transmission Customers, WAPA has identified the need to undertake, but has not yet completed, an analysis of potential operational and rate impacts of the order's requirement for newly interconnecting non-synchronous Generating Facilities to maintain a power factor within the range of 0.95 leading to 0.95 lagging at the high-side of the respective Generating Facility substation, rather than at the Point of Interconnection as currently stated in WAPA's OATT. Additionally, WAPA is conducting an analysis to determine whether this requirement conflicts with related, and previously Commission approved, non-*pro forma* language in WAPA's OATT forms of service agreement,²⁰ and if so, how to address those conflicts. Therefore, WAPA will need to defer proposing any *pro forma* revisions directed in Order No. 827 at this time. WAPA will submit a subsequent filing to the Commission addressing Order No. 827 as soon as practicable after WAPA completes its analysis and obtains input from affected stakeholders. WAPA plans to begin that subsequent OATT revision in the second quarter of 2019.

¹⁹ Unlike the *pro forma* LGIA, the *pro forma* SGIA's references to its own "articles" are not capitalized.

²⁰ Specifically, the requirement for the Transmission Customer to maintain a specified power factor range for all deliveries of capacity and energy to and from WAPA's Transmission System. See section 8.0 of Attachments A and B to WAPA's OATT, and section 7.0 of the "Specifications for Network Integration Transmission Service" form in Attachment F to WAPA's OATT.

- [Order No. 842](#): WAPA is currently reviewing the *pro forma* LGIA and SGIA revisions adopted by Order No. 842 given the recent issuance of a rehearing order by the Commission in that proceeding that occurred after WAPA began this OATT revision and associated stakeholder process. WAPA will submit a subsequent filing to the Commission addressing Order No. 842 as soon as practicable after it completes that review and obtains input from affected stakeholders. WAPA plans to begin that subsequent OATT revision in the second quarter of 2019.
- [Order No. 845](#): WAPA is currently reviewing the *pro forma* LGIA and LGIA revisions adopted by Order No. 845 given the recent issuance of a rehearing order by the Commission in that proceeding that occurred after WAPA began this OATT revision and associated stakeholder process as well as the request for rehearing filed last week in the proceeding. WAPA will submit a subsequent filing to the Commission addressing Order No. 845 as soon as practicable after it completes that review and obtains input from affected stakeholders. WAPA anticipates beginning a subsequent OATT revision to address Order No. 845 in the second half of 2019.
- [Order No. 1000](#): Following the Commission's issuance of Order No. 1000, WAPA's Regional Transmission Providers invested significant efforts to jointly create planning regions and transmission planning processes with its neighboring Transmission Providers to address the Order No. 1000 requirements.

WAPA's Upper Great Plains Region (UGPR) was actively working with the Mid-Continent Area Power Pool (MAPP) participants to create a planning region and updated transmission planning processes within MAPP that UGPR could participate in prior to its decision to join the Southwest Power Pool, Inc. (SPP), after which UGPR transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015.²¹ SPP is currently the Transmission Provider for UGPR's transmission facilities under the SPP Open Access Transmission Tariff (SP OATT), and the UGPR transmission system is included in the SPP Transmission Planning Process under Attachment O of the SPP OATT. WAPA made proposed revisions to OATT Attachment P to reflect UGPR addressing the Order No. 1000 requirements in SPP, and to remove the mooted transmission planning process language related to UGPR in Part I of Attachment P to WAPA's OATT (Transmission Planning Process – Upper Great Plains Region).

²¹ See, e.g., *Southwest Power Pool, Inc.*, 149 FERC ¶ 61,113 (2014) at P 74-76.

WAPA's Desert Southwest (DSW), Rocky Mountain (RMR), and Sierra Nevada (SNR) Regional Offices actively participated in the formation of the WestConnect planning region and each of these Regional Transmission Providers joined the Commission-approved WestConnect planning region as a Coordinating Transmission Owner.²² Therefore, DSW, RMR, and SNR are currently participating in the WestConnect planning region. WAPA was prepared to incorporate revisions to Part II of Attachment P to its OATT to reflect the participation of those regions and to address the Order No. 1000 requirements in this OATT revision filing. However, the public utility Transmission Providers in the Order No. 1000 WestConnect transmission planning region have suggested to WAPA they may terminate their filed OATT planning attachments and refile to remove the Commission-approved Coordinating Transmission Owner provisions. Currently, the jurisdictional entities have appealed the Commission's latest Order involving the WestConnect planning region and that appeal is being held in abeyance pending ongoing discussions between the jurisdictional and non-jurisdictional parties.²³

Therefore, WAPA will also need to defer incorporating any proposed Order No. 1000-related revisions to Part II of Attachment P to its OATT (Transmission Planning Process – Western Interconnection of WAPA's Rocky Mountain, Desert Southwest and Sierra Nevada Regional Offices) until such time as WAPA can ensure the final modifications to the WestConnect planning region documents will not conflict with WAPA's statutory requirements and WAPA determines whether DSW, RMR, and SNR can continue to participate. WAPA will consider any modifications the WestConnect public utility Transmission Providers' propose to their OATT planning attachments if and when they are filed and, if it is possible to do so, WAPA will propose statutorily compliant revisions to its OATT in a subsequent filing to the Commission to address the Order No. 1000 requirements for DSW, RMR, and SNR as soon as practicable after it completes those reviews and obtains input from affected stakeholders.

²² See *Pub. Serv. Co. of Colo., et al.*, 142 FERC ¶ 61,206 (2013), *order on reh'g and compliance*, 148 FERC ¶ 61,213 (2014), *order on reh'g and compliance*, 151 FERC ¶ 61,128 (2015), *reh'g denied*, 163 FERC ¶ 61,204 (2018).

²³ *El Paso Electric Company v. FERC*, 5th Cir. Case No. 18-60575, filed August 20, 2018. The case is currently being held in abeyance pending ongoing discussions among the parties. See Order approving the unopposed joint motion of the parties dated December 6, 2018, Document: 00514748398 and the status report filed February 4, 2019, Document: 00514821677.

B. Other Revisions

1. Removal of the Transmission Capacity Reassignment Price Cap

In Order Nos. 890 and 890-A,²⁴ the Commission removed the price cap under OATT section 23.1 for the resale, reassignment, or transfer of Point-to-Point (PTP) Transmission Service for a two-year trial period ending October 1, 2010. However, in its Order No. 890 filing submitted on September 30, 2009, WAPA proposed to retain the price cap indefinitely. The Commission approved that proposal without modification.²⁵

On April 15, 2010, Commission staff released a study regarding transmission capacity reassignments made during the trial period.²⁶ The study analyzed nearly 35,000 such transactions totaling approximately 65 terawatt-hours, and found that: (1) almost all reassignments were priced below the cap, and the few priced above the cap had small mark-ups; and (2) there did not appear to be any evidence of abuse by resellers, e.g., the percentage of transactions priced above the cap was about the same for affiliates and non-affiliates. On September 20, 2010, the Commission issued Order No. 739 which permanently lifted the price cap based in large part on the Commission staff study.²⁷ Furthermore, in Order No. 739-A, the Commission indicated that entities could file stand-alone rate schedules allowing them to reassign transmission capacity above a price cap if one is imposed by a non-public utility Transmission Provider, and WAPA is aware of at least one instance in which the Commission has approved such a filing.²⁸

WAPA is proposing to remove the price cap, based upon reconsideration of the issue above and analysis by the Commission along with experience gained in the industry. At this time, WAPA believes that it can remain consistent with its statutory obligations while meeting the Commission's stated objective to encourage utilization of unused transmission, and WAPA does not expect abuses by resellers due to the price cap removal which would conflict with its

²⁴ *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, 73 FR 2984 (January 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228 (2009), *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

²⁵ See WAPA's filing in Docket No. NJ10-1-000 at p 10-11, and *Western Area Power Administration*, 133 FERC ¶ 61,193 at P 23-27 (2010).

²⁶ *Staff Findings on Capacity Reassignment* (2010), available for download from the Commission's website at <https://www.ferc.gov/legal/staff-reports/04-15-10-capacity-reassignment.pdf>.

²⁷ *Promoting a Competitive Market for Capacity Reassignment*, Order No. 739, 132 FERC ¶ 61,238 (2010), *reh'g denied*, Order No. 739-A, 135 FERC ¶ 61,137 (2011).

²⁸ See Order No. 739-A at P 6, 15-16; and the Commission's letter order dated January 6, 2012, in Docket No. ER11-4374-002 (approving a revised transmission reassignment tariff filed by Portland General Electric Company [PGE] that allows PGE to reassign its transmission rights, without limitation, at negotiated rates on non-public utility transmission systems such as that of Bonneville Power Administration).

statutory requirements. Moreover, removing the price cap may increase WAPA's PTP Transmission Service sales and revenues under its OATT, which in turn could reduce the overall cost of service to all customers. Accordingly, WAPA proposes to revise section 23.1 of its as-filed OATT to include the *pro forma* language allowing resellers to be compensated at uncapped rates established by agreement between the reseller and assignee, and WAPA also proposes to modify section 8.0 of Attachment A-1 to its OATT to remove pertinent non-*pro forma* language added by WAPA in its aforementioned Order No. 890 filing. WAPA has also included the *pro forma* section labeling changes in Section 23.1 incorporated by the Commission under Order No. 739.

Finally, the Commission previously accepted WAPA's proposal to add language to the beginning of section 23.1 of its OATT requiring the Transmission Customer to obtain WAPA's approval before the former may sell, assign, or transfer all or a portion of its rights under its Service Agreement to another entity. This requirement was added pursuant to the Federal Anti-Assignment Act, which prohibits WAPA from allowing the assignment of an agreement in which WAPA is a party without first providing its concurrence.²⁹ Consequently, WAPA proposes to retain the requirement in the revised OATT section 23.1. WAPA will not deny any resales, reassignments, or transfers of transmission capacity based on the price negotiated between the reseller and assignee, and WAPA will revise its current "Resale of Transmission Rights" business practice³⁰ to reflect this commitment and post it on its OASIS sites.

2. Rate Schedule Change Language, Unreserved Use Penalties

The current language in WAPA's various OATT Schedules does not clearly reflect the longstanding process that WAPA follows to implement changes to its OATT-related rate schedules (e.g., transmission and ancillary service). This lack of clarity unfortunately resulted in confusion among certain of WAPA's customers during a WAPA rate proceeding before the Commission.³¹

WAPA's longstanding process to implement changes to its OATT-related rate schedules is as follows. When WAPA executes and distributes an initial transmission service agreement to a Transmission Customer, WAPA attaches the applicable rate schedules to that initial agreement. Afterward, should WAPA promulgate a change to a charge within a rate schedule, WAPA

²⁹ See 41 U.S.C. § 6305 (2018). See also WAPA's filing dated March 2, 2007, in Docket No. NJ07-2-000 at p 4-5; and *Western Area Power Administration*, 119 FERC ¶ 61,329 (2007) at P 10-11 (finding that WAPA's then-proposed revised OATT continued to meet the requirements of the *pro forma* OATT with one unrelated exception pertaining to the SGIA).

³⁰ Posted at <https://www.oasis.oati.com/woa/docs/WAPA/WAPAdocs/Western-Common-Business-Practices.html>.

³¹ See *Western Area Power Administration*, Docket No. EF15-10-001, 156 FERC ¶ 61,102 (2016).

distributes the modified rate schedule to each affected customer with the intention that the modified schedule be attached to the service agreement in place of the superseded schedule.

In order to clarify this existing process under its OATT, WAPA revised its OATT Rate Schedules 1 through 10 to state that any change to the pertinent charge or methodology “shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement.” WAPA will also implement a business practice describing in detail the process it undertakes to notify customers of changes to its rate schedules which are promulgated pursuant to Federal law and regulation and subsequently distributed to customers to be attached to and made part of their service agreement.

Additionally, in order to transparently clarify the Commission’s direction in Order No. 890 to its Transmission Customers, WAPA has revised OATT Schedule 10 with an additional modification to indicate that a Transmission Customer may be charged unreserved use penalties in accordance with the OATT even if that customer does not have an applicable service agreement.³²

3. WestConnect Regional Tariff

WestConnect filed an Amended and Restated Point-to-Point Regional Transmission Service Participation Agreement (Participation Agreement) in Docket No. ER13-1295-000 on April 16, 2013. In conjunction with the WestConnect Filing, certain public utility WestConnect participants individually submitted WestConnect Point-to-Point Regional Transmission Service Tariffs (Regional Tariffs). In its order conditionally accepting the Participation Agreement and Regional Tariffs, the Commission directed these public utility WestConnect Participants to either submit the Participation Agreement as a separate rate schedule, or submit a certificate of concurrence with the Participation Agreement and include a tariff record to incorporate it by reference.³³

WAPA entered into the Participation Agreement with the other WestConnect Participants on May 31, 2013. As a non-public utility Transmission Provider, WAPA was not required to file the Participation Agreement, Regional Tariff, or a certificate of concurrence with the Commission. WAPA did however develop OATT Rate Schedule WC-8 pursuant to a public rate

³² See *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241 at P 834 (stating that a Transmission Customer “will be subject to an unreserved use penalty if the transmission customer uses transmission service where it does not have a transmission service reservation”), *order on reh’g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh’g*, Order No. 890-B, 123 FERC ¶ 61,299 (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).

³³ *WestConnect, et al.*, 143 FERC ¶ 61,291 at P 16 (2013).

setting process that was approved by the Commission to provide rates for service it provided under the Participation Agreement for the Central Arizona Project, Colorado River Storage Project, Loveland Area Projects, Pacific Northwest-Pacific Southwest Intertie Project, and Parker-Davis Project.³⁴ As part of this OATT revision, WAPA incorporated the Participation Agreement by reference into WAPA's OATT Schedule 8 and stated that additional details regarding this WestConnect Regional Transmission Service are available on the Transmission Provider's OASIS to increase transparency for its OATT customers taking service under the WestConnect Regional Tariff.

4. UGPR's Participation in the Southwest Power Pool

WAPA made the following proposed revisions in its OATT to address the participation of WAPA's UGPR as a transmission owner in the SPP,³⁵ and to note the fact that SPP is now the Transmission Provider for UGPR's eligible transmission facilities, which are now included under the SPP OATT:

- Replaced the entirety of Part II of OATT Attachment C (Methodology to Assess Available Transfer Capability – Upper Great Plains Region) with a brief paragraph noting UGPR's participation in SPP, and indicating that SPP is the Transmission Provider for UGPR's transmission facilities under the SPP OATT and utilizes SPP's ATC calculation methodology.
- Modified OATT Attachment D (Methodology for Completing a System Impact Study) to indicate that “[t]he Transmission Provider will use the [SPP] System Impact Study Methodology, if necessary, when the Transmission Provider is a transmission owning member of SPP (Upper Great Plains Region).”
- Revised OATT Attachment K (Authorities and Obligations) to reflect UGPR's participation in SPP, and to address the related termination of UGPR's Integrated System arrangement with Basin Electric Power Cooperative and Heartland Consumers Power District.

³⁴ See *United States Department of Energy – Western Area Power Administration (Loveland Area Projects, Colorado River Storage Project, Pacific Northwest-Pacific Southwest Intertie Project, Central Arizona Project and Parker-Davis Project)*, 149 FERC ¶ 62,196 (2014). WAPA has recently proposed extending this rate. See Notice of proposed extension of the WestConnect Point-to-Point Regional Transmission Service Participation Agreement formula rates, 84 Fed. Reg. 9771 (March 18, 2019).

³⁵ See, e.g., *Southwest Power Pool, Inc.*, 149 FERC ¶ 61,113 (2014); and the Commission's delegated letter order dated April 20, 2015, in Docket No. ER14-2850-002, *et al.* (accepting SPP's relevant filed revisions to its OATT and Membership Agreement).

- Replaced the entirety of Part I of OATT Attachment P (Transmission Planning Process – Upper Great Plains Region) with a brief paragraph noting UGPR’s participation in SPP, and indicating that UGPR’s transmission system is included in the SPP Transmission Planning Process under Attachment O of the SPP OATT.

5. NITS Agreement

WAPA modified section 1.0 of its OATT Attachment F (NITS Agreement) to include language related to the revision of charges or losses that is included in the other Commission-approved forms of transmission service agreement under WAPA’s OATT Attachments A and B that were included in its original OATT filing.³⁶ This modification conforms section 1.0 in the three forms of transmission service agreement, and resolves an inadvertent error in section 4.1.1 of the Specifications to WAPA’s form of NITS Agreement which indicates that WAPA “will notify the Transmission Customer of the revised loss factor(s) pursuant to Section 1.0 of this Service Agreement.”

6. Miscellaneous Revisions/Corrections

WAPA also made the following minor revisions/corrections in its OATT:

- Added a statement to OATT Attachment E (Index of Point-To-Point Transmission Service Customers) and Attachment I (Index of Network Integration Customers) clarifying that WAPA’s Regional Transmission Providers post their respective customer indices on their OASIS sites.
- Articles 4.1.1.1 (Energy Resource Interconnection Service – The Product) and 4.1.2.1 (Network Resource Interconnection Service – The Product) of the *pro forma* LGIA contain an incorrect reference in that they state the Transmission Provider shall construct facilities identified in Attachment A to the LGIA, rather than in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) as actually is the case. WAPA corrected that reference.
- Modified language in OATT Attachment K under the Colorado River Storage Project Management Center (CRSP MC) provisions as follows: “The CRSP MC does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff from its Integrated Projects hydroelectric resources,

³⁶ See WAPA’s filing dated December 31, 1997, in Docket No. NJ98-1-000; and *United States Department of Energy – Western Area Power Administration, et al.*, 99 FERC 61,062 (2002).

including, but not limited to, certain ~~Ancillary sServices and Network Integration Transmission Service.~~” The CRSP MC does offer certain Ancillary Services unrelated to Control Area operations (e.g. Reactive Supply and Voltage Control from Generation or Other Sources Service under Schedule 2 of the OATT) and does offer Network Integration Transmission Service. This revision corrects this inadvertent misstatement of services available under the OATT from the CRSP MC.

- Modified language in OATT Attachment K under the SNR provisions as follows: “The SNR does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff, including, but not limited to, certain ~~Ancillary Services and Network Integration Transmission Service.~~” SNR does offer certain Ancillary Services unrelated to Control Area operations (e.g. Reactive Supply and Voltage Control from Generation or Other Sources Service under Schedule 2 of the OATT) and does offer Network Integration Transmission Service. This revision corrects this inadvertent misstatement of services available under the OATT from SNR.
- Modified language in OATT Attachment K under the UGPR provisions to change the incorrect and outdated reference to the “MAPP reliability council” to the currently correct reference of the “Midwest Reliability Organization (MRO) region” given the organizational changes that have occurred since WAPA originally filed its OATT.
- Revised OATT Attachment Q to update the mailing address for submittal of the Credit Application form.

III. PETITION FOR AN EXEMPTION FROM FILING FEES

WAPA hereby seeks an exemption in lieu of paying a filing fee applicable to petitions for declaratory orders. As an agency of the United States Department of Energy, WAPA is engaged in official business of the Federal Government in filing this petition for a declaratory order from the Commission that these modifications to WAPA’s non-jurisdictional OATT, including its LGIA, SGIP, and SGIA, satisfy the requirements for reciprocity status. WAPA is an agency of the United States and, therefore is exempt from filing fees.³⁷

³⁷ 18 C.F.R. §§ 381.102(a), 381.108(a) (2018), and 381.302(c)(2018).

IV. EFFECTIVE DATE

WAPA requests that the revisions proposed in this filing become effective June 3, 2019.

V. SERVICE

WAPA shall place a notice on its OASIS sites that it is making this filing and will also make copies of this filing available for public inspection on its OASIS sites.

VI. CONTENTS OF THE FILING

Along with this transmittal letter, the following documents are submitted with this filing:

Attachment A –Redline versions of WAPA’s proposed OATT changes described herein, including the OATT, LGIA, SGIP, and SGIA compared to the those documents as previously approved by the Commission up to and including the April 12, 2013, filing in Docket No. EF11-4-003 and the Commission’s relevant delegated letter order issued on July 10, 2015.

VII. COMMUNICATION

WAPA requests that all correspondence, pleadings, and other communications concerning this filing be served upon:

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Dated this 1st day of April, 2019

Respectfully submitted,

/s/

Ronald J. Klinefelter
Assistant General Counsel
Office of General Counsel
Western Area Power Administration

UNITED STATES
DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
OPEN ACCESS TRANSMISSION SERVICE TARIFF

UNITED STATES
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 WESTERN AREA POWER ADMINISTRATION
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WESTERN AREA POWER ADMINISTRATION

OPEN ACCESS TRANSMISSION SERVICE TARIFF

PART 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 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, pursuant to Federal Law.
- 1.4 Application: A request by an Eligible Customer for transmission service pursuant to the provisions of the Tariff.
- 1.5 Clustering: The process whereby two or more Long-Term Firm Point-to-Point Transmission Service requests are studied together, instead of serially, for the purpose of conducting the System Impact Study in accordance with Section 19 of this 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 and application processing fee.
- 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 Curtailment: A reduction in firm or non-firm transmission service in response to a transfer capability shortage as a result of system reliability conditions.
- 1.10 Delivering Party: The entity supplying capacity and energy to be transmitted at Point(s) of Receipt.
- 1.11 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.
- 1.12 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.
- 1.13 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.
- 1.14 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.

- 1.15 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.
- 1.16 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).
- 1.17 Interruption: A reduction in non-firm transmission service due to economic reasons pursuant to Section 14.7.
- 1.18 Load Ratio Share: 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 and calculated on a rolling twelve month basis.
- 1.19 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 of the Tariff.
- 1.20 Long-Term Firm Point-To-Point Transmission Service: Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of one year or more.
- 1.21 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.
- 1.22 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.

- 1.23 Network Integration Transmission Service: The transmission service provided under Part III of the Tariff.
- 1.24 Network Load: The load that a Network Customer designates for Network Integration 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 a 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 Part II of the Tariff for any Point-To-Point Transmission Service that may be necessary for such non-designated load.
- 1.25 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 under Part III of the Tariff.
- 1.26 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 under Part III of this Tariff.
- 1.27 Network Resource: 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, except for purposes of fulfilling obligations under a reserve sharing program.
- 1.28 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.
- 1.29 New Rate: Means the modification of a Rate for transmission or ancillary services provided by the Transmission Provider which has been promulgated pursuant to the rate development process outlined in Power And Transmission Rates, 10 C.F.R. Part 903 (2006).
- 1.30 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 the Tariff. Non-Firm Point-To-Point Transmission Service is available on a stand-alone basis for periods ranging from one hour to one month. The Transmission provider may offer Non-Firm Point-To-Point Transmission Service for periods longer than one month. If offered, the terms and conditions will be consistent with Part II of the Tariff and will be posted on the Transmission Provider's OASIS.

- 1.31 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.
- 1.32 Open Access Same-Time Information System (OASIS): The information system and standards of conduct contained in Part 37 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.
- 1.33 Part I: Tariff Definitions and Common Service Provisions contained in Sections 2 through 12.
- 1.34 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.
- 1.35 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.
- 1.36 Parties: The Transmission Provider and the Transmission Customer receiving service under the Tariff.
- 1.37 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 Agreement for Long-Term Firm Point-to-Point Transmission Service.
- 1.38 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.

- 1.39 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.
- 1.40 Power Purchaser: The entity that is purchasing the capacity and energy to be transmitted under the Tariff.
- 1.41 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.
- 1.42 Rate: Means the monetary charge or the formula for computing such a charge for any electric service provided the Transmission Provider as defined in 10 C.F.R. § 903.2(k)(1) (2006).
- 1.43 Rate Adjustment: Means a change in an existing rate or rates, or the establishment of a rate or rates for a new service. It does not include a change in rate schedule provisions or in contract terms, other than changes in the price per unit of service, nor does it include changes in the monetary charge pursuant to a formula stated in a rate schedule or a contract as defined in 10 C.F.R. § 903.2(k)(m) (2006).
- 1.44 Rate Formula Adjustment: Means a change in an existing rate formula, or the establishment of a rate formula for a new service. It does not include updates to the monetary charge pursuant to a formula stated in a rate schedule or a contract.
- 1.45 Reasonable Efforts: With respect to an action required to be attempted or taken by a Party under this Tariff, 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.
- 1.46 Receiving Party: The entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.
- 1.47 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.
- 1.48 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. Reserved

Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

- 1.49 **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.
- 1.50 **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 or Section 29.1 under the Tariff.
- 1.51 **Short-Term Firm Point-To-Point Transmission Service:** Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of less than one year.
- 1.52 **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.
- 1.53 **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 or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.
- 1.54 **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.
- 1.55 **Transmission Customer:** Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider provide transmission service without a Service Agreement, pursuant to section 15.3 of the Tariff. This term is used in the Part I Common Service Provisions to include customers receiving transmission service under Part II and Part III of this Tariff.
- 1.56 **Transmission Provider:** The Regional Office of the Western Area Power Administration (Western) which owns, controls, or operates the facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff.

- 1.57 Transmission Provider's Monthly Transmission System Peak: The maximum firm usage of the Transmission Provider's Transmission System in a calendar month.
- 1.58 Transmission Service: Point-To-Point Transmission Service provided under Part II of the Tariff on a firm and non-firm basis.
- 1.59 Transmission System: The facilities owned, controlled or operated by the Transmission Provider that are used to provide transmission service under Part II and Part III of the Tariff.

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 rate 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 March 2, 2011, 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 March 2, 2011; provided that, the one-year notice requirement shall apply to such service agreements with five years or more left in their terms as of March 2, 2011.

3 Ancillary Services

Ancillary 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.

The Transmission Customer may not decline the Transmission Provider's offer of Ancillary Services unless it demonstrates that it has acquired the Ancillary Services from another source. However, when sufficient Federal generation is not available to provide the required Ancillary Services, the Transmission Provider will offer to make every effort to purchase Ancillary Services from others, as available. The costs of such purchases on behalf of a Transmission Customer will be passed directly through to that Transmission Customer. At the request of the Transmission Provider, the costs associated with the purchase of Ancillary Services from others may be collected from the Transmission Customer in advance of the provision of service. The Transmission Customer must list in its Application which Ancillary 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 utility providing transmission service, but is not a Control Area operator, it may be unable to provide some or all of the Ancillary Services. In this case, the Transmission Provider can fulfill its obligation to provide Ancillary Services by acting as the Transmission Customer's agent to secure these Ancillary 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 directly from the Control Area operator, or (iii) secure the Ancillary Services (discussed in Schedules 3, 4, 5, 6, and 9) 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 by the Transmission Customer.

The specific Ancillary Services, prices and/or compensation methods for each 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 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 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.

- 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.
- 3.4 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 9.

4 Open Access Same-Time Information System (OASIS)

- 4.1 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 and 32.
- 4.2 The North American Energy Standards Board Wholesale Electric Quadrant standards listed in Attachment N to this Tariff are incorporated herein.
- 4.3 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.

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.
- (ii) If the Eligible Customer thereafter renews its request for the same 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, 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 Procedures:** Within a reasonable time after the first day of each month, the Transmission Provider shall submit an invoice to the Transmission Customer for charges for services under the Tariff. The charges shall be for all services furnished during the preceding month except for those Transmission Customers required to make advance payment pursuant to a rate schedule adopted in a public process. Invoices for Transmission Customers required to make advance payment shall be issued in accordance with the applicable rate schedule and will show the credits for any advance payments deposited and received by the Transmission Provider for the service month being billed. 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 **Unpaid Balances:**
- (a) Bills not paid in full by the Contractor by the due date specified in Section 7.1 shall bear an interest charge of five hundredths percent (0.05%) of the principal sum unpaid for each day payment is delinquent, to be added until the amount due is paid in full. 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. Payments received will be first applied to the charges for late payment assessed on the principal and then to payment of the principal.
 - (b) In the event the Transmission Customer fails to make payment to the Transmission Provider on or before the due date as described above, twice within any twelve consecutive months, the Transmission Provider may determine that the Transmission Customer presents a risk of future timely payments. If such determination is made, Transmission Provider will give written notice to the Transmission Customer that it must provide a form of collateral as identified in Attachment Q to this Tariff. Any dispute between the

Transmission Customer and the Transmission Provider regarding elimination of additional collateral under this provision shall be covered under Section 12.

- 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. Within the same 30 calendar days after notice of failure to make payment, the Transmission Customer shall have the right of appeal to the Administrator of Western. The Transmission Provider shall submit its recommendation to the Administrator for review and approval, but shall not terminate service until the Administrator makes a determination on the Transmission Customer's appeal. 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 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

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 changes in terms and conditions, classification of service, or Service Agreement, consistent with the Commission's rules and regulations and Transmission Providers statutory obligations.

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.

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. The liability of the Transmission Provider shall be determined in accordance with the Federal Tort Claims Act provision set forth in Attachment J of this Tariff.

11 Creditworthiness

The Transmission Provider will specify its creditworthiness procedures in Attachment Q.

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 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 resolved in accordance with the procedures set forth below.
- 12.2 External Dispute Resolution Procedures: Any complaint arising concerning implementation of this Tariff shall be resolved as follows:
- (a) through a dispute resolution process, pursuant to the terms of a Regional Transmission Group or applicable reliability council governing agreement of which both Parties are members; or
 - (b) if both Parties are not members of the same Regional Transmission Group or applicable reliability council, through a dispute resolution process agreed to by the Parties, or through a transmission complaint filed with the Commission to the extent the Commission has jurisdiction over such dispute.
- 12.3 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.

PART 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 determined by the Transmission Provider as either one hour or one day and the maximum term shall be specified in the Service Agreement. Where applicable, the Transmission Provider shall post on its OASIS the rates, terms and conditions pertaining to its provision of hourly Firm Point-To-Point Transmission Service.

13.2 Reservation Priority:

- (i) 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 reserved service.
- (ii) Reservations for Short-Term Firm Point-To-Point 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 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 Section 13.8) 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 the 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 and Network Customers.

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

- (v) For any requests for Short-Term Firm Point-to-Point Transmission Service for which the Transmission Provider's business practices establish an earliest time such requests are permitted to be submitted, any requests for such service submitted within a five (5) minute window following such earliest time shall be deemed to have been submitted simultaneously during such window. If sufficient transmission capacity is not available to meet all such requests submitted within any such five (5) minute window, the otherwise applicable priorities shall apply to allocation of transmission capacity to such requests; provided that, if the otherwise applicable priorities would be to allocate transmission capacity to transmission requests on a first-come, first-served basis (i.e., in the chronological sequence in which each Transmission Customer has requested service), transmission capacity shall instead be allocated to such transmission requests pursuant to a lottery that will select the order that such requests will be processed in a non-discriminatory and non-preferential manner. The Transmission Provider shall post on its OASIS the allocation methodology and associated business practices.
- 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 of the Tariff when making Third-Party Sales under agreements executed on or after March 7, 1998. The Transmission Provider will maintain separate accounting, pursuant to Section 8, for any use of the Point-To-Point Transmission 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. 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 penalties, to have executed the appropriate Service Agreement. The Service 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 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 in advance 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 or a separate agreement, as appropriate, 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, 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 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.

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. The Transmission Provider shall specify in accordance with Schedule 10 of this Tariff the rate treatment and all related terms and conditions applicable in the event that a 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.

- 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. [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 10:00 a.m. will be accommodated, if practicable. Hour-to-hour [and intra-hour \(four intervals consisting of fifteen minute schedules\)](#) schedules of any capacity and energy that is to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by the Transmission Provider]. 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. Scheduling changes will be permitted up to twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour [and intra-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 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 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 agreements executed on or after March 7, 1998. 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.
- 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. The Transmission Provider shall specify in accordance with Schedule 10 of this Tariff the rate treatment and all related terms and

conditions applicable in the event that a Transmission Customer (including Third-Party Sales by the Transmission Provider) exceeds its non-firm capacity reservation. 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 must be submitted to the Transmission Provider no later than 2:00 p.m. [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 2:00 p.m. will be accommodated, if practicable. Hour-to-hour [and intra-hour \(four intervals consisting of fifteen minute schedules\)](#) schedules of energy that are to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by the Transmission Provider]. 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. Scheduling changes will be permitted up to twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour [and intra-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. 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 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 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.

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 Transmission Provider's OASIS (Section 4) is contained in Attachment C 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 commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Provider at the existing rate placed in effect pursuant to applicable Federal law and regulations, and (ii) comply with the terms and conditions of the Tariff

including paying the appropriate security deposit and processing fees in accordance with the terms of Section 17.3. If the Transmission Customer cannot accept all of the terms and conditions of the offered Service Agreement, the Transmission Customer may request resolution of the unacceptable terms and conditions under Section 12, Dispute Resolution Procedures, of the Tariff. Any changes resulting from the Dispute Resolution Procedures will be effective upon the date of initial service.

- 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 P, provided the Transmission Customer agrees to compensate the Transmission Provider in advance 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 P, 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, and is contingent upon the availability to Transmission Provider of sufficient appropriations and/or authority, when needed, and the Transmission Customer's advanced funds.
 - (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 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 factors are specified in the Service Agreements.

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;
 - (b) The Transmission Customer meets the creditworthiness criteria set forth in Section 11;
 - (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 P; 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 contain a written Application to the appropriate Regional Office, as identified in Attachment K to the Tariff, 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 Transmission Provider's OASIS. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. Each of these methods will provide a time-stamped record for establishing the priority of the Application.

- 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, tax identification number, 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 the Tariff, by Federal law, 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 P.

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 and Processing Fee:** For firm Transmission Service requests of one year or longer, a Completed Application for Firm Point-To-Point Transmission Service shall include: (1) a non-refundable processing fee of \$3,500; and (2) a deposit of either one month's charge for Reserved Capacity (not to exceed \$100,000) submitted to the Transmission Provider, or the same amount deposited into an escrow fund setup by the Eligible Customer. The application processing fee does not apply to costs to complete System Impact Studies or Facility Studies or to add new facilities. The specific requirements for the escrow fund will be posted on the Transmission Provider's OASIS. The Eligible Customer shall select one of the two options to satisfy the deposit requirement; provided, that the Transmission Customer will not be required to submit a deposit in the case of either a request for transmission service resulting only in modification to an existing Service Agreement, or a rollover of equivalent transmission service provided under either an existing Service Agreement or other existing bundled or standalone agreement executed prior to December 31, 1997. If the Application is rejected by the Transmission Provider because it does not meet the conditions for service as set forth herein, the Transmission Provider shall release the escrow fund or return the deposit, without interest. The Transmission Provider shall also release the escrow fund or return the deposit, without interest, 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 Transmission Provider shall release the escrow fund or return the deposit, without interest. Advanced payments 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 Transmission Provider shall release the escrow fund following receipt of the Transmission Customer's payment for the first month of service, or the deposit, without interest, will be fully credited against the Transmission Customer's monthly transmission service bill(s) upon commencement of service.
- 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 and release the escrow fund or return the deposit, without 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 a 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 service without an executed 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 pursuant to section 17.3, and release the escrow fund or return the deposit, without 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 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 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. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. Each of these methods will provide a time-stamped record for establishing the service priority of the Application.
- 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, tax identification number, 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;
- (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 Federal Law, 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 no earlier than sixty (60) days before service is to commence; requests for weekly service shall be submitted no earlier than fourteen (14) days before service is to commence, requests for daily service shall be submitted no earlier than two (2) days before service is to commence, and requests for hourly service shall be submitted no earlier than noon the day before service is to commence. Requests for service received later than 2:00 p.m. prior to the day service is scheduled to commence will be accommodated if practicable [or such reasonable times that are generally accepted in the region and are consistently adhered to by the Transmission Provider].

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) thirty (30) minutes for hourly service, (ii) thirty (30) minutes for daily service, (iii) four (4) hours for weekly service, and (iv) two (2) days for monthly service. [Or such reasonable times that are generally accepted in the region and are consistently adhered to by the Transmission Provider].

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 redispach 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 advance funds to 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 pursuant to section 17.3, the Transmission Provider shall release the escrow fund or return the deposit, without interest.

- 19.2 Clustering of System Impact Studies: Clustering is intended to facilitate the Transmission Provider's performance of System Impact Studies for multiple Long-Term Firm Point-to-Point Transmission Service requests. At the written request of an Eligible Customer and with the written concurrence of all other Eligible Customers proposed to be included in the System Impact Study cluster, two or more Long-Term Firm Point-to-Point Transmission Service requests may be studied in a cluster for the purpose of the System Impact Study. If the Transmission Provider determines at its own discretion that it cannot reasonably accommodate a request for Clustering, including but not limited to instances where a request for Clustering may impair the administration or timely processing of the Transmission Provider's Transmission Service queue, the Transmission Provider may reject a request of an Eligible Customer to implement Clustering of System Impact Studies.

If the Transmission Provider determines based on an Eligible Customer's written request and with the written concurrence of other Eligible Customers within the proposed cluster to study Long-Term Firm Point-to-Point Transmission Service requests using Clustering, all Transmission Service requests within the cluster shall be studied together. Once such a cluster is established, no Eligible Customer shall be allowed to opt out of the cluster unless the Eligible Customer withdraws its Transmission Service request. If an Eligible Customer fails to make payment to the Transmission Provider as specified in the System Impact Study Agreement, such Eligible Customer will be deemed withdrawn from the cluster and its Transmission Service request shall also be deemed withdrawn. The deadline and procedures for completing all System Impact Studies for which a System Impact Study Agreement has been executed for a cluster shall be in accordance with Section 19 of this Tariff for all Transmission Service requests assigned to the same cluster. The initiation date of the System Impact Study for the cluster will take into consideration the time required to coordinate the completion of a System Impact Study Agreement among the cluster participants and the Transmission Provider, and such coordination may cause tender of the System Impact Study Agreement to extend beyond the time frame stated in Section 19.1.

The Transmission Provider will assign the cost of producing the clustered System Impact Study, including any third-party study work required by the Transmission Provider and any cost for restudy necessitated by a customer opting out of or being deemed withdrawn from the cluster, to each customer remaining in the cluster at the time of the cost allocation based on the ratio of the transmission capacity reservation of each such customer to the total transmission capacity reservation of all such customers.

19.3 System Impact Study Agreement and Compensation:

- (i) The System Impact Study Agreement will clearly specify the Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge will 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 8.

19.4 System Impact Study Procedures: Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use Reasonable Efforts 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 Reasonable Efforts 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 service without an executed Service Agreement pursuant to Section 15.3, or the Application shall be deemed terminated and withdrawn.

- 19.5 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 advance funds to 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. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use Reasonable Efforts 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 pay the Transmission Provider in advance Transmission Customer's share of the costs of new facilities or

upgrades. The Transmission Customer shall have thirty (30) days to execute a construction agreement and a Service Agreement and provide the advance payment or request service without an executed Service Agreement pursuant to Section 15.3 and pay the Transmission Customer's share of the costs or the request will no longer be a Completed Application and shall be deemed terminated and withdrawn and pursuant to section 17.3, the Transmission Provider shall release the escrow fund or return the deposit, without interest. Any advance payment made by the Transmission Customer that is in excess of the costs incurred by the Transmission Provider shall be refunded.

- 19.6 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.
- 19.7 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.
- 19.8 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.
- 19.9 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 in advance 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 in advance 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.

- 19.10 Study Metrics: Sections 19.4 and 19.5 require a Transmission Provider to use Reasonable Efforts to meet 60-day study completion deadlines for System Impact Studies and Facilities Studies.

For the purpose of calculating the percent of non-Affiliates' System Impact Studies processed outside of the 60 day study completion deadlines, the Transmission Provider shall consider all System Impact Studies and Facilities Studies that it completed 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.

- 19.11 Notice of Need for Environmental Review: If the Transmission Provider determines that environmental review is required in response to a request for service the Transmission Provider shall use Reasonable Efforts to tender an environmental review agreement within 15 Calendar Days of providing a System Impact Study report to Eligible Customer. Pursuant to such agreement or agreements, the Eligible Customer shall make advance payment of funds to the Transmission Provider for performing the environmental review, including review under the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., as amended. The agreement(s) shall also set forth Eligible Customer's responsibilities in connection with such environmental review. The Eligible Customer shall execute and return each environmental review agreement, along with the required study funds due upon execution as set forth in the agreement, to the Transmission Provider within 30 calendar days of receipt of the final version offered for execution. If an executed environmental review agreement(s) and the required funds are not provided in the manner set forth above, the application shall be deemed withdrawn and, pursuant to Section 17.3, its deposit shall be returned, without interest, or the release of its escrow funds authorized. In addition, if at any time prior to the issuance of Transmission Providers final NEPA decisional document the Eligible Customer fails to comply with the terms of the environmental review agreement, Transmission Provider reserves the right to deem the request for service withdrawn.

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 pursuant to section 17.3, the Transmission Provider shall release the escrow fund or return the deposit, without interest, and any advance payment made by the Transmission Customer that is in excess of the costs incurred by the Transmission Provider through the time construction was suspended shall be returned. 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 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 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 Modifications 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 and application processing fee 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) Subject to the Transmission Provider's prior approval, 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 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~~ 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. 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 the 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 in advance 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 Point(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); and Non-Firm Point-To-Point Transmission Service (Schedule 8). The Transmission Provider shall use Part II 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 in a manner consistent with applicable Federal law and regulations.

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.

PART 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 as-available 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 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 P 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 the 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 P, 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. This obligation to construct and place into service sufficient transmission capacity to deliver the Network Customer's Network Resources to serve its Network Load is contingent upon the availability to Transmission Provider of sufficient appropriations and/or authority, when needed, and the Transmission Customer's advanced funds.
- 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 as-available 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.
- 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 factors are specified in the Service Agreements.

- 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 for any Third-Party Sale which requires use of the Transmission Provider's Transmission System. The Transmission Provider shall specify in accordance with Schedule 10 of this Tariff 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.

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 for service under Part III of the Tariff or requests in writing that the Transmission Provider provide service without an executed Service Agreement, and (iv) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G or requests in writing that the Transmission Provider provide service without an executed Network Operating Agreement. If the Transmission Provider and the Network Customer cannot agree on all the terms and conditions of the Network Service Agreement, the Transmission Provider shall commence providing Network Integration Transmission Service subject to the Network Customer agreeing to (i) compensate the Transmission Provider at the existing rate placed in effect pursuant to applicable Federal law and regulations, and (ii) comply with the terms and conditions of the Tariff including paying the appropriate processing fees in accordance with the terms of Section 29.2. If the Network Customer cannot accept all of the terms and conditions of the offered Service Agreement, the Network Customer may request resolution of the unacceptable terms and conditions under Section 12, Dispute Resolution Procedures, of the Tariff. Any changes resulting from the Dispute Resolution Procedures will be effective upon the date of initial service.

29.2 Application Procedures: An Eligible Customer requesting service under Part III of the Tariff must submit an Application to the Transmission Provider as far as possible in advance of the month in which service is to commence. For transmission service requests of one year or longer, the Completed Application shall include: (1) a non-refundable application processing fee of \$3,500; and (2) a deposit approximating the charge for one month of service (not to exceed \$100,000) submitted to the Transmission Provider, or the same amount deposited into an escrow fund setup by the Eligible Customer. The application processing fee does not apply to costs to complete System Impact Studies or Facility Studies or to add new facilities. The specific requirements for the escrow fund will be posted on the Transmission Provider's OASIS. The Eligible Customer shall select one of the two options to satisfy the deposit requirement; provided, that the Transmission Customer will not be required to submit a deposit in the case of either a request for transmission service resulting only in modification to an existing Service Agreement, or a rollover of equivalent transmission service provided under either an existing Service Agreement or other existing bundled or standalone agreement executed prior to December 31, 1997. If an Application is withdrawn or the Eligible Customer decides not to enter into a Service Agreement for Network Integration Transmission Service, the Transmission Provider shall release the escrow fund or return the deposit, without interest. If a Service Agreement for Network Integration Transmission Service is executed, the Transmission Provider shall release the escrow fund following receipt of the Transmission Customer's payment for the first month of service, or the deposit, without interest, will be fully credited against the Transmission Customer's monthly transmission service bill(s) upon commencement of service. 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. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. Each of these methods will provide a time-stamped record for establishing the service priority of the Application. A Completed Application shall provide all of the information included in 18 CFR § 2.20 including but not limited to the following:

- (i) The identity, tax identification number, 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, if required based on the Transmission Provider's posting on OASIS
- 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 noninterruptible 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 P.

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 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 This section is intentionally left blank.

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 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 noninterruptible 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.
- 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 at any time by providing notification to the Transmission Provider through OASIS as soon as reasonably practicable, but not later than the firm scheduling deadline for the period of termination. 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, 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.
- 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, 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 on 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 May 14, 2007 (i.e., the effective date of the Commission's Order No. 890), 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. 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. The Transmission Provider will have no obligation to refund any advance of funds expended for purposes of providing facilities for a Network Customer. However, upon receipt of a Network Customer's written notice of such a cancellation or delay, the Transmission Provider will use the same Reasonable Efforts to mitigate the costs and charges owed to the Transmission Provider as it would to reduce its own costs and charges.

- 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 P. 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 advance funds to 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 pursuant to section 29.2, the Transmission Provider shall release the escrow fund or return the deposit, without interest.

32.2 System Impact Study Agreement and Compensation:

- (i) The System Impact Study Agreement will clearly specify the 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 Reasonable Efforts 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 Reasonable Efforts 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 service without an executed Service Agreement pursuant to Section 29.1, 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 advance funds to 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. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use Reasonable Efforts 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 advance funds to the Transmission Provider for the construction of new facilities and such advance and construction shall be provided for in a separate agreement. If the construction of new facilities requires the expenditure of Transmission Provider funds, such construction shall be contingent upon the availability of appropriated funds. The Eligible Customer shall have thirty (30) days to execute a construction agreement and a Service Agreement and provide the advance payment or request service without an executed Service Agreement pursuant to Section 29.1 and pay the Transmission Customer's share of the costs or the request no longer will be a Completed Application and shall be deemed terminated and withdrawn and pursuant to section 29.2, the

Transmission Provider shall release the escrow fund or return the deposit, without interest. Any advance payment made by the Transmission Customer that is in excess of the costs incurred by the Transmission Provider shall be refunded.

- 32.5 Study Metrics: Section 19.10 defines the methodology used to calculate the percentage of non-affiliates' System Impact Studies and Facilities Studies processed outside the 60-day study completion deadlines using Reasonable Efforts under Part II of the Tariff. The same calculation applies to service under Part III of the Tariff.
- 32.6 Notice of Need for Environmental Review: If the Transmission Provider determines that environmental review is required in response to a request for service the Transmission Provider shall use Reasonable Efforts to tender an environmental review agreement within 15 Calendar Days of providing a System Impact Study report to Eligible Customer. Pursuant to such agreement or agreements, the Eligible Customer shall make advance payment of funds to the Transmission Provider for performing the environmental review, including review under the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., as amended. The agreement(s) shall also set forth Eligible Customer's responsibilities in connection with such environmental review. The Eligible Customer shall execute and return each environmental review agreement, along with the required study funds due upon execution as set forth in the agreement, to the Transmission Provider within 30 calendar days of receipt of the final version offered for execution. If an executed environmental review agreement(s) and the required funds are not provided in the manner set forth above, the application shall be deemed withdrawn and, pursuant to Section 17.3, its deposit shall be returned, without interest, or the release of its escrow funds authorized. In addition, if at any time prior to the issuance of Transmission Providers final NEPA decisional document the Eligible Customer fails to comply with the terms of the environmental review agreement, Transmission Provider reserves the right to deem the request for service withdrawn.

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. 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 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 and any Network Customer's use of the Transmission System to serve its designated Network Load.
- 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 and Network Customers will each bear a proportionate share of the total redispatch cost based on their respective Load Ratio Shares.
- 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.
- 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 and the Network Customer 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. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer fails to respond to established Load Shedding and Curtailment procedures.

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 Federal policy, along with the following:

- 34.1 **Monthly Demand Charge:** The Network Customer 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 specified in Schedule H.
- 34.2 **Determination of Network Customer's Monthly Network Load:** 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) coincident with the Transmission Provider's Monthly Transmission System Peak.
- 34.3 **Determination of Transmission Provider's Monthly Transmission System Load:** The Transmission Provider's monthly Transmission System load is the Transmission Provider's Monthly Transmission System Peak minus the coincident peak usage of all Long-Term Firm Point-To-Point Transmission

Service customers pursuant to Part II of this Tariff plus the Reserved Capacity of all Long-Term Firm Point-To-Point Transmission Service customers.

- 34.4 **Redispatch Charge:** The Network Customer shall pay a Load Ratio Share of any redispatch costs allocated between the Network Customer 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 in a manner consistent with applicable Federal law and regulations.

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 and the applicable regional reliability organization (RRO), (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 and the applicable RRO. 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.

- 35.3 Network Operating Committee: A Network Operating Committee (Committee) may 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 may meet from time to time as need requires.

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 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 referred to 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.

The Transmission System specific charges for Scheduling, System Control and Dispatch Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Scheduling, System Control and Dispatch Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Scheduling, System Control and Dispatch Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 can 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 upon the rates referred to 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.

The Transmission System specific charges for Reactive Supply and Voltage Control from Generation or Other Sources Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Reactive Supply and Voltage Control from Generation or Other Sources Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Reactive Supply and Voltage Control from Generation or Other Sources Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 moment-by-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 Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements. The charges for Regulation and Frequency Response Service are referred to below. The amount of Regulation and Frequency Response Service will be set forth in the Service Agreement. 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 System specific charges for Regulation and Frequency Response Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Regulation and Frequency Response Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Regulation and Frequency Response Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 obtain 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 System specific compensation for Energy Imbalance Service is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the compensation for Energy Imbalance Service upon written notice to the Transmission Customer. Any change to the compensation to the Transmission Customer for Energy Imbalance Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 charges for Spinning Reserve Service are referred to below. The amount of Spinning Reserve Service will be set forth in the Service Agreement. 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 System specific charges for Operating Reserve - Spinning Reserve Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Operating Reserve - Spinning Reserve Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Operating Reserve - Spinning Reserve Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 on-line 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 charges for Supplemental Reserve Service are referred to below. The amount of Supplemental Reserve Service will be set forth in the Service Agreement. 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 System specific charges for Operating Reserve - Supplemental Reserve Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Operating Reserve - Supplemental Reserve Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Operating Reserve - Supplemental Reserve Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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 pursuant to the Transmission System specific Firm Point-to-Point Transmission Service Rate Schedule attached to and made a part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Firm Point-to-Point Transmission Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Firm Point-to-Point Transmission Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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.

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.

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 pursuant to the Transmission System specific Non-Firm Point-to-Point Transmission Service Rate Schedule attached to and made a part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Non-Firm Point-to-Point Transmission Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Non-Firm Point-to-Point Transmission Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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.

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.

[WestConnect Participation and Rate Schedule - Hourly Non-Firm Point-To-Point Regional Transmission Service](#)

[The Transmission Provider incorporates by reference and offers service under the WestConnect Amended and Restated Point-to-Point Regional Transmission Service Participation Agreement \(Participation Agreement\), as amended and supplemented, while Transmission Provider is a party to such Participation Agreement, over the Central Arizona Project, Colorado River Storage Project, Loveland Area Projects, Pacific Northwest-Pacific Southwest Intertie Project, and Parker-Davis Project transmission systems. Details regarding this WestConnect Regional Transmission Service are available on Transmission Provider's OASIS and at: \[http://regpricing.westconnect.com/regional_transmission.htm\]\(http://regpricing.westconnect.com/regional_transmission.htm\).](#)

SCHEDULE 9

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 System specific compensation for Generator Imbalance Service is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the compensation for Generator Imbalance Service upon written notice to the Transmission Customer. Any change to the compensation to the Transmission Customer for Generator Imbalance Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

SCHEDULE 10

Unreserved Use Penalties

The Transmission System specific methodology for assessment of Unreserved Use Penalties is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement, [if one exists](#). The rates or rate methodology used to calculate such penalties under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the methodology for assessment of Unreserved Use Penalties upon written notice to the Transmission Customer. Any change to that methodology shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and [distributed to the Transmission Customer to become](#) attached to and made part of the applicable Service Agreement. [If a Transmission Customer does not have an applicable Service Agreement, they will be charged Unreserved Use Penalties in accordance with the Tariff](#). The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

(Service Agreement Number)
 (Transmission Customer)
 Attachment A

ATTACHMENT A

Service Agreement for Firm Point-To-Point Transmission Service

- 1.0 This Service Agreement, dated as of _____, is entered into, by and between the (Region) of Western Area Power Administration (Transmission Provider), and _____ (Transmission Customer), each of whom are sometimes hereinafter individually called Party and both of whom are sometimes hereinafter collectively called the Parties. For purposes of this Service Agreement, the Transmission Provider's Transmission System consists of the applicable facilities described in Attachment K to the Tariff. The Transmission Provider may revise charges or losses for Firm Point-to-Point Transmission Service provided under this Service Agreement pursuant to applicable Federal Laws, regulations and policies upon written notice to the 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 a deposit and/or nonrefundable Application processing fee 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 is mutually agreed. Service under this agreement shall terminate on _____. The Transmission Provider's acceptance of a rollover or renewal request is contingent upon, and in the sole discretion of the Transmission Provider may be limited by, the Transmission Provider's requirement to utilize capacity on its Transmission System in amounts necessary to meet statutory and contractual obligations to deliver Federal power to Project Use and Firm Electric Service customers of the Federal government. The Transmission Provider is presently aware of the following events that will impact and/or alter the capacity of its Transmission System and cause a limitation or denial of a rollover or renewal request: *(Each Region will add specific language into final service agreements detailing all known events that may affect transmission system capacity. Examples may include, but are not limited to: new Firm Electric Service Marketing Plans; status changes pertaining to Project Use and Firm Electric Service customers; and applications to join RTOs.)* Therefore, notwithstanding the provisions of Section 2.2 of the Tariff, prior to expiration of this Service Agreement, the Transmission Provider may in its sole discretion determine that a rollover or renewal would impair its ability to meet these Federal obligations. In such case, the Transmission Provider may not offer a

rollover or renewal of the Transmission Customer’s transmission service in the amounts the Transmission Customer has reserved under this Service Agreement.

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.

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:

Each Party may change the designation of its representative upon oral notice to the other, with confirmation of that change to be submitted in writing within ten (10) days thereafter.

7.0 The Tariff and, if applicable, the “Specifications For Long-Term Firm Point-To-Point Transmission Service”, as presently constituted or as they may be revised or superseded, are incorporated herein and made a part hereof.

8.0 Power Factor: The Transmission Customer will be required to maintain a power factor between __-percent lagging and __-percent leading for all deliveries of capacity and energy to and from the Transmission Provider’s Transmission System.

9.0 Transmission Losses

9.1 Loss Factors:

9.1.1 If, based on operating experience and technical studies, the Transmission Provider determines that any of the transmission loss factors on the Transmission Provider’s Transmission System differs from the loss factors set forth in this Service Agreement, the Transmission Provider will notify the Transmission Customer of the

revised loss factor(s) pursuant to Section 1.0 of this Service Agreement.

9.1.2 Transmission Provider Transmission Loss Factor: Transmission Provider transmission losses shall initially be ___% and shall be assessed on the power scheduled and transmitted to a point of delivery on the Transmission Provider's Transmission System.

10.0 Ancillary Services

10.1 Provided by Transmission Provider

10.1.1 Scheduling, System Control, and Dispatch Service

10.1.2 Reactive Supply and Voltage Control from Generation Sources Service

10.2 Provided by Transmission Customer

10.2.1 (To be filled in if applicable)

10.2.2

10.3 Provided by _____

10.3.1 (To be filled in if applicable)

10.3.2

11.0 Net Billing and Bill Crediting Option: The Parties have agreed to implement [Net Billing, Bill Crediting, both Net Billing and Bill Crediting, or neither Net Billing nor Bill Crediting] as set forth in Attachment J.

12.0 Charges for Service: Charges for Firm Point-to-Point Transmission Service and associated Ancillary Services shall be calculated in accordance with the applicable Rate Schedule(s) attached hereto and made a part of this Service Agreement. The rates or rate methodology used to calculate the charges for service under that schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

(Service Agreement Number)

(Transmission Customer)

Attachment A

(The following section will be included as appropriate at the Transmission Providers discretion)

13.0 Independent System Operator: The Parties understand that the Transmission Provider may join an independent system operator under Commission jurisdiction. In the event the Transmission Provider either joins or is required to conform to protocols of the independent system operator, the Parties agree that the Transmission Provider either may (1) make any changes necessary to conform to the terms and conditions required by Commission approval of the independent system operator, or (2) terminate this Service Agreement by providing a one-year written notice to the Transmission Customer.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(TRANSMISSION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

**Specifications For
Long-Term Firm Point-To-Point 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: _____
Capacity Reservation: _____

4.0 Point(s) of Delivery: _____
Receiving Party: _____
Capacity Reservation: _____

5.0 The Maximum amount of capacity and energy to be transmitted (Reserved Capacity) is: _____

6.0 Designation of party(ies) subject to reciprocal service obligation:

7.0 Name of the Control Area from which capacity and energy will be delivered to the Transmission Provider for Transmission Service:

Name of the Control Area to which capacity and energy will be delivered by the Transmission Provider:

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.

(Service Agreement Number)
(Transmission Customer)
Attachment A

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:

8.5 Redispatch Charges: To be filled in if applicable

8.6 Network Upgrade Charges: To be filled in if applicable

(Service Agreement Number)

(Assignee)

Attachment A-1

ATTACHMENT A-1

**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 (Region) of Western Area Power Administration (Transmission Provider), and _____ (Assignee), each of whom are sometimes hereinafter individually called Party and both of whom are sometimes hereinafter collectively called the Parties. For purposes of this Service Agreement, the Transmission Provider’s Transmission System consists of the applicable facilities described in Attachment K to the Tariff.
- 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 and the terms and conditions of Service Agreement No. _____ between the Transmission Provider and the initial Reseller, except for the following terms and conditions negotiated by the Reseller of the reassigned transmission capacity (pursuant to Section 23.1 of this Tariff) and the Assignee: contract effective and termination dates, subject to the limitations on rollover or renewal requests set forth in Service Agreement No. _____ between the Transmission Provider and the initial Reseller; the amount of reassigned capacity or energy; Point(s) of Receipt and Delivery; and transmission service and other charges. 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 continue to invoice the initial Reseller for Point-to-Point Transmission Service provided in accordance with the terms and conditions of Service Agreement No. _____ between the Transmission Provider and the initial Reseller. The Reseller and the Assignee shall negotiate and execute separate billing arrangements between themselves for the charges reflected in this 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:

(Service Agreement Number)

(Assignee)

Attachment A-1

Assignee:

Each Party may change the designation of its representative upon oral notice to the other, with confirmation of that change to be submitted in writing within ten (10) days thereafter.

6.0 The Tariff, Service Agreement No. _____ between the Transmission Provider and the initial Reseller, and, if applicable, the “Specifications For The Resale, Reassignment Or Transfer of Long-Term Firm Point-To-Point Transmission Service,” as presently constituted or as they may be revised or superseded, are 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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(ASSIGNEE)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

(Service Agreement Number)

(Assignee)

Attachment A-1

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 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 reassigned capacity: _____

6.0 Designation of party(ies) subject to reciprocal service obligation:

7.0 Name of the Control Area from which capacity and energy will be delivered to the Transmission Provider for Transmission Service:

Name of the Control Area to which capacity and energy will be delivered by the Transmission Provider:

Name(s) of any Intervening Systems providing transmission service:

8.0 The Reseller and the Assignee have negotiated the charges detailed below in accordance with the terms and conditions of the Tariff, [including the price cap specified in Section 23.1 of the Tariff](#).

8.1 Transmission Charge: _____

(Service Agreement Number)

(Assignee)

Attachment A-1

8.2 System Impact and/or Facilities Study Charge(s):

8.3 Direct Assignment Facilities Charge: _____

8.4 Ancillary Services Charges: _____

9.0 Name of Reseller of the reassigned transmission capacity:

ATTACHMENT B

**Service Agreement for
Non-Firm Point-To-Point Transmission Service**

- 1.0 This Service Agreement, dated as of _____, is entered into, by and between the (Region) of Western Area Power Administration (Transmission Provider), and _____ (Transmission Customer), each of whom are sometimes hereinafter individually called Party and both of whom are sometimes hereinafter collectively called the Parties. For purposes of this Service Agreement, the Transmission Provider’s Transmission System consists of the applicable facilities described in Attachment K to the Tariff. The Transmission Provider may revise charges or losses for Non-Firm Point-to-Point Transmission Service provided under this Service Agreement pursuant to applicable Federal laws, regulations and policies upon written notice to the Transmission Customer.
- 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.
- 3.0 Service under this Service Agreement shall be provided by the Transmission Provider upon request by an authorized representative of the Transmission Customer. This Service Agreement shall terminate on _____.
- 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.
- 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:

(Service Agreement Number)
(Transmission Customer)
Attachment B

Transmission Customer:

Each Party may change the designation of its representative upon oral notice to the other, with confirmation of that change to be submitted in writing within ten (10) days thereafter.

7.0 The Tariff as presently constituted or as it may be revised or superseded is incorporated herein and made a part hereof.

8.0 Power Factor: The Transmission Customer will be required to maintain a power factor between __-percent lagging and __-percent leading for all deliveries of capacity and energy to and from the Transmission Provider’s Transmission System.

9.0 Transmission Losses:

9.1 Loss Factors:

9.1.1 If, based on operating experience and technical studies, the Transmission Provider determines that any of the transmission loss factors on the Transmission Provider’s Transmission System differs from the loss factors set forth in this Service Agreement, the Transmission Provider will notify the Transmission Customer of the revised loss factor(s) pursuant to Section 1.0 of this Service Agreement.

9.1.2 Transmission Provider Transmission Loss Factor: Transmission Provider transmission losses shall initially be __% and shall be assessed on the power scheduled and transmitted to a point of delivery on the Transmission Provider’s Transmission System.

10.0 Ancillary Services

10.1 Provided by Transmission Provider

10.1.1 Scheduling, System Control, and Dispatch Service

10.1.2 Reactive Supply and Voltage Control from Generation Sources Service

10.2 Provided by Transmission Customer

10.2.1 (To be filled in if appropriate)

10.2.2

(Service Agreement Number)
(Transmission Customer)
Attachment B

10.3 Provided by _____

10.3.1 (To be filled in if appropriate)

10.3.2

11.0 Net Billing and Bill Crediting Option: The Parties have agreed to implement [Net Billing, Bill Crediting, both Net Billing and Bill Crediting, or neither Net Billing nor Bill Crediting] as set forth in Attachment J.

12.0 Charges for Service: Charges for Non-Firm Point-to-Point Transmission Service and associated Ancillary Services shall be calculated in accordance with the applicable Rate Schedules(s) attached hereto and made a part of this Service Agreement. The rates or rate methodology used to calculate the charges for service under that schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

[The following section will be included as appropriate at the Transmission Provider’s discretion]

13.0 Independent System Operator: The Parties understand that the Transmission Provider may join an independent system operator under Commission jurisdiction. In the event the Transmission Provider either joins or is required to conform to protocols of the independent system operator, the Parties agree that the Transmission Provider either may (1) make any changes necessary to conform to the terms and conditions required by Commission approval of the independent system operator, or (2) terminate this Service Agreement by providing a one-year written notice to the Transmission Customer.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(Service Agreement Number)
(Transmission Customer)
Attachment B

(TRANSMISSION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

ATTACHMENT C

Methodology to Assess Available Transfer Capability

Part I - Colorado River Storage Project Management Center, Desert Southwest Region, Rocky Mountain Region, and Sierra Nevada Region

- (1) Detailed description of the specific mathematical algorithm used to calculate firm and non-firm ATC for scheduling, operating and planning horizons.

Scheduling Horizon

- a. Firm ATC = $TTC - TRM - ETC$
- b. Non-Firm ATC = $TTC - TRM * Coef - ETC$

Operating Horizon

- a. Firm ATC = $TTC - TRM - ETC$
- b. Non-Firm ATC = $TTC - TRM * Coef - ETC$

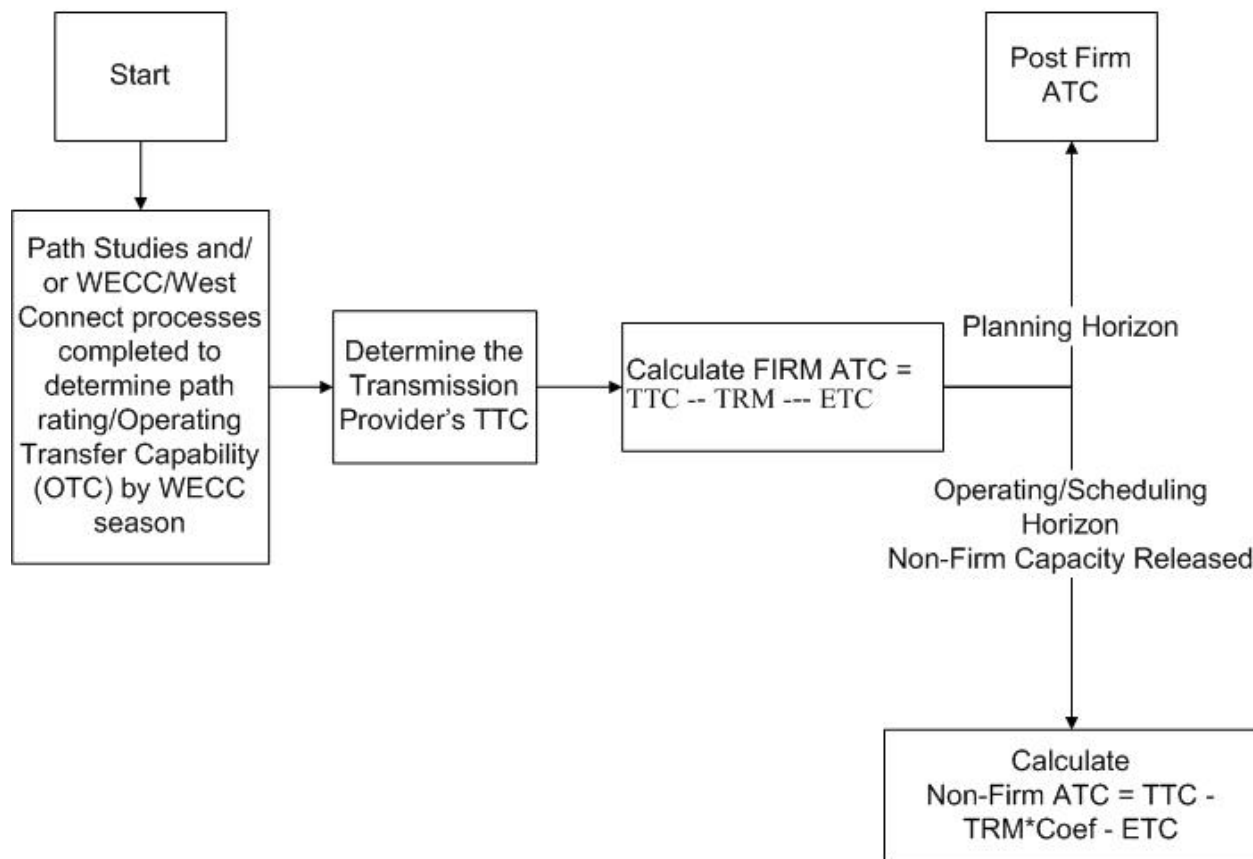
Planning Horizon

- a. Firm ATC = $TTC - TRM - ETC$
- b. Non-Firm ATC = $TTC - ETC$

The Transmission Provider's ATC algorithms are also available on the Transmission Provider's OASIS website.

- (2) A process flow diagram that illustrates the various steps through which ATC/AFC is calculated

ATC Process Flow Diagram



(3) Detailed explanation of how each of the ATC components is calculated for both the operating and planning horizons

a. For TTC:

i. Definition of TTC:

Total Transfer Capability (TTC): The amount of electric power that can be transferred over a specific path within the Transmission Provider's interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post- contingency system conditions. TTC is a variable quantity, dependent upon operating conditions in the near term and forecasted conditions in the long term. TTC shall be calculated consistent with the requirements of FERC, NERC and WECC as needed to represent system conditions, but no less frequently than seasonally. TTC cannot exceed the path rating.

ii. TTC calculation methodology.

- For transmission facilities that will affect the Western Interconnection, the determination of TTC is accomplished through the WECC Path Rating Process. The Transmission Provider follows the ATC methodology adopted by WECC and presented in the WECC Document Determination of Available Transfer Capability Within the Western Interconnection. Seasonal Operating Transfer Capability (OTC) studies are completed to determine the limit at which a transmission path can be operated at and still meet reliability requirement under an N-1 (single contingency) condition. The study results are reviewed and approved through WECC Operating Transfer Capability Planning Committee (OTCPC) regional processes.
- TTC is determined either prior to a new transmission component being brought into service or when a modification to a transmission component would affect the TTC.
- Once the TTC determination is made, it remains fixed and changes only if there is a physical or operational change to the transmission system or a transmission component which requires a change to TTC.
- When transmission facilities are jointly owned, the capacity is allocated among the owners based on the joint ownership or participation agreement; therefore, the TTC of the jointly owned facilities will be based upon the capacity allocated to each Transmission Provider.
- If a WECC defined path must be separated into components to properly allow for the commercial use of the path and its components, the components' TTCs will be based on the same studies used to determine the path OTC or the thermal rating of the components. The sum of the components' TTCs will not exceed the path OTC.
- For internal constraints, the net of local load and local generation may be used to determine TTC and/or ATC.
- Narratives explaining changes to monthly and/or yearly TTC are posted on the Transmission Provider's OASIS.

iii. List of databases used in TTC assessments:

The Transmission Provider utilizes the NERC and WECC contract path methodology to determine TTC on its transmission system. The

determination of the TTC for paths on the Transmission Provider system is segment dependent. However, the tools used to determine TTC is the same for all segments, i.e., the GE PSLF powerflow and stability programs using system modeling data obtained through WECC.

iv. Assumptions used in TTC assessments:

Paths with established transfer capabilities will not be evaluated unless there is a valid reason for doing so, such as a component change or new configuration, which could affect the transfer capability. Should a change in a WECC rated path warrant restudying, the required studies for the path will be performed through the WECC Path Rating Process. Should a change in a non-WECC rated path warrant restudying, the required studies for the path will follow the WECC rated path methodology, but not be brought through the WECC Path Rating Process. However, the study process will be performed through the applicable Regional or SubRegional Planning group.

b. For ETC:

i. Definition of ETC.

Existing Transmission Commitments (ETC): ETC is transmission that is already committed for use.

There are four types of committed uses: 1) native load uses; 2) existing commitments for purchase/exchange/deliveries/sales; 3) existing commitments for transmission service (Pre-Order 888, Post-Order 888, Point-to-Point and Network); and 4) other pending potential uses of transfer capability (non-confirmed Transmission Service Requests). The Transmission Provider determines ETC as the total of all contracts using a contract path methodology.

ii. Explanation of calculation methodology used to determine the transmission capacity to be set aside for native load and non-OATT customers:

The Transmission Service Provider shall determine the impact of firm ETCs based on the following inputs:

- The transmission capability utilized in serving Firm Electric Service, congressionally mandated power deliveries to Transmission Provider's preference customers from the Federally owned generating plants.

Attachment C

- The impact of Firm Network Integration Transmission Service serving Load, to include Load forecast error and losses not otherwise included in TRM.
- The impact of grandfathered firm Transmission Service agreements and bundled contracts for energy and transmission, where executed prior to the effective date of a Transmission Provider's Open Access Transmission Tariff or Safe Harbor Tariff accepted by FERC.
- The impact of Firm Point-to-Point Transmission Service.
- The impact of any Ancillary Services not otherwise included in TRM,
- Post-backs of redirected or released Firm services.
- The impact of any other services, contracts, or agreements not specified above using transmission that serves Firm Electric Service or Firm Network Integration Transmission Service.

iii. How point to point transmission service requests are incorporated.

Point-to-point type contracts are modeled using the specified megawatt quantity, point of receipt, point of delivery, and contract term.

iv. How rollover rights are accounted for:

Western takes into consideration an existing transmission customer's rollover rights when assessing whether to confirm a new request for long-term firm point-to-point transmission service. Western posts on OASIS potentially available ATC, including capacity associated with the rollover rights, but it does not grant new transmission service until such rollover rights have expired. This approach allows a customer viewing Western's posted ATC to consider all potentially available ATC and submit a request to obtain a queue position, should the existing transmission customer allow its rollover rights to expire. An OASIS assignment reference and queue time will be given to these new requestors. The new requests will be evaluated with the assumption that the existing transmission customer's rollover rights will rollover. If there is insufficient capacity to accommodate the transmission service request, the requests will follow the system impact study procedure outlined in section 19 of Western's Tariff.

v. Processes for ensuring that non-firm capacity is released properly:

The Transmission Provider uses an Offset value to account for unused transmission capacity which has not been scheduled (tagged) including the

impact of netting schedules in the opposite direction. A portion of the unused capacity is added to the non-firm ATC formula, thus increasing the ATC posting on OASIS. Due to uncertainty nature of this process and to prevent over-posting and subsequent curtailment of schedules, the Transmission Provider uses larger value of Offset for the immediate hours than several hours in the future.

- c. If a Transmission Provider uses an AFC methodology to calculate ATC, it shall. (i) explain its definition of AFC; (ii) explain its AFC calculation methodology, (iii) explain its process for converting AFC into ATC for OASIS posting, (iv) list the databases used in its AFC assessments; and (v) explain the assumptions used in its AFC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages.

The Transmission Provider does not use an AFC methodology to calculate ATC.

- d. For TRM:

- i. Definition of 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.

- ii. TRM calculation methodology:

The Transmission Provider currently reserves TRM to support the activation of operating reserves via participation in Rocky Mountain Reserve Sharing Group and/or Southwest Reserve Sharing Group. The Transmission Provider's obligation to deliver reserves is calculated at a minimum of twice a year by the Reserve Sharing Group. In addition, the Transmission Provider may include an additional transmission capacity to account for its network customers load forecast error and at certain paths to account for unscheduled flow..

- iii. Databases used in TRM assessments:

The Transmission Provider uses a value between 0 to 1 for TRM Coefficient to release a portion of the capacity reserved under TRM as non-firm. The Transmission Provider uses its scheduling system, PI, and SCADA, WECC bases cases, and PSS E or GE PSLF in its calculation of TRM.

iv. Conditions under which the Transmission Provider uses TRM:

The Transmission Provider may use TRM for any of the following:

- Transmission necessary for the activation of operating reserves;
- Unplanned transmission outages;
- Simultaneous limitations associated with operating under a nomogram;
- Loading variations due to balancing of generation and load;
- Uncertainty in load distribution and/or load forecast;
- Allowed for unscheduled flow.

e. For CBM:

i. Identification of the entity who performs the resource adequacy for CBM determination:

The Transmission Provider does not utilize CBM.

ii. The methodology used to perform the generation reliability assessment:

The Transmission Provider has established CBM of zero on all transmission paths when calculating ATC.

iii. Explanation of whether the assessment method reflects a specific regional practice:

The Transmission Provider has established CBM of zero on all transmission paths when calculating ATC.

iv. Assumptions used in this assessment:

The Transmission Provider has established CBM of zero on all transmission paths when calculating ATC.

v. Basis for the selection of paths on which CBM is set aside:

The Transmission Provider has established CBM of zero on all transmission paths when calculating ATC.

f. Additionally for CBM:

i. Explain definition of CBM:

The transmission Provider has established CBM of zero on all transmission paths when calculating ATC.

ii. List of databases used in CBM calculations:

The Transmission Provider does not use any databases in its CBM calculation,

iii. Demonstration that there is no double-counting of outages when performing CBM, TTC and TRM calculations:

Since the Transmission Provider has established CBM as zero on all transmission paths, the Transmission Provider can't double count for outages.

g. Procedures for allowing use of CBM during emergencies (with explanation of what constitutes an emergency, entities that are permitted to use CBM during emergencies and procedure which is followed by the Transmission Provider's merchant function and other load-serving entities when they need to access CBM:

At this time, the Transmission Provider's Network Customers have not requested CBM set aside, therefore the Transmission Provider does not have CBM set aside.

Part II - Upper Great Plains Region

Western's Upper Great Plains Region (UGPR) joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). SPP is the Transmission Provider for UGPR's transmission facilities under the SPP Tariff and utilizes SPP's ATC calculation methodology.~~The Transmission Provider must include, at a minimum, the following information concerning its ATC calculation methodology:~~

~~(1) — A detailed description of the specific mathematical algorithm used to calculate firm and non-firm ATC (and AFC, if applicable) for its scheduling horizon (same-day and real-time), operating horizon (day-ahead and pre-schedule) and planning horizon (beyond the operating horizon);~~

~~The Transmission Provider utilizes the Mid-Continent Area Power Pool ("MAPP") procedures for calculating firm and non-firm ATC for those Control Area to Control Area and Controlled Interface contract paths expected to be constraining to sales of transmission service and for calculating all-firm and non-firm AFC. The rated system path methodology (contract path) is~~

~~utilized for contract paths between the UGPR system and other Transmission Providers with whom UGPR has interconnections and for Controlled Interfaces.~~

~~UGPR's Controlled Interfaces are those transmission facilities or tie-lines included in its Transmission System where the flow of power across such facilities is controlled to a desired value utilizing a High Voltage Direct Current (HVDC) technology or a phase-shifting transformer. The Controlled Interfaces included in UGPR's Transmission System include: 1) the Miles City Converter Station, which is a 200MW back-to-back HVDC tie-line located in its Miles City 230-kV Substation in eastern Montana; 2) the east-side AC transmission connection to the Rapid City DC Tie, which is a 200MW back-to-back HVDC tie-line located in western South Dakota; 3) the 300 MVA Crossover phase-shifter located on the Crossover Yellowtail 230-kV transmission line located in eastern Montana, and 4) the Tioga Boundary Dam 230-kV transmission tie-line between the United States and Saskatchewan, which is controlled by a 200 MVA phase-shifting transformer owned by SaskPower and located at the north end of the transmission line in SaskPower's Boundary Dam 230-kV Substation.~~

~~The network response flowgate methodology (network AFC) is utilized for the Transmission Provider's system for facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations.~~

~~The MAPP region, including the Transmission Provider's system, utilizes two horizons for AFC/ATC calculations:~~

~~The Operating Horizon AFC/ATC calculation evaluates hourly non-firm and secondary non-firm service. The Operating Horizon AFC/ATC calculation determines AFC/ATC values for a sliding 36-hour period. The Operating Horizon includes the "scheduling horizon" (same day and real-time) as well as the "operating horizon" (day-ahead and pre-schedule) as such terms are referred to in the FERC Order No. 890.~~

~~The Planning Horizon AFC/ATC calculation evaluates transmission service with a NERC curtailment priority of 3 or higher except for secondary non-firm service. The Planning Horizon AFC/ATC calculation determines AFC/ATC values for a sliding 3-year period beyond the Operating Horizon.~~

~~Appendix F of MAPP's document "MAPP Policies and Procedures for Transmission Operations" (MAPP Policies and Procedures) contains the detailed mathematical algorithms used to calculate firm and non-firm AFC/ATC. A summary of the mathematical algorithms is provided below.~~

~~a. ——— Non-Recallable (Firm) AFC~~

~~Under the MAPP AFC process, non-recallable AFC represents firm AFC. The MAPP formula for Non-recallable AFC is available at:~~

~~http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf~~

~~Under this formula, Non-recallable AFC is Total Flowgate Capability reduced by: (i) the capacity benefit margin (CBM); (ii) the transmission reliability margin (TRM); (iii) the non-recallable Existing Transmission Commitments (ETC); and (iv) non-recallable transmission reservation impacts.~~

b. ~~Recallable (Non-Firm) AFC~~

~~Under the MAPP AFC process, recallable AFC represents non-firm AFC. The MAPP formula for Recallable AFC is available at:~~

~~http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf~~

~~Under this formula, Recallable AFC is Total Flowgate Capability reduced by: (i) CBM; (ii) TRM; (iii) Recallable Existing Transmission Commitments; (iv) Non-Recallable transmission reservation impacts; (v) Non-Recallable Existing Transmission Commitments; (vi) Recallable transmission reservation impacts.~~

c. ~~Non-recallable ATC Computation on a Contract Path~~

~~Non-recallable ATC on a contract path is the TTC on the contract path reduced by: (i) CBM, (ii) TRM, (iii) Non-Recallable Existing Transmission Commitments, and (iv) Non-Recallable Transmission Reservation Impacts on the path.~~

d. ~~Recallable ATC Computation on a Contract Path~~

~~Recallable ATC for a MAPP Transmission Provider Flowgate is the TTC reduced by: (i) CBM; (ii) TRM; (iii) Recallable Existing Transmission Commitments; (iv) Non-Recallable transmission reservation impacts; (v) Non-Recallable Existing Transmission Commitments; (vi) Recallable transmission reservation impacts.~~

~~(2) A process flow diagram that illustrates the various steps through which ATC/AFC is calculation; and~~

~~The process flow diagram of the steps involved in calculating ATC/AFC is provided as Appendix 1 to this Attachment C 2.~~

~~(3) A detailed explanation of how each of the ATC components is calculated for both the operating and planning horizons.~~

a. ~~For TTC, a Transmission Provider shall: (i) explain its definition of TTC; (ii) explain its TTC calculation methodology; (iii) list the databases used in its TTC assessments; and (iv) explain the assumptions used in its TTC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages.~~

~~With respect to requirement 3(a)(i), UGPR defines TTC as follows:~~

~~For UGPR Control Area to Control Area contract paths:~~

~~The TTC is defined as the sum of the seasonal normal facility ratings of the tie lines between the UGPR Control Area and the other Control Area with whom UGPR has an interconnection. The Control Area to Control Area contract path TTC is determined separately for each adjoining Control Area. The seasonal normal facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).~~

~~For UGPR Controlled Interface contract paths:~~

~~The TTC is defined as the seasonal normal facility rating of the HVDC line (in each direction), or the seasonal normal facility rating of the phase shifting transformer (in each direction).~~

~~For UGPR flowgates:~~

~~For Outage Transfer Distribution Factor (“OTDF”) flowgates, the TTC is defined as the seasonal emergency facility rating of the limiting facility. The seasonal emergency facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).~~

~~For Power Transfer Distribution Factor (“PTDF”) flowgates where the limiting phenomenon is stability related, the TTC is defined as the flow on the monitored facilities above which the limiting phenomenon no longer meets criteria.~~

~~With respect to requirement 3(a)(ii), UGPR’s TTC calculation methodology is:~~

~~For UGPR Control Area to Control Area contract paths:~~

~~The TTC is calculated as the sum of the seasonal normal facility ratings of the tie lines between the UGPR Control Area and the other Control Area with whom UGPR has an interconnection. For tie lines that are jointly owned, only the UGPR ownership share of the tie line capacity is included. The Control Area to Control Area contract path TTC is determined separately for each adjoining Control Area. The seasonal normal facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).~~

~~For UGPR Controlled Interface contract paths:~~

~~The TTC is calculated as the lesser of the seasonal normal facility rating of the HVDC line (in each direction) or the flow on the HVDC line (in each direction) above which the limiting phenomenon (i.e. thermal, voltage angle, or stability related) no longer meets criteria. The TTC is calculated as the lesser of the seasonal normal facility rating of the phase shifting transformer (in each direction) or the flow on the phase shifting transformer (in each direction) above which the limiting phenomenon (i.e. thermal, voltage angle, or stability related) no longer meets criteria.~~

~~Power flow simulations are performed to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS) are not met. Stability simulations are performed, if applicable, to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS) are not met. If applicable, in the case of a voltage angle related limit, power flow simulations are performed to determine the flow on the monitored facilities at which a line outage results in a breaker angle differential at which, when the breaker is reclosed, the instantaneous generator response of the most critical generators is such that its delta power reaches its maximum safe limit (generator shaft torque is within the limits of the generator)~~

For UGPR flowgates:

~~For OTDF flowgates, the TTC is calculated as equal to the seasonal emergency facility rating of the limiting facility. The seasonal emergency facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).~~

~~For PTDF flowgates where the limiting phenomenon is voltage angle or stability related, the TTC is calculated as equal to the flow on the monitored facilities above which the limiting phenomenon no longer meets criteria. Stability simulations are performed to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS) are not met. In the case of a voltage angle related limit, power flow simulations are performed to determine the flow on the monitored facilities at which a line outage results in a breaker angle differential at which, when the breaker is reclosed, the instantaneous generator response of the most critical generators is such that its delta power reaches its maximum safe limit (generator shaft torque is within the limits of the generator).~~

~~The methodologies and studies used to determine TTC for each flowgate in the MAPP Region are reviewed and sanctioned through the MAPP Regional Transmission Committee (RTC).~~

~~With respect to requirement 3(a)(iii), the databases used in UGPR's TTC assessments are:~~

~~For thermal limitations, the seasonal normal and emergency facility ratings and impedance data for UGPR's transmission equipment are documented in internal spreadsheets and provided to MAPP, and to UGPR's Reliability Coordinator, the Midwest ISO, for real time operations and long term planning and model development purposes.~~

~~For stability limitations, MAPP maintains a database of generator and other equipment modeling data which are used in stability simulations. The North Dakota Export (NDEX) flowgate that is jointly owned by UGPR is limited by stability considerations. For voltage angle limitations, transmission line relaying synchro-check settings may be maintained by MAPP transmission owners in a computer-aided protection engineering computer database. MAPP transmission owners may also use generator shaft torque fatigue capabilities that are developed on an as-needed basis by generator manufacturers.~~

~~UGPR considers the information in these databases to be Critical Energy Infrastructure Information ("CEII").~~

With respect to requirement 3(a)(iv), the assumptions used in TTC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages are:

For Control Area to Control Area contract paths:

Load levels, generation dispatch and planned and contingency outages are not considered in determining the TTC.

For Controlled Interface contract paths:

For Controlled Interface contract paths where the limiting phenomenon is stability related, in accordance with MAPP practice, load levels for the entire MAPP area are modeled at 100% and 85% of peak summer load for summer studies and 100% and 90% of peak winter loads for winter studies. Load levels internal to the stability limited NDEX and other interdependent northern MAPP flowgates are modeled according to MAPP practice for stability simulations. Such modeling of load levels is appropriate for stability simulations because load can be a damping influence on angular instability. Generators in the electrical vicinity of the stability issue are typically dispatched at their maximum outputs in order to provide for a high level of acceleration power to appropriately analyze angular instability. Planned and contingency outages are analyzed in accordance with the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS).

For Controlled Interface contract paths where the limiting phenomenon is voltage angle related, the TTC is dependent on the relative interaction between the voltage differential across an open breaker and the resultant generator shaft torque response relative to the maximum safe limits of the generator. Generation dispatch may be a significant factor with respect to the critical generator (in terms of the generator most sensitive to a delta power fluctuation in excess of its maximum safe shaft torque) and other generators electrically near the critical generator. The critical generator is dispatched at its minimum dispatch level in the power flow simulations because that is the appropriate assumption for a delta power analysis. To the extent that other marginal generators (generators that may or may not be on-line in real-time due to their dispatch costs) are on-line in the base case models, such generators are either taken off-line or dispatched down to minimum output. This assumption results in the critical machine participating to a greater extent in the delta power analysis. Planned and contingency outages are not currently considered in determining the TTC for voltage angle related limitations.

For Controlled Interface contract paths where the limiting phenomenon is thermal loading related, summer load levels are used in the determination of summer season TTC and winter load levels are used in the determination of winter TTC. Generation dispatch is not considered in determining the TTC. Planned and contingency outages of a monitored facility or another facility in the immediate vicinity of a monitored facility are considered in the determination of the TTC. Typically, the posted TTC is based on a system intact (no outages) assumption. During times of outages of facilities near the monitored facilities, the TTC is based on the outage condition.

For flowgates:

For OTDF flowgates, the TTC is only dependent on the facility rating. Load levels, generation dispatch and planned and contingency outages are not considered in determining the TTC.

For PTDF flowgates where the limiting phenomenon is stability related, in accordance with MAPP practice, load levels for the entire MAPP area are modeled at 100% and 85% of peak summer load for summer studies and 100% and 90% of peak winter loads for winter studies. Load levels internal to the stability limited NDEX and other non-UGPR-owned interdependent northern MAPP flowgates are modeled according to MAPP practice for stability simulations. Such modeling of load levels is appropriate for stability simulations because load can be a damping influence on angular instability. Generators in the electrical vicinity of the stability issue are typically dispatched at their maximum outputs in order to provide for a high level of acceleration power to appropriately analyze angular instability. Planned and contingency outages are analyzed in accordance with the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS).

For PTDF flowgates where the limiting phenomenon is voltage angle related, the TTC is dependent on the relative interaction between the voltage differential across an open breaker and the resultant generator shaft torque response relative to the maximum safe limits of the generator. Generation dispatch may be a significant factor with respect to the critical generator (in terms of the generator most sensitive to a delta power fluctuation in excess of its maximum safe shaft torque) and other generators electrically near the critical generator. The critical generator is dispatched at its minimum dispatch level in the power flow simulations because that is the appropriate assumption for a delta power analysis. To the extent that other marginal generators (generators that may or may not be on-line in real-time due to their dispatch costs) are on-line in the base case models, such generators are either taken off line or dispatched down to minimum output. This assumption results in the critical machine participating to a greater extent in the delta power analysis. Planned and contingency outages are not currently considered in determining the TTC for voltage angle related limitations.

For PTDF flowgates where the limiting phenomenon is thermal loading related, summer load levels are used in the determination of summer season TTC and winter load levels are used in the determination of winter TTC. Generation dispatch is not considered in determining the TTC. Planned and contingency outages of a monitored facility or another facility in the immediate vicinity of a monitored facility are considered in the determination of the TTC. Typically, the posted TTC is based on a system intact (no outages) assumption. During times of outages of facilities near the monitored facilities, the TTC is based on the outage condition.

b. — For ETC, a transmission provider shall explain: (i) its definition of ETC; (ii) the calculation methodology used to determine the transmission capacity to be set aside for native load (including network load), and non-OATT customers including, if applicable, an explanation of assumptions on the selection of generators that are modeled in service; (iii) how point-to-point transmission service requests are incorporated; (iv) how rollover rights are accounted for; and (v) its processes for ensuring that non-firm capacity is released properly (e.g., when real time schedules replace the associated transmission service requests in its real time calculations); and (vi) describe the step-by-step modeling study methodology and criteria for adding or eliminating flowgates (permanent and temporary).

With respect to requirement 3(b)(i), within the MAPP region the ETC value is used to account for committed use of a flowgate or contract path other than transmission reservations made after November 1, 1996. For flowgates, ETC accounts for the impacts on a flowgate due to load serving and grandfathered transmission commitments. For contract paths, ETC accounts for grandfathered transmission commitments. ETC used in firm AFC/ATC calculations includes the effect of only firm

~~transmission commitments, and may reflect flows expected under the most limiting conditions for a given time period. ETC used in non-firm AFC/ATC calculations includes the effects of firm transmission commitments, and may reflect average conditions for a given time period.~~

~~With respect to requirement 3(b)(ii), the Planning Horizon flowgate ETC value is comprised of several components including:~~

~~MAPP Transmission Provider Generation to Load Impacts. These impacts are calculated as follows:~~

~~MAPP Transmission Providers upload, on a daily basis, hourly control area load forecasts for the next seven days and, on a monthly basis, monthly load forecasts for the next 36 months. For UGPR, the load forecast information correlates to the UGPR native load forecast with an adjustment to account for the non-IS loads within UGPR's load balancing area. The adjustment is based on historical average ratios of UGPR native load to total control area load.~~

~~MAPP Transmission Providers supply designated network resource lists for all generators in the control area. For load serving entities within the UGPR Control Area that are not network integration transmission service customers, UGPR relies on data supplied by these entities through the annual MAPP model building process.~~

~~MAPP Transmission Providers supply joint-owned generator information. This information includes information concerning the joint owners and the transmission arrangements for delivering joint-owned shares to the joint owners.~~

~~MAPP Transmission Providers supply control area generating unit merit order (block loading) information. The merit order information is used to develop the generation dispatch to serve the load in the Transmission Provider's control area. To the extent resources outside the UGPR Control Area are used to serve load in the UGPR Control Area, these deliveries are represented by the transmission service requests on OASIS, except for generators directly connected to the UGPR system through UGPR transmission facilities. In these cases, the resource is represented in the merit order file and UGPR's share of the resource is not reflected in the calculation of the adjoining control area's generation to load impacts.~~

~~MAPPCOR calculates, for each MAPP flowgate including UGPR flowgates, the generation to load impacts of each MAPP Transmission Provider serving load within its control area. MAPP's calculation is based on determining a generation dispatch for each applicable time horizon. The dispatch is based on dispatching generation in merit order up to the designated network resource limits, respecting joint ownership shares of jointly owned units, until the load plus net interchange are balanced for each control area. The calculation includes the effects of generation and transmission outages included in the NERC System Data Exchange (SDX). Further details of MAPP's calculation can be found in Section 6.1 of Appendix F to the latest version of the MAPP Policies and Procedures which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.~~

~~Centralized Dispatch Market Flow Impacts. The MAPP process can accept flow information from centralized dispatch markets. Such flow information is required to be provided by the Midwest ISO in the Interconnected Operations and Congestion Management Service Agreement (“Seams Agreement”) under the Midwest ISO tariff between UGPR and the Midwest ISO. UGPR utilizes MAPPCOR as its Contract Manager under the Seams Agreement. The flow information is provided for all MAPP Transmission Provider flowgates that meet the coordination requirements in the Congestion Management Process described in the Seams Agreement. The market flow impacts seek to represent the parallel flow on the applicable flowgates based on economic dispatch simulations of the expected market dispatch for various time frames.~~

~~Other Third Party Generation to Load Impacts. For third party transmission providers not accounted for under the above processes, MAPPCOR utilizes generation block loading files and load forecasts from the NERC SDX to calculate the control area load parallel flow impacts from non MAPP and non MISO transmission providers on each MAPP Transmission Provider flowgate. Further details of MAPP’s calculation can be found Section 6.1 of Appendix F in the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.~~

~~The Operating Horizon flowgate ETC value is calculated by MAPP for each MAPP Transmission Provider flowgate. MAPP forecasts flows and ETC on MAPP Transmission Provider flowgates for each hour of the Operating Horizon using historical flow information and reported energy schedules. The forecasting algorithm used by MAPP utilizes a weighted average of metered flows from previous hours and comparable hours from previous days. Further details of MAPP’s calculation of Operating Horizon ETC can be found in Section 6.2 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.~~

~~UGPR considers the data used in calculating ETC to be Critical Energy Infrastructure Information (“CEII”).~~

~~With respect to requirement 3(b)(iii), MAPPCOR calculates the point to point transmission service request impacts for MAPP Transmission Provider flowgates. In addition to MAPP reservations, MAPPCOR downloads OASIS reservations from the Midwest ISO, PJM and SPP OASIS nodes. The reservations are filtered according to certain filtering criteria in order to avoid double counting reservations. MAPPCOR then utilizes source/sink information from these reservations (to the extent available) or Point of Receipt / Point of Delivery information to calculate the impacts of the reservations on each MAPP Transmission Provider flowgate. Impacts of reservations in the forward direction (flows additive to the flowgate flows) and in the reverse direction (flows counterflow to the flowgate flows) are calculated for the operating and planning horizons. Further details of MAPP’s calculation can be found in the latest version of Section 11 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS~~

Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.

With respect to requirement 3(b)(iv), roll-over rights of MAPP Transmission Provider reservations are accounted for in the calculation of ATC/AFC. Absent any indication to the contrary from the MAPP Transmission Providers, it is assumed that each long-term firm transmission service reservation has rights of first refusal (roll-over rights). In like fashion, since UGPR has a seams agreement with MISO in which both parties have agreed to take into account the roll-over rights of the other party, MISO long-term firm transmission service requests are assumed to have roll-over rights unless MISO advises otherwise. The roll-over rights of the MAPP and MISO reservations are reflected in the ATC/AFC calculation by the creation of a TSN in the OASIS system. A TSN is treated the same as a reservation in the calculation of impacts. The TSN utilizes the same source/sink and POR/POD as the parent reservation and thus the impacts of the roll-over rights are calculated in the same way as the impacts of the parent reservation. Further details of MAPP’s calculation of the roll-over rights can be found in Section 13 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.

With respect to requirement 3(b)(v), the process for ensuring that non-firm capacity is released properly (e.g., when real-time schedules replace the associated transmission service requests in real-time calculations) are fully detailed in the MAPP Policies and Procedures. In summary of those procedures, MAPP calculates short-term non-firm AFC for the Operating Horizon by considering known energy schedules for all reservations except hourly non-firm reservations. For hourly non-firm reservations, the reservation amount is used if no schedule has been submitted. If a NERC e-tag has been submitted for hourly non-firm service, the amount on the e-tag is used in the calculation. Details concerning the non-firm AFC calculation can be found in the latest version of Section 6.2 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.

With respect to requirement 3(b)(vi), the step-by-step modeling study methodology and criteria for adding or eliminating flowgates (permanent and temporary) are as follows. The Transmission Provider develops flowgates for facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations. The Transmission Provider follows MAPP’s requirements for adding or removing flowgates as outlined in Section 5.2.1 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>.

Under the MAPP procedures, approval is required from the Transmission Operating Subcommittee (TOS) and the Transmission Schedules and Compensation Subcommittee (TSCSC) under the MAPP Regional Transmission Committee (RTC) for any new MAPP Transmission Provider flowgates in the MAPP Request Evaluation process. Under the MAPP procedures, a change in the definition of an existing MAPP Transmission Provider flowgate is considered a new flowgate and requires the above approvals.

~~MAPP's procedures with regard to temporary flowgates are similar to the procedures for permanent flowgates except that approval of the Chairs of the TOS and TSCSC is acceptable in lieu of approval by the committees as a whole. Temporary flowgates are developed for facilities expected to be congested in real-time operations due to unforeseen operational conditions such as short-term conditions due to planned or forced outages. In such cases, temporary flowgates are modeled for the time frames of the expected unusual operating conditions and then are removed from operation upon restoration of the Transmission System to its normal state.~~

~~c. — If a Transmission Provider uses an AFC methodology to calculate ATC, it shall: (i) explain its definition of AFC; (ii) explain its AFC calculation methodology; (iii) explain its process for converting AFC into ATC for OASIS posting; (iv) list the databases used in its AFC assessments; and (v) explain the assumptions used in its AFC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages.~~

~~UGPR utilizes the MAPP procedures for calculating firm and non-firm ATC and AFC. UGPR utilizes the rated-system path methodology (contract path) for contract paths between the UGPR system and other Control Areas with whom UGPR has interconnections. UGPR utilizes the network response flowgate methodology (network AFC) for facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations.~~

~~With respect to requirement 3(c)(i), the term "flowgate" refers to a transmission facility(s) on which flow has been correlated with a limiting phenomenon (thermal loading, transient stability, voltage stability or voltage angle). The AFC values posted for identified flowgates is the Available Flowgate Capability on a set of physical transmission facilities, rather than a Control Area to Control Area transfer capability.~~

~~Flowgates can be defined as Power Transfer Distribution Factor ("PTDF") or Outage Transfer Distribution Factor ("OTDF").~~

~~OTDF flowgates measure the system intact flow on a limiting facility (called the "monitored element") and calculate (by a network response analysis) how much flow from a contingent facility will flow on the limiting facility should an outage of the contingent facility occur. OTDF flowgates are typically only used where the limiting phenomenon is thermal loading on the limiting facility.~~

~~PTDF flowgates measure flow for conditions with the transmission system intact and are typically used where the limiting phenomenon is stability or voltage angle related or for thermal loading issues where the limiting facility and the contingent facility are both extra-high voltage facilities (e.g., 345-kV lines).~~

~~UGPR flowgates include both OTDF and PTDF flowgates.~~

~~With respect to requirement 3(c)(ii), UGPR utilizes the MAPP region AFC calculation methodology. In summary, AFC is calculated as the Total Flowgate Capability (referred to as the~~

~~“TFC” or, equivalently, the “TTC”) less CBM less TRM less ETC less transmission service reservation impacts. Detailed information regarding the algorithms used by MAPP for calculating firm and non-firm ATC/AFC is available at: http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf.~~

~~In addition, as part of the Seams Agreement between the UGPR and the Midwest ISO, the MAPP region also calculates Available Share of Total Flowgate Capability (“ASTFC”). The calculation of ASTFC is in accordance with the regional process of allocation of flowgate capability between MAPP and MISO (as well as between other Reciprocal Entities such as PJM, SPP, and TVA). The details of the MAPP’s calculation of ASTFC can be found in Section 14 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.~~

~~With respect to requirement 3(c)(iii), MAPP does not presently convert AFC into ATC. Within the MAPP region, ATC is utilized for contract path limitations and AFC is utilized for specific transmission facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations. Within the MAPP region, both an ATC evaluation and an AFC evaluation are performed for every request for transmission service. After NERC develops rules within the MOD-001 standard for converting AFC into ATC, MAPP will comply with the NERC rules. While MAPP does not convert its AFC values into ATC values, the MAPP Scenario Analyzer is available on the MAPP OASIS to evaluate AFC impacts on ATC on a Control Area to Control Area contract path.~~

~~With respect to requirement 3(c)(iv), the databases utilized in AFC assessments are broken down into two areas. First, the databases utilized by UGPR to develop the data inputs it supplies to MAPP for flowgate AFC calculations are the same as those listed in the response to requirement (iii) under Item 3(a) above (for the TTC calculation), as well as those listed in the response to requirement (ii) under 3(b) above (for the ETC calculation) and the data bases listed in the response to requirement 3(d) below (for the TRM calculation). Second, the databases utilized by MAPP in performing the AFC calculation after having been provided the MAPP Transmission Provider data inputs are described in Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the “Business Practices” area.~~

~~UGPR considers the information in these databases to be Critical Energy Infrastructure Information (“CEII”).~~

~~With respect to requirement 3(c)(v), the assumptions used in AFC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages are the same as those listed in the response to requirement (iv) under Item 3(a) above (for the TTC calculation), as well as those listed in the response to requirement (ii) under 3(b) above (for the ETC calculation) and the assumptions listed in the response to requirement 3 (d) below (for the TRM calculation).~~

d. ——— For TRM, a Transmission Provider shall explain: (i) its definition of TRM; (ii) its TRM calculation methodology (e.g., its assumptions on load forecast errors, forecast errors in system topology or distribution factors and loop flow sources); (iii) the databases used in its TRM assessments; (iv) the conditions under which the transmission provider uses TRM. A Transmission Provider that does not set aside transfer capability for TRM must so state.

With respect to requirement 3(d)(i), within MAPP, TRM is defined as the Transmission Reliability Margin. TRM provides a reserve that ensures the reliability of the interconnected transmission network. TRM accounts for the inherent uncertainty associated with TTC, ETC and ATC/AFC calculations, and the need for operating flexibility to ensure reliable system operation as system conditions change.

With respect to requirement 3(d)(ii), UGPR calculates TRM in accordance with MAPP policies and methodologies. The nature of interfaces dictates how TRM is calculated. MAPP's TRM calculation methodology for flowgates includes the following sub-components, which are described below:

~~General Uncertainty. ATC/AFC calculations utilize many assumptions and projections of system conditions, which may include such items as transmission system topology, projected customer demand and its distribution, generation dispatch, future weather conditions, and parallel path flows. Therefore, calculations of future TTC and AFC values must consider the inherent uncertainties in projecting such system parameters over longer time periods. Consistent with MAPP region policies for flowgates, UGPR sets the general uncertainty component of TRM at a value equal to 2% of the flowgate TTC. The 2% value is reasonable based on the many uncertainties discussed above.~~

~~Delivery of Operating Reserves. The operating reserve component of the TRM is defined within MAPP to be the amount of transmission capability on a flowgate required to provide the amount of operating reserves associated with 100% of the greatest single generator contingency impacting the flowgate in the direction of the constraint. For UGPR, the greatest generator outage affecting each flowgate is determined by studying the effect of tripping various generators within the MAPP region and dispatching generators within each Midwest Contingency Reserve Sharing Group ("MCRSG") member's area to reflect their share of the operating reserves required to be delivered to replace the output of the generator that tripped. The generator outages are analyzed with the contingent facility out of service. The greatest generator outage affecting the flowgate is the outage that results in the greatest incremental flow over the flowgate. The highest incremental flow on the flowgate is the amount of TRM required to deliver operating reserves.~~

~~Interdependency of Interfaces. The difference between TTC values developed using simultaneous and non-simultaneous study procedures and the related interdependency of interfaces may be handled by computing a variable TRM. This applies to the North Dakota Export (NDEX) interface.~~

~~Within MAPP, the release of TRM on a non-firm basis is allowed provided the flowgate can be operated in compliance with NERC standards. UGPR releases TRM for non-firm AFC postings in three ways. First, the uncertainty sub-component is removed from the TRM for non-firm AFC postings. The removal of the general uncertainty component is appropriate for non-firm AFC postings because non-firm service can be curtailed prior to interrupting firm transmission service. Second, the TRM sub-component related to reserve sharing is reduced to 60% for non-firm ATC postings. This is appropriate because MAPP requires that 40% of the operating reserve must be delivered immediately via spinning reserves and the other 60% must be delivered via fast-start units to be provided within 30-60 minutes. Non-firm curtailments would be expected to be effective before the fast-start 60% portion of the operating reserves needs to be delivered. Third, the TRM sub-component related to TTC values developed using simultaneous and non-simultaneous study procedures is reduced to allow for selling of non-firm capacity identified in a non-simultaneous study; provided that the Transmission Provider has coordinated a procedure for posting of non-firm capability above the simultaneous limit with other affected Transmission Providers.~~

~~The methodologies and studies used to determine TRM for each flowgate in the MAPP Region are reviewed and sanctioned through the MAPP Regional Transmission Committee (RTC).~~

~~With respect to requirement 3(d)(iii), the databases utilized in TRM assessments include the flowgate TTCs (for the general uncertainty sub-component) and the MCRSG requirements as documented in spreadsheets maintained by the MCRSG and MAPP power flow models, both used for the operating reserve delivery calculation. MAPP, including UGPR, considers the information in these databases to be Critical Energy Infrastructure Information (“CEII”).~~

~~With respect to requirement 3(d)(iv), TRM is utilized for all firm and non-firm flowgate AFC calculations. 100% of the TRM value is utilized for firm flowgate AFC calculations. Portions of the TRM are released for non-firm flowgate AFC calculations as discussed in the response to requirement 3(d)(ii) above. TRM is not utilized for contract path ATC calculations.~~

~~e. — For CBM, the Transmission Provider shall include a specific and self-contained narrative explanation of its CBM practice, including: (i) an identification of the entity who performs the resource adequacy analysis for CBM determination; (ii) the methodology used to perform generation reliability assessments (e.g., probabilistic or deterministic); (iii) an explanation of whether the assessment method reflects a specific regional practice; (iv) the assumptions used in this assessment; and (v) the basis for the selection of paths on which CBM is set aside.~~

~~UGPR does not include CBM on any of its contract paths or flowgates. These requirements are therefore not applicable to UGPR and no response is provided.~~

~~f. — In addition, for CBM, a Transmission Provider shall: (i) explain its definition of CBM; (ii) list the databases used in its CBM calculations; and (iii) demonstrate that there is no double-counting of contingency outages when performing CBM, TTC, and TRM calculations.~~

~~UGPR does not include CBM on any of its contract paths or flowgates. These requirements are therefore not applicable to UGPR and no response is provided.~~

~~g. — The Transmission Provider shall explain its procedures for allowing the use of CBM during emergencies (with an explanation of what constitutes an emergency, the entities that are permitted to use CBM during emergencies and the procedures which must be followed by the transmission providers' merchant function and other load-serving entities when they need to access CBM). If the Transmission Provider's practice is not to set aside transfer capability for CBM, it shall so state.~~

~~UGPR does not include CBM on any of its contract paths or flowgates. These requirements are therefore not applicable to UGPR and no response is provided.~~

~~(4) — An explanation of the process for coordinating ATC calculations with neighboring systems.~~

~~MAPP and the Transmission Provider coordinate ATC calculations with neighboring systems in a number of ways:~~

~~MAPP utilizes the coordination procedures outlined in the Seams Agreement between UGPR and the Midwest ISO. Under that agreement:~~

~~Flowgates are subjected to a number of tests to determine if the flowgate will be reciprocally coordinated between entities subject to the Congestion Management Process (as such term is used in the Seams Agreement) which entities include not only the Midwest ISO but also PJM, SPP and TVA.~~

~~MAPP monitors in its evaluation of transmission service requests all flowgates for which it is deemed to be reciprocal. MAPP does not calculate the AFC for these flowgates but rather uses the values provided by the owner of the flowgate.~~

~~MAPP provides AFC values for all MAPP flowgates to the other reciprocal entities to the various seams agreements. Those entities then monitor the MAPP flowgates in their evaluations of transmission service.~~

~~MAPP makes its reservations available to other parties for their use in calculating reservation impacts on their flowgates.~~

~~As discussed in the response to 3(b)(ii), the MAPP process can accept flow information from adjoining centralized dispatch markets. In the case of the Midwest ISO, the flow information is provided for all MAPP Transmission Provider flowgates that meet the coordination requirements in the Congestion Management Process described in the Seams Agreement.~~

~~As discussed in the response to 3(b)(iii), MAPP downloads OASIS reservations from the Midwest ISO, PJM and SPP OASIS nodes. MAPP includes these reservations in its calculation of point-to-point transmission service request impacts for MAPP Transmission Provider flowgates.~~

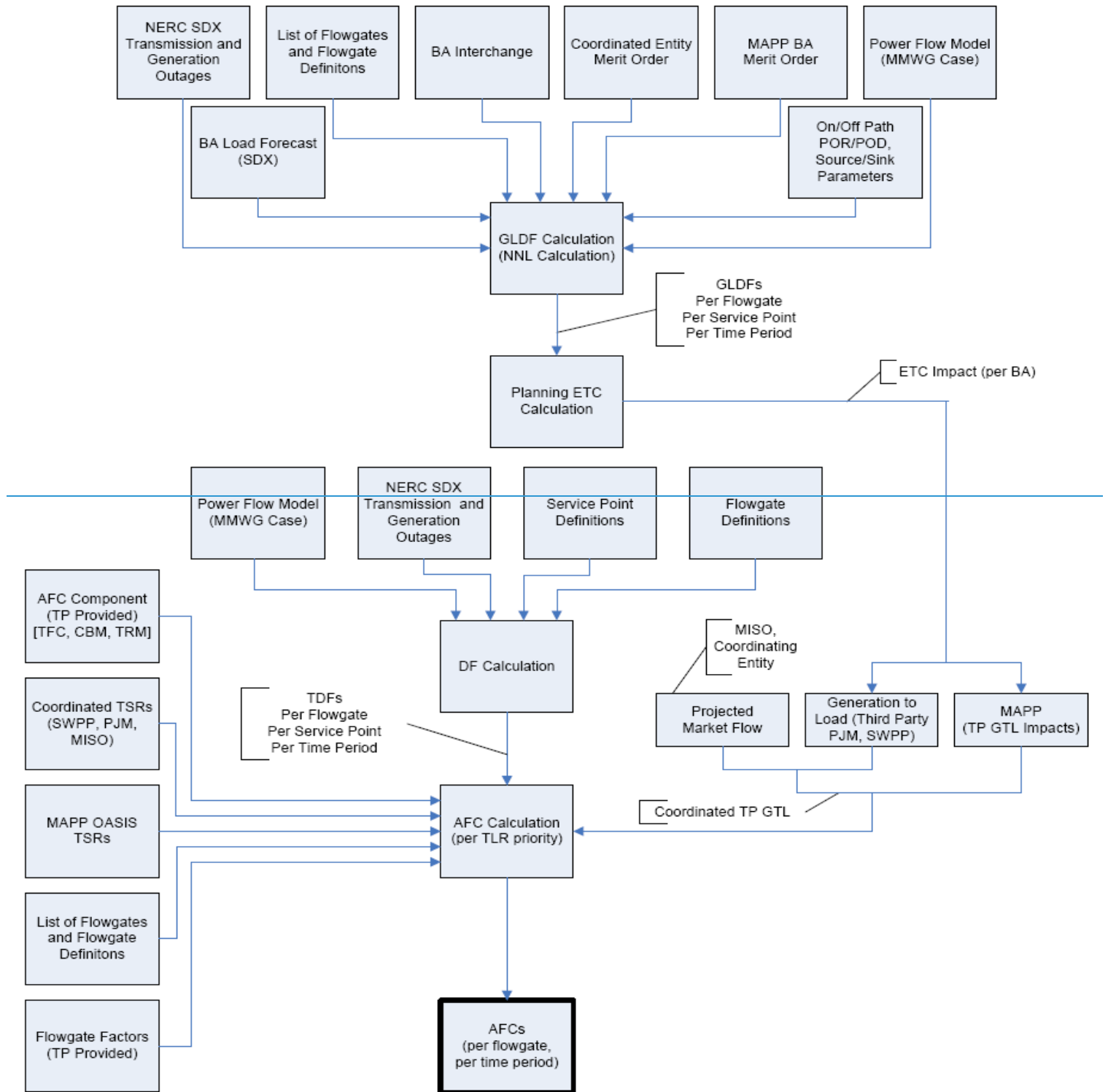
~~As discussed in the response to 3(b)(iv), MAPP and the Midwest ISO have agreed to take into account the roll-over rights of the other party.~~

~~As discussed in the response to 3(c)(ii), the MAPP region also calculates Available Share of Total Flowgate Capability (“ASTFC”). The calculation of ASTFC is in accordance with the regional process of allocation of flowgate capability between MAPP and MISO (as well as between other Reciprocal Entities such as PJM, SPP, and TVA).~~

~~The Transmission Provider coordinates its calculation of TTC with neighboring systems such that the appropriate facility ratings of the tie lines are used for setting the Control Area to Control Area contract path TTC. For flowgates that involve tie lines with other entities, UGPR utilizes the appropriate facility ratings in the determining the flowgate TFC.~~

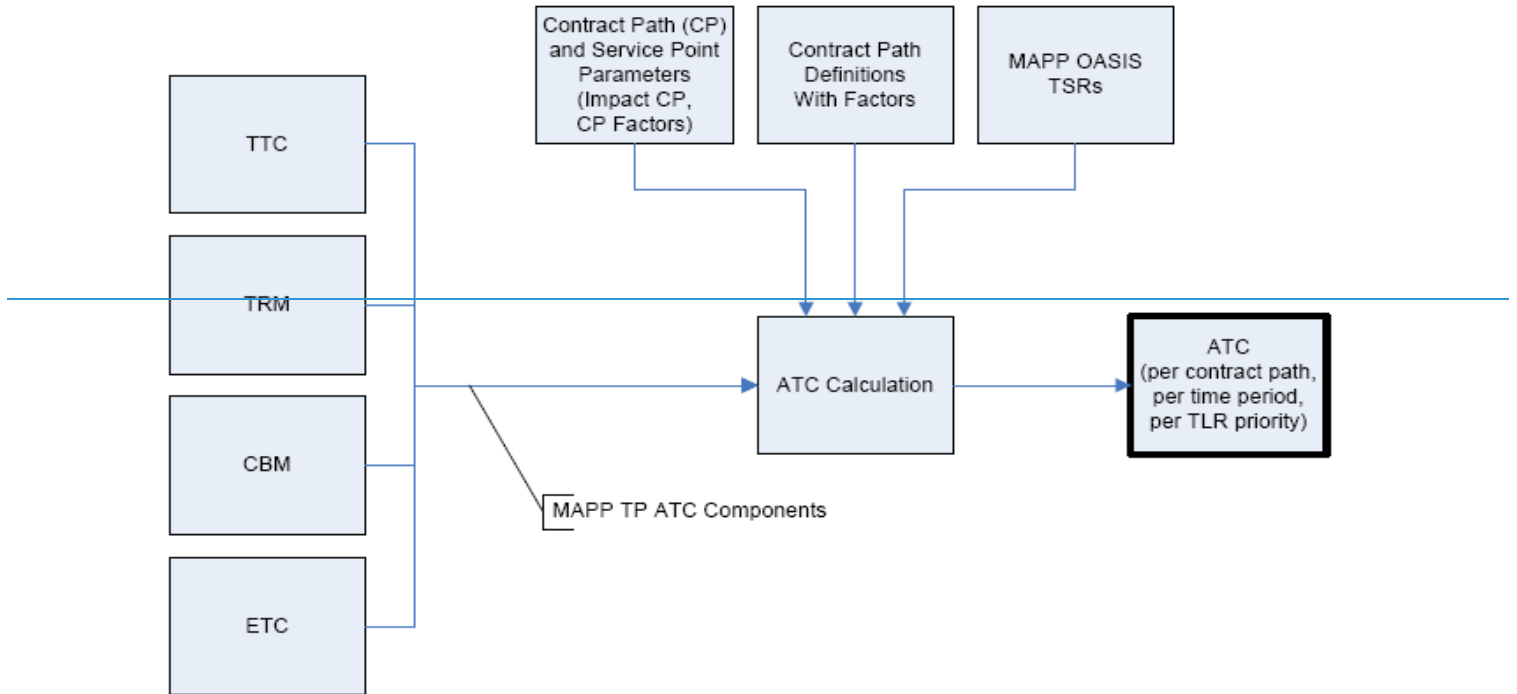
MAPP AFC Calculations Flow Diagram (Planning Horizon)

Revised: September 11, 2007



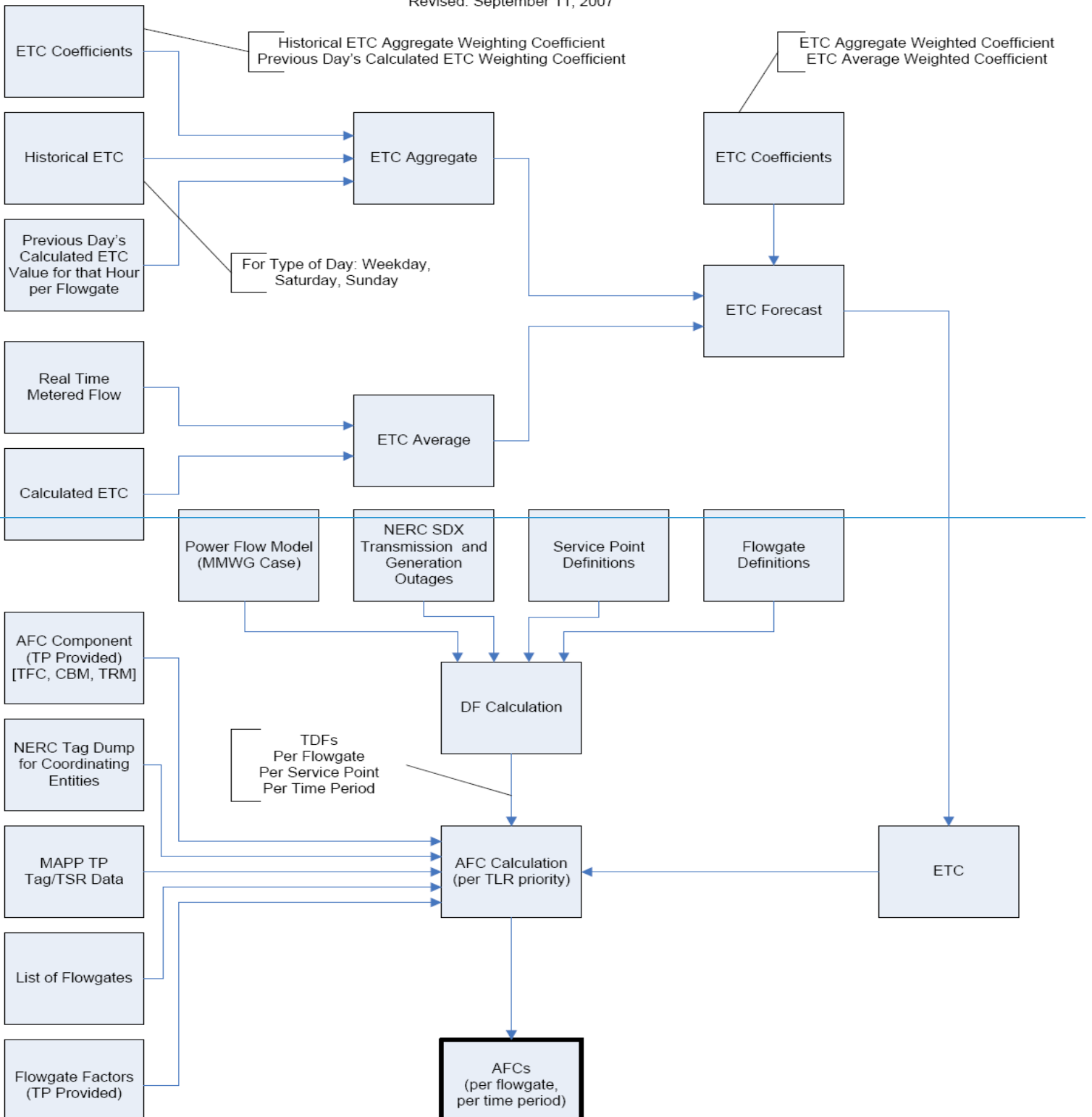
MAPP ATC Calculations Flow Diagram (Planning Horizon)

Revised: September 11, 2007



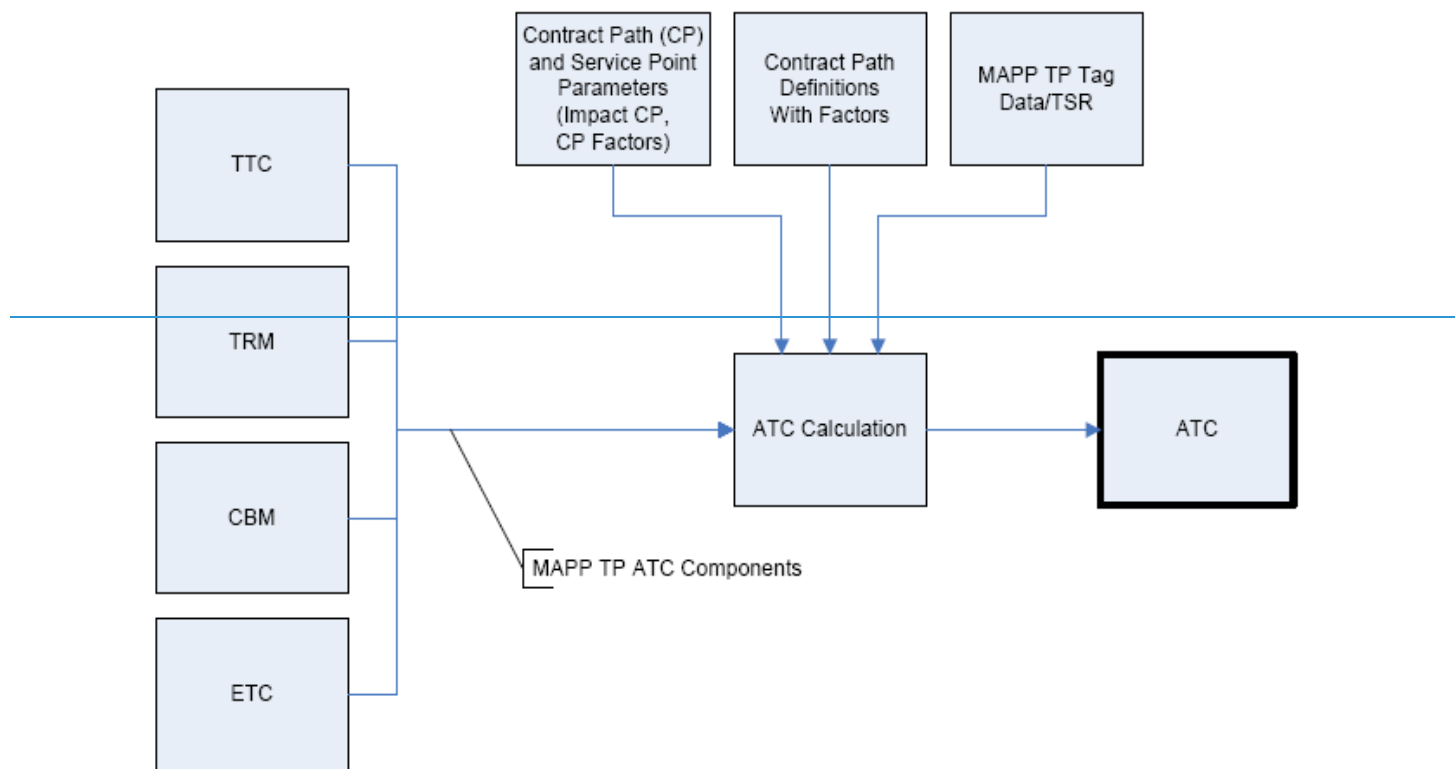
MAPP AFC Calculations Flow Diagram (Operating Horizon)

Revised: September 11, 2007



MAPP ATC Calculations Flow Diagram (Operating Horizon)

Revised: September 11, 2007



ATTACHMENT D**Methodology for Completing a System Impact Study**

The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Sections 4 and 5 of FERC Form 715 submitted to the Commission on behalf of the Transmission Provider by the Western Electricity Coordinating Council (WECC), in those instances where the Transmission Provider is a member of WECC or successor entity (Colorado River Storage Project, Desert Southwest Region, Rocky Mountain Region, and Sierra Nevada Region). The Transmission Provider will use the ~~Mid-Continent Area Power Pool (MAPP)~~Southwest Power Pool, Inc. (SPP) System Impact Study mMethodology, if necessary, when the Transmission Provider is a transmission owning member of ~~SPP/MAPP, or successor entity~~ (Upper Great Plains Region).

ATTACHMENT E

Index of Point-To-Point Transmission Service Customers

Customer

Date of Service Agreement

[\(Information is posted on the Transmission Provider's Regional Office Open Access Same-Time Information System.\)](#)

(Service Agreement Number)

(Transmission Customer)

Attachment F

ATTACHMENT F

**Service Agreement for
Network Integration Transmission Service**

- 1.0 This Service Agreement, dated as of _____, is entered into, by and between the (Region) of Western Area Power Administration (Transmission Provider), and _____ (Transmission Customer), each of whom are sometimes hereinafter individually called Party and both are sometimes hereinafter collectively called the Parties. For purposes of this Service Agreement, the Transmission Provider’s Transmission Systems consist of the applicable facilities described in Attachment K to the Tariff. The Transmission Provider may revise charges or losses for Network Integration Transmission Service provided under this Service Agreement pursuant to applicable Federal Laws, regulations and policies upon written notice to the 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. The Transmission Customer has provided to the Transmission Provider a deposit and nonrefundable application processing fee in accordance with the provisions of Section 29.2 of the Tariff.
- 3.0 Service under this Service 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 is mutually agreed. Service under this Service Agreement shall terminate on _____.
- 4.0 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.
- 5.0 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:

(Service Agreement Number)
(Transmission Customer)
Attachment F

Each Party may change the designation of its representative upon oral notice to the other, with confirmation of that change to be submitted in writing within ten (10) days thereafter.

6.0 The Tariff and the “Specifications for Network Integration Transmission Service” as presently constituted or as they may be revised or superseded are 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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(TRANSMISSION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

(Service Agreement Number)
 (Transmission Customer)
 Attachment F

Specifications for Network Integration Transmission Service

For purposes of this Service Agreement, the Transmission Provider's Transmission System consists of the facilities of the (Region) as described in Attachment K.

1.0 The Transmission Provider will provide Network Integration Transmission Service over the Transmission Provider's Transmission System for the delivery of capacity and energy from the Transmission Customer's designated Network Resources to the Transmission Customer's designated Network Load. The Transmission Provider will also provide non-firm transmission service from non-designated Network Resources under the terms of this Service Agreement. The loss factors associated with this Network Integration Transmission Service are set forth below. Such losses shall be applied and accounted for as set forth in Section 4.

2.0 Designated Network Resources:

Designated Network Resources & Estimated Maximum Resource (MW)	Point of Receipt	Delivering Party & Voltage

3.0 Designated Network Loads:

Designated Network Load & Estimated Maximum Load (MW)	Point of Delivery	Voltage

4.0 Transmission Losses:

4.1 Loss Factors:

4.1.1 If, based on operating experience and technical studies, the Transmission Provider determines that any of the transmission loss factors on the Transmission Provider's Transmission System differs from the loss factors set forth in this Service Agreement, the Transmission Provider will notify the Transmission Customer of the revised loss factor(s) pursuant to Section 1.0 of this Service Agreement.

4.1.2 Transmission Provider Transmission Loss Factor: For deliveries to the Transmission Customer's Network Load, Transmission Provider transmission losses shall initially be ___% and shall be assessed on the power scheduled and transmitted to a point of delivery on the Transmission Provider's Transmission System.

4.2 Transmission losses may be revised by written notice from the Transmission Provider to the Transmission Customer.

5.0 The Transmission Customer's transmission facilities that are integrated with the Transmission Provider's Transmission System will receive _____ credit (To be filled in if appropriate). These facilities include the following:

5.1 (To be filled in if appropriate)

5.2 (To be filled in if appropriate)

6.0 Names of any intervening systems with whom the Transmission Customer has arranged for transmission service to the Transmission Provider's Transmission System.

6.1 _____

6.2 _____

7.0 Power Factor: The Transmission Customer will be required to maintain a power factor between ___-percent lagging and ___-percent leading for all deliveries of capacity and energy to and from the Transmission Provider's Transmission System.

8.0 Ancillary Services

8.1 Provided by Transmission Provider

8.1.1 Scheduling, System Control, and Dispatch Service

8.1.2 Reactive Supply and Voltage Control from Generation Sources Service

(Service Agreement Number)
(Transmission Customer)
Attachment F

8.2 Provided by Transmission Customer

8.2.1 (To be filled in if appropriate)

8.2.2

8.3 Provided by _____

8.3.1 (To be filled in if appropriate)

8.3.2

9.0 Net Billing and Bill Crediting Option: The Parties have agreed to implement [Net Billing, Bill Crediting, both Net Billing and Bill Crediting, or neither Net Billing nor Bill Crediting] as set forth in Attachment J.

10.0 Charges for Service: Charges for Network Integration Transmission Service and associated Ancillary Services shall be calculated in accordance with the applicable Rate Schedule(s) attached hereto and made a part of this Service Agreement. The rates or rate methodology used to calculate the charges for service under that schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

[The following section will be included as appropriate at the Transmission Provider's discretion]

11.0 Independent System Operator: The Parties understand that the Transmission Provider may join an independent system operator under Commission jurisdiction. In the event the Transmission Provider either joins or is required to conform to protocols of the independent system operator, the Parties agree that the Transmission Provider either may (1) make any changes necessary to conform to the terms and conditions required by Commission approval of the independent system operator, or (2) terminate this Service Agreement by providing a one-year written notice to the Transmission Customer.

(Service Agreement Number)
(Transmission Customer)
Attachment G

ATTACHMENT G

Network Operating Agreement

To be executed by the Transmission Provider if necessary, at such time as the Transmission Provider has negotiated or offered a Network Integration Transmission Service Agreement. The terms and conditions under which the Network Customer will be required to operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service and this Service Agreement will be specified in a separate Network Operating Agreement.

The Network Operating Agreement will include provisions addressing the following:

- Authorized Representatives of the Parties
- Network Operating Committee
- Load Following
- System Protection
- Redispatch to Manage Transmission Constraints
- Maintenance of Facilities
- Load Shedding
- Operation Impacts
- Service Conditions
- Data, Information and Reports
- Metering
- Communications
- System Regulation and Operating Reserves
- Assignment
- Notices
- Accounting for Transmission Losses

ATTACHMENT H

Annual Transmission Revenue Requirement for Network Integration Transmission Service

- 1.0 The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service is to be set forth in a separate Rate Schedule.
- 2.0 The amount in 1 shall be effective until amended by the Transmission Provider or modified by the Commission pursuant to applicable Federal laws, regulations and policies, and may be revised upon written notice to the Transmission Customer.

ATTACHMENT I

Index of Network Integration Customers

Customer

Date of Service Agreement

[\(Information is posted on the Transmission Provider's Regional Office Open Access Same-Time Information System.\)](#)

ATTACHMENT J

Provisions Specific to the Transmission Provider

1.0 Change of Rates

Rates applicable under the Service Agreements shall be subject to change by Transmission Provider in accordance with appropriate Rate Adjustment procedures. If at any time the Transmission Provider promulgates a rate changing a rate then in effect under a Service Agreement, it will promptly notify the Transmission Customer thereof. Rates shall become effective as to the Service Agreements as of the effective date of such rate. If the adjustment in the formula or rate results in an increase in the charges for Transmission Customers, the Transmission Customer may terminate the service billed by the Transmission Provider under the Rate Formula Adjustment or Rate Adjustment by providing written notice to the Transmission Provider within ninety (90) days after the effective date of the Rate Formula Adjustment or Rate Adjustment. Said termination shall be effective on the last day of the billing period requested by the Transmission Customer not later than two (2) years after the effective date of the New Rate. Service provided by the Transmission Provider shall be paid for at the New Rate regardless of whether the Transmission Customer exercises the option to terminate service. This provision does not apply in those instances where rates change because the Transmission Provider updates charges pursuant to an existing formula rate.

2.0 Appropriations and Authorizations

2.1 Contingent Upon Appropriations

Where activities provided for in the Service Agreement extend beyond the current fiscal year, continued expenditures by the Transmission Provider are contingent upon Congress making necessary appropriations required for the continued performance of the Transmission Provider's obligations under the Service Agreement. In case such appropriation is not made, the Transmission Customer hereby releases the Transmission Provider from its contractual obligations and from all liability due to the failure of Congress to make such appropriation.

2.2 Contingent Upon Authorization Language

In order to receive and expend funds advanced from the Transmission Customer necessary for the continued performance of the obligations of the Transmission Provider under the Service Agreement, additional authorization may be required. In case such authorization is not received, the Transmission Customer hereby releases the Transmission Provider from those contractual obligations and from all liability due to the lack of such authorization.

3.0 Covenant Against Contingent Fees

The Transmission Customer warrants that no person or selling agency has been employed or retained to solicit or secure the Service Agreement upon a contract or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Transmission Customer for the purpose of securing business. For breach or violation of this warranty, the Transmission Provider shall have the right to annul the Service Agreement without liability or in its discretion to deduct from the Service Agreement price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

4.0 Contract Work Hours and Safety Standards

The Service Agreement, to the extent that it is of a character specified in Section 103 of the Contract Work Hours and Safety Standards Act (Act), 40 U.S.C. § 3701, as amended or supplemented, is subject to the provisions of the Act, 40 U.S.C. §§ 3701-3708, as amended or supplemented, and to regulations promulgated by the Secretary of Labor pursuant to the Act.

5.0 Equal Opportunity Employment Practices

Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that the Transmission Customer will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated by reference in the Service Agreement the same as if the specific language had been written into the Service Agreement, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal law.

6.0 Use of Convict Labor

The Transmission Customer agrees not to employ any person undergoing sentence of imprisonment in performing the Service Agreement except as provided by 18 U.S.C. § 3622(c), as amended or supplemented, and Executive Order 11755, 39 Fed. Reg. 779 (1973), as amended or supplemented.

7.0 Entire Agreement

The Service Agreements, including the Tariff, together with the specifications under such Service Agreement and any completed scheduling forms shall constitute the entire understanding between the Transmission Provider and the Transmission Customer with respect to Transmission Service thereunder.

8.0 Power Supply Obligations

The Transmission Provider shall not be obligated to supply capacity and energy from its own sources or from its purchases from other neighboring systems during Interruptions or Curtailments in the delivery by the Transmission Provider or delivery to the Transmission Provider by the Delivering Party of capacity and energy for Transmission Service hereunder, and nothing in the Service Agreement or in the Transmission Customer's agreements with others shall have the effect of making, nor shall anything in the Service Agreement or said agreements with others be construed to require the Transmission Provider to take any action which would make the Transmission Provider, directly or indirectly, a source of power supply to the Transmission Customer, to any Delivering Party or Receiving Party, or to any ultimate recipient other than through the provision of Operating Reserve Service.

9.0 Federal Law

Performance under the Tariff and Service Agreement shall be governed by applicable Federal law.

10.0 Continuing Obligations

The applicable provisions of the Service Agreement will continue in effect after termination of the Service Agreement to the extent necessary to provide for final billing, billing adjustments and payments, and with respect to liability and indemnification from acts or events that occurred while this Service Agreement was in effect.

11.0 Net Billing

As mutually agreed in the Service Agreement, payments due the Transmission Provider by a Transmission Customer may be offset against payments due the Transmission Customer by the Transmission Provider for the use of transmission facilities, operation and maintenance of electric facilities, and other services. For services included in net billing procedures, payments due one Party in any month shall be offset against payments due the other Party in such month, and the resulting net balance shall be paid to the Party in whose favor such balance exists. The Parties shall exchange such reports and information that either Party requires for billing purposes. Net billing shall not be used for any amounts due which are in dispute.

12.0 Bill Crediting

As mutually agreed in the Service Agreement, payments due the Transmission Provider by a Transmission Customer shall be paid by a Transmission Customer to a third party when so directed by the Transmission Provider. Any third party designated to receive payment in lieu of the Transmission Provider, and the amount to be paid to that party, will be so identified in writing to a Transmission Customer with the monthly power bill. The payment to the third party shall be due and payable by the payment due date specified on the Transmission Provider's bill. When remitting payment to a designated third party, a Transmission Customer shall indicate that

such payment is being made on behalf of the Transmission Provider. The Transmission Provider shall credit a Transmission Customer for the amount paid as if payment had been made directly to the Transmission Provider. All other payment provisions shall remain in full force and effect.

13.0 Costs Associated with United States Bureau of Reclamation and United States Army Corps of Engineers Interconnections

The Transmission Provider and the United States Bureau of Reclamation (Bureau) and the United States Army Corps of Engineers (Corps) have a unique statutory relationship which requires the Transmission Provider to repay to the United States Treasury obligations incurred by those two entities related to the production of power. Requiring the Bureau or Corps to submit deposits to the Transmission Provider or to directly pay for costs associated with interconnection study work under the Tariff, including the Large Generator Interconnection Agreement or Large Generator Interconnection Procedures, will result in additional unnecessary administrative burdens and overhead charges. Therefore, Transmission Provider reserves the right, at the Transmission Provider's discretion, to not require the Bureau or the Corps to pay negotiation costs under the Large Generation Interconnection Procedures, or submit deposits in whole or in part for study work or for placing reservations in the queue. Transmission Provider will account for these costs under the Transmission Provider's Tariff as if such costs had been paid by the Bureau or Corps, including costs associated with the Standard Large Generator Interconnection Agreement (LGIA) or Standard Large Generator Interconnection Procedures (LGIP) found in Attachment L of the Transmission Provider's Tariff.

14.0 Participant Funding

The Transmission Provider reserves the right to negotiate participant funding provisions if and when it deems necessary, and to incorporate the results of such negotiations into the LGIA. This will allow Transmission Provider to properly and equitably fulfill its responsibility as the transmission provider for various facilities owned by other entities, including facilities in which Transmission Provider has joint ownership.

15.0 Liability

The Transmission Provider is only liable for negligence on the part of its officers and employees in accordance with the Federal Tort Claims Act, 28 U.S.C. § 1346(b), 1346(c), 2401(b), 2402, 2671, 2672, 2674-2680, as amended or supplemented.

16.0 Environmental Compliance

Transmission [or Interconnection] Customer recognizes that as a Federal agency, Transmission Provider must comply with various environmental and natural resource laws regulating the construction, operation and maintenance of its transmission facilities, including but not limited to the National Historic Preservation Act, 16 U.S.C § 470 to 470x-6, the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4347, the Endangered Species Act, 16 U.S.C. §§ 1531-1544, and the Archaeological Resources Protection Act of 1979, 16 U.S.C. § 470aa-470mm

(2006): and regulations, and executive orders implementing these laws, as they may be amended or supplemented, as well as any other existing or subsequent applicable laws, regulations and executive orders. Transmission [or Interconnection] Customer shall comply with all environmental laws, regulations and resource protection measures, including but not limited to, any mitigation measures and Best Management Practices associated with the Transmission [or Interconnection] Customer's requested service. Transmission [or Interconnection] Customer understands that the Transmission Provider's decision to execute the LGIA is dependent on conclusions reached in the record of decision under NEPA, or other such appropriate NEPA document, concerning the respective project and that Transmission Provider's NEPA review could result in a decision not to execute a Tariff agreement or to delay Tariff agreement execution. This decision shall not be subject to dispute resolution.

ATTACHMENT K

Authorities and Obligations

Western was established on December 21, 1977, pursuant to Section 302 of the Department of Energy (DOE) Organization Act, Public Law 95-91, dated August 4, 1977. By law, the Bureau of Reclamation provides Federal power resources to its project use customers. By law, Western markets Federal power resources to its electric service customers. Western's transmission system was built primarily to enable the delivery of Federal power to satisfy these obligations.

Western is not a public utility under Sections 205 and 206 of the Federal Power Act and is not specifically subject to the requirements of the Commission's Final Orders related to Open Access Transmission or Generator Interconnections. Western is a transmitting utility subject to Sections 210-213 of the Federal Power Act. The Department of Energy has issued a Power Marketing Administration Open Access Transmission Policy that supports the intent of the Commission's Notice of Proposed Rulemaking for Open Access Transmission.

Use of transmission facilities that Western owns, operates, or to which it has contract rights for delivery of Federal long-term firm capacity and energy to project use and electric service customers is a Western responsibility under the terms and conditions of marketing criteria and electric service contracts implementing statutory obligations to market Federal power. This is complementary with the provisions of the Tariff. Transmission service provided by Western under the Tariff is solely for the use of Available Transfer Capability (ATC) in excess of the capability Western requires for the delivery of long-term firm capacity and energy to project use and electric service customers of the Federal government. Western will offer to provide others transmission service equivalent to the service Western provides itself.

Western's Regional Offices' reserved transmission capacity shall therefore include capacity sufficient to deliver Federal power resources to customers of the Federal government. Nothing in this Tariff shall alter, amend or abridge the statutory or contractual obligations of Western to market and deliver Federal power resources and to repay the Federal investment in such projects. The Tariff provides for transmission service, including each Regional Office's use of those facilities for Third Party Sales, on the unused capability of transmission facilities under the jurisdiction or control of each of Western's Regional Offices not required for the delivery of long-term firm capacity and energy to customers of the Federal government in a manner consistent with the spirit and intent of the Commission's Order Nos. 888 and 890, et seq.

Western has prepared this Tariff and Service Agreements to provide transmission service comparable to that required of public utilities by the Commission's open access orders, and to implement those orders consistent with the DOE Policy. An entity desiring transmission service from Western must comply with the application procedures outlined herein. The review and approval requirements detailed herein will apply to all requesting parties. Western will perform the necessary studies or assessments for evaluating requests for transmission service as set forth in the Tariff. Any facility construction or interconnection necessary to provide transmission

service will be subject to Western's General Requirements for Interconnection which are available upon request.

Western will provide Firm and Non-Firm Point-to-Point Transmission Service and Network Integration Transmission Service under this Tariff. The specific terms and conditions for providing transmission service to a customer will be included in a Service Agreement. Operating Procedures, ATC, and System Impact Methodology are defined in the Attachments. Western's rates are developed under separate public processes pursuant to applicable Federal law and regulations. Therefore, rates and charges for specific services will be set forth in the appropriate Regional rate schedules attached to each Service Agreement.

Western has marketed the maximum practical amount of power from each of its projects, leaving little or no flexibility for provision of additional power services. Changes in water conditions frequently affect the ability of hydroelectric projects to meet obligations on a short-term basis. The unique characteristics of the hydro resource, Western's marketing plans and the limitations of the resource due to changing water conditions limit Western's ability to provide generation-related services including Ancillary Services and redispatching using Federal hydro resources.

Western operates in 15 central and western states encompassing a geographic area of 3.38 million-square-kilometers (1.3 million-square-miles). Western has four Customer Service Regional Offices, the Desert Southwest Region, Rocky Mountain Region, Sierra Nevada Region, Upper Great Plains Region, and the Colorado River Storage Project Management Center. Each office is referred to in the Tariff as Regional Office. The addresses for submitting applications to Western's Regional Offices by mail, as well as the respective OASIS links, are available on Western's web site at www.wapa.gov.

Colorado River Storage Project Management Center

The Colorado River Storage Project Management Center (CRSP MC), located in Salt Lake City, Utah, markets power from three Federal multipurpose water development projects; the Colorado River Storage Project (CRSP), the Collbran Project, and the Rio Grande Project, collectively called the Integrated Projects. The hydroelectric facilities associated with these projects include: Flaming Gorge and Fontenelle powerplants on the Green River; Blue Mesa, Morrow Point, and Crystal powerplants on the Gunnison River; Upper and Lower Molina powerplants of the Collbran Project in Western Colorado; the largest of the CRSP facilities, Glen Canyon powerplant on the Colorado River; and Elephant Butte powerplant, part of the Rio Grande Project on the Rio Grande River in South Central New Mexico; McPhee powerplant and Towaoc Canal on the Dolores River in southwestern Colorado. The CRSP transmission system consists of high-voltage transmission lines and attendant facilities extending from Arizona, into New Mexico, through Colorado, and into portions of Utah and Wyoming. The CRSP MC uses the CRSP transmission system to meet its commitments to its Federal customers, point-to-point transmission customers, and exchange power contractors. The CRSP MC must, therefore, reserve sufficient transmission capacity to meet these long-term obligations. The CRSP MC also needs to reserve capacity in its transmission system to enable it to deliver power produced by the

Integrated Projects hydroelectric powerplants during periods when flood control water releases produce greater than normal generation levels.

The CRSP MC office, located in Salt Lake City, is a member of the Western Electricity Coordinating Council (WECC).

The CRSP MC does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff from its Integrated Projects hydroelectric resources, including, but not limited to, [certain Ancillary Services](#) ~~and Network Integration Transmission Service~~.

Desert Southwest Region

The Desert Southwest Region (DSR) manages transmission facilities in the states of Arizona, California, and Nevada. The DSR transmission facilities are interconnected with transmission facilities of several non-Federal entities and its system is operated in the WECC. For the purpose of implementing this Tariff the transmission facilities of the Parker-Davis Projects and the Pacific Northwest-Pacific Southwest Intertie Project (Pacific AC Intertie) will be utilized. For the purpose of implementing this Tariff, references in the Tariff to “deliveries of long-term firm capacity and energy” include the deliveries of Boulder Canyon Project electric service over the DSR Transmission System. DSR manages a control area operations center through its Desert Southwest Regional Office located in Phoenix, Arizona.

Rocky Mountain Region

The Rocky Mountain Region (RMR) manages transmission facilities in the states of Colorado, Wyoming, and Nebraska, which were constructed for the primary purpose of marketing power from the Pick-Sloan Missouri Basin Program - Western Division. The RMR office and Control Area operations center is located in Loveland, Colorado and its system is operated in the WECC.

For RMR, the rates for Point-to-Point and Network Integration Transmission Service charged pursuant to the Tariff will be calculated using the costs of the transmission facilities of the Pick-Sloan Missouri Basin Program - Western Division. The rates for the Ancillary Services will be calculated using the costs of the generation facilities of the CRSP within the RMR control area, Pick-Sloan Missouri Basin Program - Western Division and the Fryingpan-Arkansas Project.

Sierra Nevada Region

The Sierra Nevada Customer Service Region (SNR), located in Folsom, California, manages the Central Valley Project (CVP) transmission facilities in the State of California. These facilities were constructed for the primary purpose of marketing power resources from the CVP. SNR also has ownership rights to capacity in three multi-party transmission systems, the Pacific AC Intertie, the California-Oregon Transmission Project (COTP), and the Los Banos-Gates Transmission Upgrade Project (Path 15). Congress authorized SNR’s participation in the Pacific AC Intertie for the purpose of importing power from the Pacific Northwest. COTP rights were

acquired pursuant to Public Laws 98-360 and 99-88, primarily for the purpose of delivering power to the United States Department of Energy Laboratories and wildlife refuges in California. Path 15 upgrade rights were also acquired pursuant to Public Laws 98-360 and 99-88. Long-term use of the Pacific AC Intertie, CVP and COTP by third parties is restricted under existing contracts. SNR has turned over operational control of its Path 15 upgrade rights to the California Independent System Operator (CAISO). Therefore, the CAISO, or its successor will offer transmission service on Path 15. SNR is a member of the WECC.

The SNR does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff, including, but not limited to, certain Ancillary Services ~~and Network Integration Transmission Service~~.

Upper Great Plains Region

The Upper Great Plains Region (UGPR) manages transmission facilities in the states of Montana, North Dakota, South Dakota, Nebraska, Minnesota, and Iowa which were constructed for the primary purpose of marketing power from the Pick-Sloan Missouri Basin Program - Eastern Division. The UGPR office is located in Billings, Montana. The UGPR manages a Control Area operations center in Watertown, South Dakota. The eastern portion of the UGPR system is operated in the Midwest Reliability Organization (MRO) region ~~MAPP reliability council~~, or successor entity. The western portion of the system is operated in the WECC region.

~~The UGPR joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). Ancillary services offered by UGPR as a Balancing Authority operator are also solely available under the SPP Tariff. are integrated with the transmission facilities of Basin Electric Power Cooperative (Basin) and Heartland Consumers Power District (Heartland) such that transmission services are provided over an integrated transmission system. UGPR rates for Point-to-Point and Network Integration Transmission Service charged pursuant to the Tariff will be calculated using the costs of the transmission facilities of UGPR, Basin, and Heartland that are included in the Transmission System. This Transmission System is also called the Integrated System (IS) and the rates are identified as IS Rates.~~

~~Both Basin and Heartland also own generating facilities and must commit to deliver the output of those resources to their respective members. Basin and Heartland will therefore reserve sufficient capacity in their transmission facilities to deliver that output.~~

Any Transmission Customer taking service under this Tariff shall be subject to a Stranded Cost Charge payable to either UGPR, Basin or Heartland if such service is used for the transmission of power or energy that replaces wholly or in part, power or energy supplied by Western, Basin or Heartland, respectively.

~~The Stranded Cost Charge of Basin shall be applicable regardless of whether the transmission relates to power and/or energy that is purchased by or on behalf of a Generation and Transmission Cooperative member of Basin (G&T), a Distribution Cooperative member of Basin or G&T, or a retail customer of a Distribution Cooperative member of Basin or a G&T.~~

~~The Stranded Cost Charge of Heartland shall be applicable whether the transmission service relates to power and/or energy that is purchased by or on behalf of a municipal customer of Heartland or a retail customer of a municipal customer of Heartland.~~

Stranded costs will be recovered only from a Transmission Customer who obtains transmission service under access rights granted through the Transmission Provider's compliance tariff developed pursuant to ~~t~~The Commission's Final Order Nos. 888 and 888-A and other applicable Commission Orders and causes ~~either~~ UGPR, ~~Basin or Heartland~~ to incur stranded costs. Stranded costs will be recovered through the terms and conditions of a separate contract entered into ~~either~~ by UGPR and the Transmission Customer ~~or Basin and the Transmission Customer or Heartland and the Transmission Customer.~~

ATTACHMENT L

**Standard Large Generator Interconnection Procedures Including Standard Large
Generator Interconnection Agreement**

[This Attachment L reserved for Western's Commission-approved Standard Large Generator Interconnection Procedures and Agreement, as filed with the Commission and posted on Western's OASIS.]

ATTACHMENT M

**Standard Small Generator Interconnection Procedures Including Standard Small
Generator Interconnection Agreement**

[This Attachment M reserved for Western's Commission-approved Standard Small Generator Interconnection Procedures and Agreement, as filed with the Commission and posted on Western's OASIS.]

ATTACHMENT N

North American Energy Standards Board Wholesale Electric Quadrant Standards

The following North American Energy Standards Board Wholesale Electric Quadrant standards are incorporated by reference into Transmission Provider's Tariff as described in section 4.2 therein:

- [WEQ-000, Abbreviations, Acronyms, and Definition of Terms, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Oct. 4, 2012, Nov. 28, 2012 and Dec. 28, 2012 \(with minor corrections applied Nov. 26, 2013\);](#)
- [WEQ-001, Open Access Same-Time Information Systems \(OASIS\), OASIS Version 1.52.0 \(WEQ-001, WEQ Version 002.13, March 11, 2009\) July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 \(with minor corrections applied May 29, 2009 and September 8, 2009\) Nov. 26, 2013\) with the exception of excluding Standards 001-0.19.5, 001-0.9 through 001-0.1310.5, 001-1.014.1.3, 001-9.715.1.2, 001-14.1.3, and 001-15.1.2106.2.5;](#)
- [WEQ-002, Open Access Same-Time Information Systems \(OASIS\) Business Practice Standards and Communication Protocols \(S&CP\), OASIS Version 1.52.0, \(WEQ-002, Version 002.13, March 11, 2009\) July 31, 2012, as modified by NAESB final actions ratified on Nov. 28, 2012 and Dec. 28, 2012 \(with minor corrections applied May 29, 2009 and September 8, 2009\) Nov. 26, 2013\);](#)
- [WEQ-003, Open Access Same-Time Information Systems \(OASIS\) Data Dictionary Business Practice Standards, OASIS Version 1.52.0, \(WEQ-003, Version 002.13, March 11, 2009\) July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 \(with minor corrections applied May 29, 2009 and September 8, 2009\) Nov. 26, 2013\);](#)
- [WEQ-004, Coordinate Interchange, \(WEQ-004, Version 002.13, March 11, 2009\) July 31, 2012; \(with minor corrections applied May 29, 2009 and September 8, 2009\) Final Action ratified on December 28, 2012\);](#)
- [WEQ-005, Area Control Error \(ACE\) Equation Special Cases, \(WEQ-005, Version 002.13, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009\) July 31, 2012;](#)
- [WEQ-006, Manual Time Error Correction, \(WEQ-006, Version 003.1, October 31, 2007, with minor corrections applied on November 16, 2007\) July 31, 2012;](#)
- [WEQ-007, Inadvertent Interchange Payback, \(WEQ-007, Version 003.1, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009\) July 31, 2012;](#)

- [WEQ-008, Transmission Loading Relief – Eastern Interconnection](#), (~~WEQ-008, Version 002.13, March 11, 2009~~[July 31, 2012](#); (with minor corrections applied ~~May 29, 2009 and September 8, 2009~~[November 28, 2012](#));
- [WEQ-011, Gas/Electric Coordination](#), (~~WEQ-011, Version 002.13, March 11, 2009, with minor corrections applied May 29, 2009 and September 8, 2009~~[July 31, 2012](#));
- [WEQ-012, Public Key Infrastructure \(PKI\)](#), (~~WEQ-012, Version 002.13, March 11, 2009~~[July 31, 2012](#); with minor corrections applied ~~May 29, 2009 and September 8, 2009~~[\(as modified by NAESB final actions ratified on Oct. 4, 2012\)](#)); ~~and~~
- [WEQ-013, Open Access Same-Time Information Systems \(OASIS\) Implementation Guide, OASIS Version 4.52.0](#), (~~WEQ-013, Version 002.13, March 11, 2009~~[July 31, 2012](#), as modified by NAESB final actions ratified on ~~Dec. 28, 2012~~ (with minor corrections applied ~~May 29, 2009 and September 8, 2009~~[Nov. 26, 2013](#));
- [WEQ-015, Measurement and Verification of Wholesale Electricity Demand Response, WEQ Version 003, July 31, 2012](#); and
- [WEQ-021, Measurement and Verification of Energy Efficiency Products, WEQ Version 003, July 31, 2012](#).

ATTACHMENT O

Procedures for Addressing Parallel Flows

For the Transmission Provider's facilities in the Western Electricity Coordinating Council:

The North American Electric Reliability Corporation's ("NERC") Qualified Path Unscheduled Flow Relief for the Western Electricity Coordinating Council ("WECC"), Reliability Standard WECC-IRO-STD-006-0 filed by NERC in Docket No. RR07-11-000 on March 26, 2007, and approved by the Commission on June 8, 2007, and any amendments thereto, are hereby incorporated and made part of this Tariff. See www.nerc.com for the current version of the NERC's Qualified Path Unscheduled Flow Relief Procedures for WECC.

For the Transmission Provider's facilities in the Eastern Interconnection:

NERC's 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.

ATTACHMENT P

Transmission Planning Process

Overview of Western's Transmission Planning Processes

The Western Area Power Administration (Western) is a Federal agency under the Department of Energy that markets and transmits wholesale electrical power from 56 federal hydropower plants and one coal-fired plant. Western sells about 40 percent of regional hydroelectric generation in a service area that covers 1.3 million square miles in 15 states. To provide this reliable electric power to most of the western half of the United States, Western markets and transmits about 10,000 megawatts of hydropower across an integrated 17,000-circuit mile, high-voltage transmission system.

Western's customers include municipalities, cooperatives, public utility and irrigation districts, Federal and state agencies, investor-owned utilities (only one of which has an allocation of Federal hydropower from Western), marketers and Native American tribes. They, in turn, provide retail electric service to millions of consumers in Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah and Wyoming.

Western's role in delivering power also includes managing 10 different rate-setting systems. These rate systems are made up of 14 multipurpose water resource projects and one transmission project. The systems include Western's transmission facilities along with power generation facilities owned and operated primarily by the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers and the U.S. State Department's International Boundary and Water Commission. Western sets power rates to recover all costs associated with our activities, as well as the Federal investment in the power facilities (with interest) and certain costs assigned to power from repayment, such as aid to irrigation development.

Western employees sell power and transmission service, operate transmission and provide maintenance and engineering services. These duty locations include Western's Corporate Services Office in Lakewood, Colo., and four regions with offices in Billings, Mont.; Loveland, Colo.; Phoenix, Ariz.; and Folsom, Calif. Western also markets power from the Management Center in Salt Lake City, Utah, and also manages Upper Great Plains Region system operations and maintenance from offices in Bismarck, N.D.; Fort Peck, Mont.; Huron, S.D. and Watertown, S.D.

Since its inception on December 21, 1977, Western and its employees have been dedicated to providing public service, including promoting environmental stewardship, energy efficiency and renewable energy and implementing new technologies to ensure its transmission system is the most reliable possible.

Western's Attachment P is divided into Part I and Part II – Part I outlines the transmission planning process Western uses in the Upper Great Plains Region (UGPR) on both the Eastern and Western Interconnections, while Part II outlines the process used in the remaining Western regions in the Western Interconnection.

Western's transmission planning process is based on three core objectives:

- Maintain reliable electric service.
- Improve the efficiency of electric system operations, including the provision of open and non-discriminatory access to its transmission facilities.
- Identify and promote new investments in transmission infrastructure in a coordinated, open, transparent and participatory manner.

Western's transmission planning process is intended to facilitate a timely, coordinated and transparent process that fosters the development of electric infrastructure that maintains reliability and meets Network load growth, so that Western can continue to provide reliable low cost electric power to its customers.

The transmission planning process conducted by Western includes a series of open planning meetings that allow anyone, including, but not limited to, network and point-to-point transmission customers, interconnected neighbors, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, and other stakeholders, input into and participation in all stages of development of Western's transmission plan.

PART I - Upper Great Plains Region

~~Western's Upper Great Plains Region (UGPR) joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). SPP is the Transmission Provider for UGPR's transmission facilities under the SPP Tariff and the UGPR transmission system is included in the SPP Transmission Planning Process under Attachment O of the SPP Tariff. Part I of this Attachment P addresses the rights and obligations of Transmission Customers, Affected Generators, other relevant stakeholders, and the Western Upper Great Plains Region (Transmission Provider) related to Transmission Planning within the UGPR. Specifically, Part I of Attachment P addresses: (a) the Mid-Continent Area Power Pool ("MAPP") regional planning process adopted by the Regional Transmission Committee ("RTC") Members of MAPP in the RTC Region, as those terms are defined by the MAPP Restated Agreement (Sections 1.0 to 12.0); (b) the Transmission Provider's local planning process for local facilities not covered by the respective regional planning processes (Section 13.0); and (c) the Western Electricity Coordinating Council (WECC) regional planning in relation to Western's UGPR facilities within the Western Interconnection (Section 14.0). Supporting documents~~

~~related to Transmission Planning within the UGPR, Part I of this Attachment P are available on the Transmission Provider's (Western's UGPR) OASIS page located at <http://www.oasis.oati.com/wapa/index.html> under the Transmission Planning Process folder. Within this folder, Western's UGPR posts an Attachment P links document that provides URLs for both Part I a, the Regional Planning Process within MAPP, Part I B, the Local Planning Process, and Part I c, the Regional Planning Process with WECC for Western's UGPR as noted above.~~

~~1.0 — Introduction to the MAPP Sub-regional Planning Process~~

~~The MAPP Regional Plan integrates the transmission plans developed by individual MAPP Members through the RTC's Transmission Planning Subcommittee ("TPSC") and by subregional planning groups ("SPGs"), in order to meet the transmission needs in the MAPP Region of Members and interested parties on a consistent, reliable, environmentally acceptable and economic basis. The MAPP Regional Plan shall be consistent with applicable standards and requirements established by the MAPP Members Reliability Criteria and Study Procedures Manual and by the North American Electric Reliability Council ("NERC") and Midwest Reliability Organization ("MRO") Planning Standards.~~

~~2.0 — Definitions~~

~~2.1 — Host Transmission Owner ("Host TO"). The transmission owner on whose transmission system a proposed Economic Network Upgrade is to be located. The Host TO shall conduct all related project management activities associated with the Economic Network Upgrade. If facility upgrades are required on more than one transmission owner's transmission system for a given set of transmission facilities comprising an Economic Network Upgrade, the affected Host TOs shall provide a single joint Facilities Agreement to the Subscription Rights buyers.~~

~~2.2. — Affected Generator. A generator owner whose existing or proposed generating unit(s) is directly affected by a proposed Economic Network Upgrade as demonstrated in the study analysis performed in conjunction with Section 11, Economic Planning Studies of this Attachment P.~~

~~2.3 — Affected System. The transmission owner's system, including the Host TO, that is affected by the allocations in an economic benefits study performed by the MAPP RTC in accordance with Section 11 of this Attachment P.~~

~~2.4 — Affected System Operator. The transmission owner/operator that operates an Affected System.~~

~~2.5 — Economic Network Upgrade. A project, or set of projects, that is designed to relieve a constrained facility by providing additional transmission capacity, and which has been identified to be: (a) a local economically beneficial project within a single transmission owner's system; or (b) an economically beneficial project classified as a Regionally Beneficial Project in the MAPP~~

~~Plan, and defined by an Economic Planning Study authorized by the MAPP RTC in Section 11 of this Attachment P as having project benefits exceeding project costs.~~

~~2.6 — Physical Transmission Rights. Rights held by a party to a Facilities Agreement to schedule transmission service across a defined portion of a NERC flowgate or other transmission facility and/or to collect revenue credits, if applicable, against transmission service charges. Physical Transmission Rights will exist for the life of the facility if the holder is an owner, or for the term stated in the Facilities Agreement. The facility's capabilities that are to be allocated as Physical Transmission Rights, shall be consistent with the owner's or joint owners' methodologies for determining facility ratings, system operating limits and, if applicable, TTC and ATC in accordance with NERC standards.~~

~~2.7 — Renewable Energy Zone. A geographic region recognized by the TPSC that has limited or constrained ability to transport electric energy from generating units that had such units been in production they would have utilized renewable resources for the production of electric energy.~~

~~2.8 — Subscription Rights. Contractual rights to use the transmission capacity associated with an Economic Network Upgrade defined in a Facilities Agreement with the Host TO in exchange for payments to the Host TO for facility charges and continuing operation and maintenance charges.~~

~~2.9 — Other Defined Terms. All other terms will have the meanings set forth in the MAPP Restated Agreement, the TPSC procedures, and the SPG guidelines.~~

~~3.0 — MAPP Regional Transmission Planning~~

~~3.1 — Member Plans. As part of the MAPP regional transmission planning process, each RTC Member that has transmission facilities under MAPP's Restated Agreement shall prepare and maintain a plan for its transmission facilities ("Member Plan"). Such Member Plans shall conform to applicable reliability standards and requirements, and to applicable methods and assessment practices and other transmission planning standards and requirements established by the RTC. Each Member Plan shall adhere to Local Transmission Planning Standards set forth in Section 13 of this Attachment P. Such plans shall take into account:~~

- ~~(a) — the RTC Member's current and anticipated requirements for transmission to provide all requirements and partial requirements service and service to its end-use loads;~~
- ~~(b) — the current and anticipated requirements for transmission to provide network transmission service to those entities for which the RTC Member provides such service;~~
- ~~(c) — the RTC Member's other contractual and tariff obligations to provide firm transmission service;~~
- ~~(d) — any other contractual obligations of the RTC Member affecting the use of its transmission facilities;~~

~~(e) — any requirements for future transmission service of a Member or interested party communicated to the RTC Member under procedures, standards and requirements established by the RTC;~~

~~(f) — the coordination of the RTC Member's transmission plan with the transmission plans of neighboring systems, and in particular any coordination parameters or requirements identified by the relevant subregional working groups used by the RTC; and~~

~~(g) — the obligation of the RTC Member under FERC requirements, the MAPP Restated Agreement, and applicable standards and requirements established by the RTC to provide transmission service to other entities on a basis comparable to its own use of its transmission facilities.~~

~~3.2 — Availability of Plans and Information. The RTC Members' transmission plans, along with the information on which the plans are based, shall be made available to the RTC on a regular basis as established by the RTC. Each RTC Member shall make its transmission plan available upon request to any other RTC Member, independent Regional Transmission Organization or relevant non-MAPP neighboring transmission owning utilities. Sufficient additional information should be made available to enable the requesting entity to perform planning analyses on the same basis as the RTC Member providing the information. Such information shall be provided in accordance with the MAPP Critical Energy Infrastructure Information ("CEII") policy and the Commission's Standards of Conduct regulations.~~

~~3.3 — Planning Procedures and Requirements. The RTC shall establish procedures and requirements for:~~

~~(a) — The communication to an RTC Member by Members and interested parties of their bona fide requirements for transmission service;~~

~~(b) — The utilization of SPGs for the coordination of RTC Members' transmission plans and the resolution of subregional transmission planning issues on an informal, collaborative basis, which working groups shall be open to any interested RTC Member or other interested party, and shall maintain such records as shall be required by the RTC;~~

~~(c) — The incorporation of asserted bona fide requirements for transmission service into RTC Member, subregional, and regional transmission plans; and~~

~~(d) — The development of integrated transmission plans by the subregional working groups, and the integration of the subregional plans into a transmission plan for the MAPP RTC Region.~~

~~3.4 — The MAPP Regional Plan. No less often than biennially, the RTC shall develop and approve a coordinated transmission plan, including alternatives, for the ensuing 10 years, or other planning period specified by NERC, for all transmission facilities in the MAPP RTC Region at a capacity of 115 kV or greater. The MAPP Regional Plan shall integrate the transmission plans~~

~~developed by individual RTC Members and by subregional working groups, for the purpose of enabling the transmission needs in the MAPP RTC Region of Member and interested parties to be met on a consistent, reliable, environmentally acceptable and economic basis.~~

~~— The MAPP Regional Plan shall avoid unnecessary duplication of facilities or the imposition of unreasonable costs on any RTC Member, shall take into account the legal and contractual rights and obligations of all Members, may provide alternative means for meeting transmission needs in the MAPP RTC Region, and shall differentiate proposed transmission projects from projects for which a definitive commitment of resources has been made *e.g.*, projects under the Subscription Rights process or under a Facilities Agreement.~~

~~— The MAPP Regional Plan shall be consistent with standards and requirements established by the applicable reliability entity. The RTC shall develop policies and procedures for updating or modifying the Plan between biennial planning cycles as may be appropriate. Any Member, Regulatory Participant, or interested party may attend any meeting of the RTC or any of its subcommittees dealing with the MAPP Regional Plan.~~

~~4.0 — MAPP Regional Planning Process~~

~~4.1 — MAPP Regional Plan Development Process. The TPSC, the RTC Subcommittee responsible for planning in the MAPP region, shall collect the individual Member Plans of the MAPP Members and integrate these Member Plans utilizing Subregional Planning Groups into four coordinated Subregional Plans. All MAPP Members are obligated to submit their transmission Member Plans to the TPSC under the MAPP Restated Agreement. These Members Plans are to include the needs of all stakeholders in the Member's service area. The Subregional Plans primarily address local load serving needs and subregional issues, but are not precluded from providing for regional transmission needs.~~

~~— The TPSC collects these Subregional Plans and integrates them into a single coordinated preliminary MAPP Regional Plan. The TPSC assesses the adequacy and security of the preliminary MAPP Regional Plan to meet the local, subregional, regional and inter-regional reliability and market needs, and where required, identifies and evaluates alternatives and recommends preferred plans to address deficiencies. The final MAPP Regional Plan is submitted to the RTC for approval. The appropriate Transmission Owning Members of MAPP, as that term is defined in the MAPP Restated Agreement, are responsible for designing, constructing and placing into service the various transmission projects comprising the MAPP Regional Plan, after satisfying applicable regulatory requirements.~~

~~— The TPSC initiates several activities as part of a planning process to produce the MAPP Regional Plan. These activities included collection of planning input data, preparation of study models, the formation of SPGs to collect and coordinate individual Member Plans, collaboration with regulatory agencies, and a procedure to study and evaluate the effectiveness of proposed enhancements in addressing regional and inter-regional problems.~~

~~4.2 — Process Steps for MAPP Regional Plan Development. The TPSC shall prepare the MAPP Regional Plan as set forth in the MAPP Restated Agreement and this Attachment P and as detailed in the TPSC procedures. The TPSC uses milestone dates as established in the MAPP Regional Transmission Planning Procedures Manual for the following items:~~

~~4.2.1 — TPSC Data Collection from Members (Annually)~~

- ~~(a) — Ongoing studies of the SPG Member and Working Group.~~
- ~~(b) — Subregional Plan Addendum report submitted to TPSC.~~

~~4.2.2 — Data Analysis by TPSC (during the MAPP Regional Plan year):~~

- ~~(a) — Analyze history of constrained interface performance.~~
- ~~(b) — Analyze history of transmission loading relief requests.~~
- ~~(c) — Review of reliability assessment studies and reports.~~

~~4.2.3 — TPSC Model Preparation:~~

- ~~(a) — Select base case models from appropriate MRO Model Series.~~
- ~~(b) — Add Member and SPG plans to models.~~
- ~~(c) — Solicit input from stakeholders including additions or changes to transmission, generation, and demand resources, in developing base-line assumptions and models.~~
- ~~(d) — Validate firm transactions, major new loads, transmission and new generation.~~

~~4.2.4 — TPSC Study Procedures:~~

- ~~(a) — Evaluate base system with Member/SPG planned additions (local plans).~~
- ~~(b) — Identify and evaluate alternative plans to meet regional and inter-regional reliability and market requirements (assess impacts on local plans).~~
- ~~(c) — Utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG. Technical analysis may include, but is not limited to, load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members. Engineering judgment may include such factors as the extent to which proposed alternative solutions meet applicable planning criteria and other regulatory requirements, expected levels of public acceptance and projected environmental impacts.~~

~~(d) — Perform cost analysis.~~

~~4.2.5 — Regulatory Collaboration~~

~~(a) — Regulatory participation at SPG and TPSC meetings.~~

~~(b) — Regulatory input at preliminary planning stages.~~

~~(c) — Process to address “why project needed” and “why it is better than other alternatives considered” through SPG Meeting process.~~

~~4.2.6 — MAPP Regional Plan Report and Approval~~

~~(a) — Submit MAPP Regional Plan Report to the RTC for approval of the MAPP Regional Plan year.~~

~~4.3 — Updating the MAPP Regional Plan. The TPSC shall update or modify the MAPP Regional Plan between biennial planning cycles in accordance with the procedures below. This update to the MAPP Regional Plan, shall be issued to the RTC for approval. The established SPGs shall remain active in the planning process for their respective subregions. Individual utility Member Plans and detailed documentation should be submitted to the SPGs.~~

~~In order to accomplish this update process, the SPGs shall:~~

~~(a) — review the individual utility Member Plans;~~

~~(b) — coordinate the individual utility Member Plans within their subregion;~~

~~(c) — evaluate the impacts of the individual Member Plans on their subregion and possibly require additional evaluation or study work;~~

~~(d) — identify to the TPSC the proposed solution alternatives included in individual Member Plans or proposed by stakeholders in instances where there is no SPG consensus on a preferred alternative; and~~

~~(e) — submit subregional plan modifications to the TPSC each off year.~~

~~The TPSC shall:~~

~~(a) — evaluate the subregional plan modifications for their impact on the MAPP Regional Plan;~~

~~(b) — provide feedback to the SPGs regarding the regional impacts;~~

~~(c) — utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG. Technical analysis may include, but is not limited to, load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members. Engineering judgment may include such factors as the extent to which proposed alternative solutions meet applicable planning criteria and other regulatory requirements, expected levels of public acceptance and projected environmental impacts; and~~

~~(d) — approve or deny all final modifications to the MAPP Regional Plan each off year.~~

~~Modifications to the MAPP Regional Plan may include: (a) commitments to new generation; (b) new transmission facilities; (c) changes in construction schedules; or (d) changes in project scope. All approved MAPP Regional Plan modifications must be included in the MRO Model building process and should be submitted to the MRO Model Building Subcommittee by the responsible transmission owning entity.~~

~~4.4 — Identification of Transmission Requirements. The following process is used to communicate to the TPSC the transmission requirements identified by the Member and interested parties:~~

~~(a) — Interested parties may contact the Member transmission provider in the area where service is required. If it is unclear as to who is the appropriate transmission provider, the interested parties should contact any member of the TPSC.~~

~~(b) — The Member is required to take both the Member Plans and interested parties' plans to the appropriate SPGs. The SPG Guidelines indicate the required format Members are to use to submit the data.~~

~~(c) — The SPGs must prepare coordinated subregional plans incorporating the member and interested parties' needs.~~

~~(d) — The SPG plans are forwarded to the TPSC.~~

~~(e) — The TPSC develops a coordinated MAPP Regional Plan addressing SPG, regional and inter-regional needs.~~

~~(f) — The TPSC forwards the MAPP Regional Plan to the RTC for approval.~~

~~The TPSC will establish liaisons with existing neighboring regional planning entities to facilitate addressing inter-regional transmission issues.~~

~~5.0 — The Transmission Planning Subcommittee~~

~~5.1 — Procedures for Conduct of TPSC Meetings~~

~~5.1.1 TPSC Role. The MAPP TPSC, under the direction of the RTC, shall develop the MAPP Regional Plan. The TPSC shall utilize the following procedures in developing the MAPP Regional Plan. Costs incurred related to regional planning activities shall be recovered under the provisions of the MAPP Restated Agreement and related RTC policies.~~

~~5.1.2 TPSC Representatives. The TPSC shall be constituted as defined by the MAPP Restated Agreement. In accordance with the MAPP Restated Agreement, such Representatives shall be elected by the RTC, and the RTC sets the size, duties and responsibilities of the TPSC. The TPSC Representatives shall elect the TPSC Chair and Vice Chair.~~

~~5.1.3 TPSC Meeting Notification. The notice of a TPSC meeting shall state the time and place of the meeting and shall include an agenda sufficient to notify an interested party of the substance of the matters considered at the meeting. The TPSC meeting notice and agenda shall be sent at least 10 days prior to the meeting. All meeting notices are communicated electronically through MAPP e-mail distribution lists, and subsequently posted at www.mapp.org. All meeting notices shall be publicly available.~~

~~5.1.4 TPSC Meeting Agenda Development. The TPSC agenda shall include the time and place of its meetings. An interested party shall submit a request to the Chair and the Secretary of the TPSC to have an item considered at the next TPSC meeting at least fifteen (15) days in advance, subject to any limitations set forth in the TPSC procedures manual. The Chair of the TPSC has authority to determine action items for the meeting agenda. All action items shall be shown and communicated clearly so that any interested party can determine what is being acted upon.~~

~~—— The TPSC meeting agenda shall be posted at www.mapp.org and sent via the TPSC e-mail distribution list at least ten (10) days prior to the meeting. The TPSC will make the best effort attempt to communicate all supporting information for the meeting agenda at least ten (10) days prior to the meeting. The supporting information shall be posted on the www.mapp.org after communicating it via the e-mail distribution list, unless the information has been deemed CEII.~~

~~5.1.5 TPSC Action. The publication of an agenda of actions to be voted upon by the TPSC shall include the wording of any proposed motion, and a brief discussion, as needed, of the reasons for the motion to be offered and voted. The member of the TPSC or other entity sponsoring the motion shall provide the wording of the motion and the discussion points. A best effort attempt shall be made by those sponsoring items on a TPSC meeting agenda to have background material, and the action to be voted, distributed with the meeting agenda in a timely manner. In general, an action may not be brought to a vote of the TPSC unless it is noticed on a published agenda at least ten (10) days prior to the meeting date upon which action is to be voted. This requirement for a 10-day notice may be waived either by the approval of the TPSC Chair or by 90% affirmative vote of the TPSC's voting members present at a TPSC meeting at which a quorum has been established, subject to any limitations set forth in the TPSC procedures.~~

~~5.1.6 TPSC Meeting Procedures. The TPSC shall utilize Robert's Rules of Order for guidance regarding conduct of subcommittee meetings. A quorum is necessary to conduct TPSC business.~~

~~A quorum is established when 50 percent or more of TPSC Representatives are present as currently stated in the MAPP Restated Agreement. A vacant position on the TPSC does not count towards the quorum requirement. All interested parties can attend TPSC and working group meetings subject to signing a MAPP non-disclosure agreement.~~

~~5.1.7—Affirmative Votes. Actions or decisions by a subcommittee requires an affirmative vote of two-thirds of both the TPSC Transmission Owning Members and the Transmission Using Members as set forth in the MAPP Restated Agreement.~~

~~5.1.8—TPSC Meeting Minutes. All TPSC meetings shall be recorded through accurate and timely meeting minutes. Draft TPSC meeting minutes shall be distributed to TPSC Representatives ten (10) business days following the meeting date for review and comment. The TPSC will attempt to approve their previous meeting's minutes at their next meeting. Once the meeting minutes are approved by the TPSC, the minutes are sent to the TPSC and RTC e-mail distribution lists and posted at www.mapp.org.~~

~~5.1.9—Review of TPSC Action. An RTC Member or Regulatory Participant may request a review of TPSC actions, in accordance with the MAPP Restated Agreement.~~

~~5.2—TPSC Responsibilities. The TPSC shall:~~

~~(a)—develop and recommend for approval by the RTC the biennial MAPP Regional Plan required by the MAPP Restated Agreement;~~

~~(b)—develop procedures and policies for updating and modifying the MAPP Regional Plan between biennial planning cycles, and approve modifications to the MAPP Regional Plan;~~

~~(c)—develop and approve procedures, standards and requirements for the communication of the future transmission requirements of Members and interested parties to the appropriate Transmission Owning Members, and for the inclusion of bona fide requirements in the transmission Member Plans of the Transmission Owning Members, and in the MAPP Regional Plan.~~

~~(d)—establish procedures, standards and requirements for the coordination of the transmission Member Plans of the Transmission Owning Members with the plans of neighboring transmission systems, including establishing of subregional planning groups for resolution of subregional planning issues on a cooperative basis;~~

~~(e)—establish procedures, standards, and requirements for making available Member Plans and the information on which the Member Plans are based, as required by the MAPP Restated Agreement;~~

~~(f)—establish procedures, standards and requirements for public input, including input from Regulatory Participants, in the development of the MAPP Regional Plan;~~

~~(g) — determine, subject to RTC approval, the appropriate Member or Members to construct and own, or to receive Rights Equivalent to Ownership in, transmission facilities;~~

~~(h) — coordinate with the subcommittees of the RTC, the MRO and Adjacent Systems pertinent to reliability issues, standards, requirements, procedures, models and studies, and conduct or request the MRO to conduct such studies as appropriate to carry out the responsibilities of the TPSC;~~

~~(i) — conduct appropriate transmission economic planning studies;~~

~~(j) — conduct appropriate transmission cost allocation analysis for new projects;~~

~~(k) — assume responsibility for submission of FERC Form 715 information for MAPP;~~

~~(l) — conduct transmission adequacy and security assessments as appropriate, including assessments of the intra and inter regional transfer capability of the MAPP system;~~

~~(m) — oversee the duties and responsibilities of Working Groups; and~~

~~(n) — utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG.~~

~~5.3 — Transmission Customer Responsibilities. Transmission Customers in the RTC region shall provide annually to the Transmission Provider the following types of information:~~

~~(a) — Generators: All planned additions or upgrades (including status and expected in-service date), planned retirements, and environmental restrictions.~~

~~(b) — Demand Response Resources: Existing and planned demand resources and their impacts on demand and peak demand.~~

~~(c) — Network Customers: Forecast information for load and resource requirements over the planning horizon and identification of demand response reductions.~~

~~(d) — Point-to-Point Transmission Customers: Projections of need for service over the planning horizon, including transmission capacity, duration, and receipt and delivery points.~~

~~(e) — Transmission Customers should provide the Transmission Provider with timely written notice of material changes in any information previously provided relating to its load, its resources, or other aspects of its facilities or operations affecting the transmission provider's ability to provide service.~~

~~6.0 — Sub-regional Planning Groups~~

~~6.1 — Current SPGs. The TPSC has established and recognized the following SPGs to carry out the task of coordinating transmission plans among Members:~~

- ~~(a) — Northern MAPP;~~
- ~~(b) — Missouri Basin;~~
- ~~(c) — Iowa Transmission Working Group;~~
- ~~(d) — Nebraska.~~

~~6.2 — Establishment of SPGs. The TPSC can establish new or recognize additional SPGs to carry out the task of coordinating transmission plans among Members. The TPSC may also recognize and coordinate its MAPP Regional Plan with existing or future transmission planning study groups concerned with transmission facilities located outside the MAPP region.~~

~~6.3 — SPG Membership. Membership in a SPG is open to any interested party and any actual or potential user of the relevant transmission facilities. Participation in any SPG meeting is open to any interested party who has signed the MAPP Non-Disclosure Agreement (NDA). A MAPP NDA is obtained by contacting the Secretary of the MAPP TPSC. Neighboring transmission owning utilities and regulatory participants are eligible and encouraged to join the SPG to promote joint planning between MAPP and its neighboring regions.~~

~~6.4 — SPG Guidelines. The Subregional Planning Groups, to the extent possible, should:~~

- ~~(a) — develop a coordinated Subregional Plan, the SPG Biennial Plan, including alternatives, for the ensuing ten years, for all transmission facilities in the subregion at a voltage of 115 kV or greater;~~
- ~~(b) — review and comment on proposed Member Plans for additions and modifications to the subregional transmission system;~~
- ~~(c) — incorporate proposed Member load serving plans to the subregional transmission system into the SPG Biennial Plan;~~
- ~~(d) — incorporate Member Plans for new generator connections and associated network upgrades into the SPG Biennial Plan as soon as practicable;~~
- ~~(e) — coordinate the Subregional Plans of the SPG with the Subregional Plans of neighboring SPGs;~~
- ~~(f) — update the SPG Biennial Plan as deemed necessary by the SPG or the TPSC;~~
- ~~(g) — form technical study task forces as required to carry out the subregional planning responsibilities;~~

~~(h) — encourage non MAPP member participation to ensure that the TPSC and the SPGs learn of facility changes outside MAPP's system to ensure the impact of parallel path flows are considered in the planning studies;~~

~~(i) — encourage participation by stakeholders so that the SPG can consider and incorporate the future transmission needs of the stakeholder into the Subregional Plan;~~

~~(j) — ensure SPG studies meet NERC/MRO Planning Standards and requirements; and~~

~~(k) — promote stakeholder and Regulatory Participant review and comment on the Subregional Plan and its development.~~

~~6.5 — Submission of Member Plans to SPG. Each Transmitting Utility Member, as that term is defined in the MAPP Restated Agreement, shall submit its transmission plans to the SPG in which its system is geographically located, or SPGs in situations where its system crosses several SPG boundaries. The TPSC requires that all Members submit their individual Member Plans to the appropriate SPG. Each SPG member must be willing to participate in joint SPG studies to assess the adequacy of proposed Member Plans to best meet the needs of the subregion. The TPSC will not be in a position to support the transmission Member Plans of any Member who does not make such Member Plans available to the SPG.~~

~~6.6 — Network Upgrades Out of Planning Cycle. When planned transmission upgrades are identified by a Member outside the timing requirements of the Regional Plan (including any network upgrades needed for generation interconnection or transmission service): The Member will submit information about the upgrades at the next SPG meeting and the next TPSC meeting to make every reasonable effort to allow for stakeholder input on such upgrades before those upgrades go in-service. The Member will include those upgrades in their next Member Plan.~~

~~6.7 — SPG Meetings. Each SPG should meet at least twice annually to review plans and determine what changes, if any, need to be made to coordinate Member Plans among Members. Participation in any SPG meeting is open to any interested party who has signed the MAPP NDA. Meeting notices are posted on the MAPP calendar at www.mapp.org. Recommendations carried forward to the TPSC by the SPG should reflect a consensus of the SPG members. However, a SPG member also has the right to reflect a minority opinion in any report to the TPSC. The notice of SPG meetings are to be sent out by the SPG TPSC liaison person, the SPG Chair, or SPG Secretary to the SPG Membership via the SPG and TPSC exploder email list. Other stakeholders, such as interested parties, that request meeting notification shall also be sent a meeting notice. In addition, the meetings are posted on the MAPP website under the calendar of MAPP meetings. The notice shall state the time and place of the meeting, and shall include an agenda sufficient to notify Members of the substance of matters to be considered at the meeting. Additionally, the appropriate subregional Regulatory Participants, who are not SPG Members or may not be subscribed to the SPG and TPSC exploders list, are to be sent a meeting notice.~~

~~6.8 — TPSC/SPG Communication. Each recognized SPG shall appoint a liaison to the TPSC to facilitate communication of the planning process. The liaison person can be any SPG member including an elected TPSC member. The form of communication the TPSC expects from the SPG includes: (a) SPG Meeting Agendas; (b) SPG final approved Meeting Minutes; and (c) SPG liaison status reports to the TPSC at the scheduled meetings. The SPG meeting agendas and approved minutes should be electronically sent to the TPSC Secretary for posting on the MAPP website in the RTC/TPSC area. The SPG status reports are given by the TPSC liaison at the scheduled TPSC meetings.~~

~~6.9 — SPG Planning Responsibilities. The SPG shall develop a coordinated subregional transmission plan (the SPG Plan), including alternatives, for the ensuing ten years, for all transmission facilities in the subregion at a capacity of 115 kV or greater. This SPG Plan shall be submitted to the TPSC biennially, each even numbered or MAPP Regional Plan year. The SPG shall update and modify the SPG Plan, as required, between biennial planning year cycles and submit these modifications to the TPSC for approval. The Subregional Plan should:~~

~~identify load serving problems in the subregion;~~

~~identify constrained interface problems within the subregion and with neighboring subregions and regions;~~

~~identify transmission needs for new generation;~~

~~propose and study transmission expansion alternatives to address these problems and needs;~~

~~recommend the preferred alternatives which best address the subregional requirements to the TPSC;~~

~~forward alternative proposed solutions to the TPSC for the evaluation and determination of preferred plan options for inclusion in the MAPP Regional Plan in the absence of consensus agreement by a SPG on the selection of preferred plan options;~~

~~address subregional deficiencies identified in the MAPP Regional Plan; and~~

~~provide feedback assessment of impacts of the published MAPP Regional Plan on the subregion.~~

~~6.10 — Planning Criteria. The MAPP Restated Agreement states that each Member's plan shall conform to applicable reliability standards and requirements, and to applicable methods and assessment practices and other transmission planning standards and requirements established by the RTC. In this context, the Subregional Plan shall conform to the requirements of the MAPP Members Reliability Criteria and Study Procedures Manual and the NERC and MRO Planning Standards. In instances where these Standards are different, the more stringent Standard shall be adopted. Such criteria and standards are available at www.mapp.org.~~

~~6.11—SPG Study Models. Whenever possible, the SPGs shall adopt the most current approved regional model series to develop their base case study models. Each series provides near term, five-year and ten-year models representing summer peak, summer off-peak and winter peak system conditions. The SPG shall determine the appropriate load conditions (summer peak, summer off-peak, winter peak, etc.) and generation schedules for the SPG studies. The SPG shall verify that the load data, new generation data, and all existing firm transactions in the subregion are included and correct. In developing the base case load flow models to be used for the SPG studies, the SPG shall document all modifications required to load flow cases. The SPGs may add underlying transmission detail to these models as required. The SPG shall solicit input from stakeholders including additions or changes to transmission, generation, and demand resources, in developing base-line assumptions and models used in developing the SPG Plan. The SPG may, if appropriate, adopt other models to conduct its studies. However, the SPG shall develop and provide the TPSC with appropriate files to facilitate incorporation of the Subregional Plan study data into the next regional model series that will be used by the TPSC.~~

~~6.12—SPG Studies and Reports. A report summarizing the results of the Member and SPG Working Group studies shall be provided for review and consensus approval of the SPG, prior to adopting the plans of Members or the SPG study groups into the Subregional Plan. The SPG shall require its Members or its SPG Study Groups to perform system studies to demonstrate that the performance of the proposed Member and Subregional Plans meets the planning standards defined above. These studies may include, but not necessarily be limited to load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members.~~

~~6.13—Subregional Plan Report to the TPSC. The Subregional Plan, or modifications to the SPG Plan, shall be provided to the TPSC each year. A report shall be provided describing the Subregional Plan. This report shall include the following information:~~

~~an executive summary (to be incorporated into the MAPP Regional Plan report);~~

~~a description of needs being addressed;~~

~~a description of the alternatives considered;~~

~~recommendations as to which alternatives should be included in the MAPP Regional Plan;~~

~~a description of alternative plan options in the absence of consensus SPG agreement on preferred solutions;~~

~~a brief description of the SPG studies, including costs, supporting the recommendations, with reference to the detailed SPG study report;~~

~~a description of the new facilities; and~~

~~a description of the Public Input/Review Process.~~

7.0 — Public Input Process

~~7.1 — Stakeholder Participation. The TPSC shall invite Members, interested parties, any actual or potential users of the relevant transmission facilities, and neighboring transmission owning utilities (referred to collectively as “stakeholders”), as well as Regulatory Participants, to be part of the planning process. The SPG shall invite such stakeholders to SPG meetings as part of the public input process into the Subregional Plan. The SPG shall:~~

~~identify and maintain a list of stakeholders involved in the review and comment on additions to the Transmission System in their subregion;~~

~~add stakeholders to the appropriate SPG email exploder lists following their requests to MAPP COR planning staff to participate;~~

~~verify that stakeholders have signed the MAPP NDA for attendance at the meetings where CEH material is discussed;~~

~~identify comparable contacts from interconnected NERC regions;~~

~~(e) — coordinate with stakeholders as to the process required, areas of needs, and possible solutions;~~

~~(f) — review the solutions with stakeholders to identify the best options from a transmission and regulatory basis for that subregion to include in the Subregional Plan; and~~

~~(g) — report to the TPSC and include in the Subregional Plan documentation of the public process completed for the Subregional Plan such as dates of meetings, number of stakeholders, highlights of key comments and SPG consideration of those comments. The SPG shall include in their Subregional Plan report to the TPSC a listing of the suggestions for economic planning studies that they received from their stakeholders during the year.~~

~~7.2 — Regulatory Participation. The TPSC shall encourage and facilitate input from Regulatory Participants, in the development of the MAPP Regional Plan. The SPGs, as part of the formal process for regulatory participation, shall:~~

~~(a) — Maintain a list of Regulatory Participants involved in the review and approval of additions to the Transmission System in their subregion.~~

~~(b) — Maintain a list of comparable contacts from interconnected regions.~~

~~(c) — Coordinate with the Regulatory Participants as to the process required, areas of needs, and possible solutions. Review the solutions with such participants to identify the best options from a transmission and regulatory basis for that subregion to include in the MAPP Regional Plan.~~

~~(d) — Describe in the Subregional Plan how the proposed facilities address the needs, and identify the Regulatory Participants involved in the Subregional Plan development and what future regulatory approvals are required for development of facilities in the Subregional Plan.~~

~~The TPSC, as part of the formal process for the regulatory participation, shall:~~

~~(a) — maintain a list of Regulatory Participants involved in the review and approval of additions to the Transmission System for each SPG;~~

~~(b) — report in the MAPP Regional Plan the input of the Regulatory Participants obtained in developing the MAPP Regional Plan;~~

~~(c) — present the results of the MAPP Regional Plan and the needed facilities to the RTC;~~

~~(d) — work with the Members and SPGs on final approvals for needed projects as required and coordinate any regional information that needs to be disseminated;~~

~~(e) — make the MAPP Regional Plan available to the public and regulatory community subject to applicable CEH restrictions; and~~

~~(f) — as required, sponsor information seminars to facilitate regulatory and public acceptance of the MAPP Regional Plan.~~

~~8.0 — Inter regional Planning Coordination~~

~~The TPSC shall coordinate on planning issues with: (1) the subcommittees of the RTC; (2) the MRO; (3) relevant non-MAPP neighboring transmission owning utilities and Regional Transmission Organizations (“RTOs”).~~

~~The TPSC will select a TPSC member who will be responsible for reporting on the relevant activities of the MAPP RTC, MRO and RTO subcommittees at each TPSC meeting. The TPSC liaison may attend the MAPP RTC, MRO and neighboring RTO subcommittee meetings or employ other effective means to obtain the required information.~~

~~8.1 — Coordination Principles. The MAPP Regional Plan shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from neighboring regions, or their applicable sub-regions, including adjacent transmission providers or regional transmission organizations, or their designated regional planning organization(s).~~

~~8.2 — Joint Planning Committee. MAPP shall participate in a Joint Planning Committee (“JPC”) with representatives of adjacent transmission providers or regional transmission organizations, or their designated regional planning organizations(s) (“Regional Planning Coordination Entities” or “RPCEs”). The JPC shall be comprised of representatives of MAPP and the RPCE(s) in numbers and functions to be identified from time to time. The JPC may~~

~~combine with or participate in similarly established joint planning committees amongst multiple RPCEs or established under joint agreements to which MAPP is a signatory, for the purpose of providing for broader and more effective inter-regional planning coordination. The JPC shall have a Chairman. The Chairman shall be responsible for: the scheduling of meetings; the preparation of agendas for meetings; the production of minutes of meetings; and for chairing JPC meetings. The Chairmanship shall rotate amongst MAPP and the RPCEs on a mutually agreed to schedule, with each party responsible for the Chairmanship for no more than one planning study cycle in succession. The JPC shall coordinate planning of the systems of the Western Area Power Administration's Upper Great Plains Customer Service Region and the RPCEs, including the following:~~

~~8.2.1—Coordinate the development of common power system analysis models to perform coordinated system planning studies including power flow analyses and stability analyses. For studies of interconnections in close electrical proximity at the boundaries among the systems of MAPP and the RPCEs, the JPC or its designated working group will coordinate the performance of a detailed review of the appropriateness of applicable power system models.~~

~~8.2.2—Conduct, on a regular basis, a Coordinated Regional Transmission Planning Study (“CRTPS”), which shall be reviewed by stakeholders, as set forth in Section 8.4.1.~~

~~8.2.3—Coordinate planning activities under this section 8, including the exchange of data and developing necessary report and study protocols.~~

~~8.2.4—Maintain an Internet site and e-mail or other electronic lists for the communication of information related to the coordinated planning process. Such sites and lists may be integrated with those existing for the purpose of communicating the open and transparent planning processes of MAPP.~~

~~8.2.5—Meet at least semi-annually to review and coordinate transmission planning activities.~~

~~8.2.6—Establish working groups as necessary to address specific issues, such as the review and development of the regional plans of the RPCE and MAPP, and localized seams issues.~~

~~8.2.7—Establish a schedule for the rotation of responsibility for data management, coordination of analysis activities, report preparation, and other activities.~~

~~8.3—Data and Information Exchange. MAPP shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. MAPP shall provide such data in accordance with the applicable CEH policy, and maintain data and information received from each RPCE in accordance with their applicable confidentiality policies.~~

~~8.3.1—Data required for the development of power flow cases, and stability cases, incorporating up to a ten year load forecasts as may be requested, including all critical assumptions that are used in the development of these cases.~~

~~8.3.2 Fully detailed planning models (up to the next ten (10) years as requested) on an annual basis and updates as necessary to perform coordinated studies that reflect system enhancement changes or other changes.~~

~~8.3.3 The regional plan documents, any long term or short term reliability assessment documents, and any operating assessment reports produced by MAPP and the RPCE.~~

~~8.3.4 The status of expansion studies, system impact studies and generation interconnection studies, such that MAPP and the RPCE have knowledge that a commitment has been made to a system enhancement as a result of any such studies.~~

~~8.3.5 Transmission system maps for MAPP and the RPCE bulk transmission systems and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.~~

~~8.3.6 Contingency lists for use in load flow and stability analyses, including lists of all contingency events required by applicable NERC or Regional Entity planning standards, as well as breaker diagrams, as readily available, for the portions of the MAPP and the RPCE transmission systems that are relevant to the coordination of planning between or among the systems. Breaker diagrams to be provided on an as requested basis.~~

~~8.3.7 The timing of each planned enhancement, including estimated completion dates, and indications of the likelihood that a system enhancement will be completed and whether the system enhancement should be included in system expansion studies, system impact studies and generation interconnection studies, and as requested the status of related applications for regulatory approval. This information shall be provided at the completion of each planning cycle of MAPP, and more frequently as necessary to indicate changes in status that may be important to the RPCE system.~~

~~8.3.8 Quarterly identification of interconnection requests that have been received and any long-term firm transmission services that have been approved, that may impact the operation of MAPP or the RPCE system.~~

~~8.3.9 Quarterly, the status of all interconnection requests that have been identified.~~

~~8.3.10 Information regarding long term firm transmission services on all interfaces relevant to the coordination of planning between or among the systems.~~

~~8.3.11 Load flow data initially will be exchanged in PSS/E format. To the extent practical, the maintenance and exchange of power system modeling data will be implemented through databases. When feasible, transmission maps and breaker diagrams will be provided in an electronic format agreed upon by the Transmission Provider and the RPCE. Formats for the exchange of other data will be agreed upon by MAPP and the RPCE.~~

~~8.4—Coordinated System Planning. MAPP shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission system. Results of such coordinated studies will be included in the Coordinated System Plan. MAPP shall agree to conduct with the RPCEs such coordinated planning as set forth below.~~

~~8.4.1—Stakeholder Review Processes. MAPP, in coordination with coordinating RPCEs shall review the scope, key modeling assumptions, and preliminary and final results of the CRTPS with impacted stakeholders, and shall modify the study scope as deemed appropriate by MAPP in agreement with the coordinating RPCEs, after receiving stakeholder input. Such reviews will utilize the existing planning stakeholder forums of the coordinating parties including as applicable joint Sub Regional Planning Meetings.~~

~~8.4.2—Single Entity Planning. MAPP shall engage in such transmission planning activities, including expansion plans, system impact studies, and generator interconnection studies, as necessary to fulfill its obligations under the MAPP Restated Agreement and any other MAPP transmission planning procedures. Such planning shall conform to applicable reliability requirements of NERC, applicable regional reliability councils, and any successor organizations thereto. Such planning shall also conform to any and all applicable requirements of Federal or State regulatory authorities. MAPP will prepare a regional transmission planning report that documents the procedures, methodologies, and business rules utilized in preparing and completing the report. MAPP shall agree to share the transmission planning reports and assessments with each RPCE, as well as any information that arises in the performance of its individual planning activities as is necessary or appropriate for effective coordination among MAPP and the RPCEs on an ongoing basis. MAPP shall provide such information to the RPCEs in accordance with the applicable CEII policy and shall maintain such information received from the RPCEs in accordance with their applicable confidentiality policies.~~

~~8.4.3—Analysis of Interconnection Requests. In accordance with the procedures under which a MAPP Transmission Provider provides interconnection service, MAPP will agree to coordinate with each RPCE the conduct of any studies required in determining the impact of a request for generator or merchant transmission interconnection. Results of such coordinated studies will be included in the impacts reported to the interconnection customers as appropriate. Coordination of studies shall include the following:~~

~~8.4.3.1—When the Transmission Provider receives a request under its interconnection procedures for interconnection, it will determine whether the interconnection potentially impacts the system of a RPCE. In that event, the Transmission Provider will notify the RPCE and convey the information provided in the interconnection queue posting. The Transmission Provider will provide the study agreement to the interconnection customer in accordance with applicable procedures.~~

~~8.4.3.2—If the RPCE determines that it may be materially impacted by an interconnection on the Transmission Provider's system, the RPCE may request participation in the applicable interconnection studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the interconnection on the RPCE~~

~~System, and who will perform the studies. The Transmission Provider will strive to minimize the costs associated with the coordinated study process undertaken by agreement with the RPCE.~~

~~8.4.3.3 — Any coordinated studies associated with requests for interconnection to the Transmission Provider's system will be performed in accordance with the study timeline requirements and scope of the applicable generation interconnection procedures of Western.~~

~~8.4.3.4 — The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider, or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between Transmission Provider and the interconnection customer, will reflect the costs, and the associated roles of the study participants including the RPCE. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation, and responsibilities in the study. If the RPCE agrees to perform any aspects of the study, the RPCE must comply with the timelines and schedule of Western's interconnection procedures.~~

~~8.4.3.5 — The Transmission Provider will collect from the interconnection customer the costs incurred by the RPCE associated with the performance of such studies and forward collected amounts, no later than thirty (30) days after receipt thereof, to the RPCE. Upon the reasonable request of the RPCE, the Transmission Provider will make its books and records available to the requestor pertaining to such requests for collection and receipt of collected amounts.~~

~~8.4.3.6 — The Transmission Provider will report the combined list of any transmission infrastructure improvements on either the RPCE and/or the Transmission Provider's system required as a result of the proposed interconnection.~~

~~8.4.3.7 — Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the proposed interconnection shall be accomplished under the terms of Western's tariff under which the transmission service is provided, consistent with applicable Federal or State regulatory policy and applicable law.~~

~~8.4.3.8 — Each transmission provider will maintain a separate interconnection queue. The JPC will maintain a composite listing of interconnection requests for all interconnection projects that have been identified as potentially impacting the systems of MAPP and coordinating RPCEs. The JPC will post this listing on the Internet site maintained for the communication of information related to the coordinated system planning process.~~

~~8.4.4 — Analysis of Long-Term Firm Transmission Service Requests. In accordance with applicable procedures under which the Transmission Provider provides long-term firm transmission service, Transmission Provider will coordinate the conduct of any studies required to determine the impact of a request for such service. Results of such coordinated studies will be included in the impacts reported to the transmission service customers as appropriate. Coordination of studies will include the following:~~

~~8.4.4.1 — The Transmission Provider will coordinate the calculation of ATC values, if any, associated with the service, based on contingencies on their systems that may be impacted by the granting of the service.~~

~~8.4.4.2 — When Transmission Provider receives a request for long-term firm transmission service, it will determine whether the request potentially impacts the system of the RPCE. If Transmission Provider determines that the RPCE system is potentially impacted, and that the RPCE would not receive a transmission service request to complete the service path, Transmission Provider will notify the RPCE and convey the information provided in the posting.~~

~~8.4.4.3 — If the RPCE determines that its system may be materially impacted by granting the service, it may contact Transmission Provider and request participation in the applicable studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the requested service on the RPCE system, and will strive to minimize the costs associated with the coordinated study process. The JPC will develop screening procedures to assist in the identification of service requests that may impact systems of the JPC members other than the Transmission Provider.~~

~~8.4.4.4 — Any coordinated studies for request on Transmission Provider's system will be performed in accordance with the study timeline and scope requirements of the applicable transmission service procedures of the Transmission Provider.~~

~~8.4.4.5 — The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider or by providing input to the studies to be performed by Transmission Provider. The study cost estimates indicated in the study agreement between Transmission Provider and the transmission service customer will reflect the costs and the associated roles of the study participants. Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation and responsibilities in the study.~~

~~8.4.4.6 — Transmission Provider will collect from the transmission service customer, and forward to the RPCE, the costs incurred by the RPCE with the performance of such studies.~~

~~8.4.4.7 — Transmission Provider will identify any transmission infrastructure improvements required as a result of the transmission service request.~~

~~8.4.4.8 — Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the transmission service request shall be accomplished under the terms of Western's Open Access Transmission Tariff.~~

~~8.4.5 — Coordinated Transmission Planning. MAPP agrees to participate in the conduct of a periodic Coordinated Regional Transmission Planning Study ("CRTPS"). The CRTPS shall have as input the results of ongoing analyses of requests for interconnection and ongoing analyses of requests for long-term firm transmission service. The Parties shall coordinate in the~~

~~analyses of these ongoing service requests in accordance with sections 8.4.3 and 8.4.4. MAPP, in coordination with coordinating RPCEs, shall review the scope, preliminary results and final results of the CRTPS with impacted stakeholders, in accordance with section 8.4.1 and this section. The results of the CRTPS shall be an integral part of the expansion plans of each Party. Construction of upgrades on the Transmission System of the Transmission Provider identified as necessary in the CRTSP shall be under the terms of the applicable Western documentation applicable to the construction of upgrades identified in the expansion planning process. Coordination of studies required for the development of the Coordinated System Plan will include the following:~~

~~8.4.5.1 — Every three years, MAPP shall participate in the performance of a CRTPS. Sensitivity analyses will be performed, as required, during the off years based on a review by the JPC of discrete reliability problems or operability issues that arise due to changing system conditions.~~

~~8.4.5.2 — The CRTPS shall identify all reliability and expansion issues, and shall propose potential resolutions to be considered by MAPP and the coordinating RPCEs.~~

~~8.4.5.3 — As a result of participation in the CRTPS, neither MAPP nor its members are obligated in any way to construct, finance, operate, or otherwise support any transmission infrastructure improvements or other transmission related projects identified in the CRTPS. Any decision to proceed with any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS shall be based on the applicable reliability, operational and economic planning criteria established for MAPP as applicable to the development of the MAPP Regional Plan and set forth in this Attachment P.~~

~~8.4.5.4 — As a result of participation in the CRTPS, the RPCEs are not entitled to any rights to financial compensation due to the impact of the transmission plans of MAPP upon the RPCE system, including but not limited to its decisions whether or not to construct any transmission infrastructure improvements or other transmission related projects identified in the CRTPS.~~

~~8.4.5.5 — The JPC will develop the scope and procedure for the CRTPS. The scope of the CRTPSs performed over time will include evaluations of the transmission systems against reliability criteria, operational performance criteria, and economic performance criteria applicable to MAPP and the RPCEs.~~

~~8.4.5.6 In the conduct of the CRTPS, MAPP and the coordinating RPCEs will use planning models that are developed in accordance with the procedures to be established by the JPC. Exchange of power flow models will be in a format that is acceptable to the coordinating parties.~~

~~9.0 — Member Plans~~

~~The procedures, standards and requirements for making available Members' transmission plans ("Member Plans") and the information on which the Member Plans are based, as required by the MAPP Restated Agreement. Members may submit information to the TPSC individually, but~~

~~submittals through the SPGs are preferred. The SPGs provide a forum for members to continue their long-term joint planning relationships with their neighbors, and involve regulatory staff. The Member Plans will be integrated into the SPG Subregional Plan.~~

~~The Subregional Plan reports, and subsequent updates, are submitted to the TPSC as part of the MAPP Regional Plan. Additionally, the MAPP Regional Plan will provide an executive summary report of the Member and SPG plans showing the anticipated transmission expansions in the region. Detailed Member planning reports are referenced in the Subregional Plan. Such reports typically provide details of economic evaluations, extensive alternative evaluations and supporting technical studies and minority opinions if consensus is not reached.~~

~~10.0 — Dispute Resolution~~

~~All substantive and procedural disputes related to the MAPP Regional Planning Process shall be resolved in accordance with the dispute resolution procedures set forth in the MAPP Restated Agreement. Disputes related to local planning issues shall be resolved in accordance with the dispute resolution procedures set forth in this Tariff.~~

~~11.0 — Economic Planning Studies~~

~~The TPSC shall evaluate limitations on MAPP transfer capability through historical Transmission Loading Relief (“TLR”) analysis associated with the defined flowgates in the MAPP region. The TPSC shall utilize these comprehensive reviews to determine transmission constraints in the region. The TPSC shall also support economic studies necessary to review the integration of large proposed generation facilities to the regional grid and shall develop concept plans as part of regional study efforts.~~

~~The TPSC may also commission SPGs and joint SPGs to address highly constrained regional flowgates and to develop proposed plans for increasing inter-regional transfer capability. SPGs may also perform regional transfer capability analysis and develop exploratory transmission expansion plans to address the most limiting flowgates within their SPG region. The TPSC may also coordinate and support other joint exploratory economic planning efforts within and adjacent to the RTC Region.~~

~~In addition to these types of studies, stakeholders, through the TPSC, may request that the TPSC perform economic planning studies to evaluate potential upgrades or other investments that could reduce congestion or integrate new transmission, generation or demand resources and loads on an aggregated or regional basis. The TPSC shall review such proposals and select a certain number for study each year.~~

~~The TPSC may cluster or batch requests for economic planning studies so the TPSC can perform the studies in the most efficient manner. Requests for studies shall be submitted to the chairman of the TPSC. All such requests will be collected over a 12-month period ending January 1 of each year. The TPSC (with stakeholder input) will commit and engage to address up to five requests per year. The TPSC will attempt to combine the scope of such requests such that the~~

~~scope of actual study work will adequately address multiple requests, so as not to exceed three studies. Requesting parties would be required to submit essential data for their requested study.~~

~~As part of this process, the TPSC may also consider economic studies of upgrades to MAPP flowgates. The flowgates studied will be selected among those determined to have recurring congestion, as evidenced by a high number of hours per year with no available firm Available Flowgate Capacity (“AFC”) or a high number of historical hours per year under Transmission Loading Relief (“TLR”). Along with stakeholder input, the TPSC will use these or similar metrics to determine which MAPP flowgates are most congested and warrant study of the economic benefits of proposed flowgate upgrades. Any economic planning study, which identifies a new MAPP region transmission facility or the upgrade of an existing transmission facility as a proposed Economic Network Upgrade, shall identify the proposed upgrade subject to the cost allocation principles set forth in Section 12 of this Attachment P. Such economic study shall also include a benefit allocation analysis based on one or more of the following principles: (a) reductions in projected congestion costs; (b) reductions in projected energy costs; or (c) reductions in projected transmission losses.~~

~~The economic planning studies performed by the TPSC shall include sensitivity analyses representing various generation price scenarios; however, the TPSC shall study the cost of congestion only to the extent it has information to do so. If a stakeholder requests that a particular congested area be studied, it must supply relevant data within its possession to enable the TPSC to calculate the level of congestion costs that is occurring or is likely to occur in the near future.~~

~~12.0 — Cost Allocation~~

~~12.1 — Categories of Projects. The TPSC will identify cost responsibility on a regional and subregional basis for Network Upgrades identified in the MAPP Regional Plan for reliability and economic projects subject to any grandfathered project provisions from pre-existing agreements. There will be three categories of projects:~~

~~12.1.1 Baseline Reliability Projects (BRP). BRPs are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable NERC and MRO Reliability Standards.~~

~~12.1.2 New Transmission Access Projects. New Transmission Access Projects are defined as Network Upgrades identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under Western’s Tariff. New Transmission Access Projects include projects that are needed to accommodate the incremental needs associated with requests for new transmission or interconnection service, as determined in Facilities Studies associated with such requests. New Transmission Access Projects are either Generation Interconnection Projects or Transmission Service Projects.~~

~~12.1.2.1 — Generation Interconnection Projects. Generation Interconnection Projects are New Transmission Access Projects that are associated with either the interconnection of new~~

~~generation, or an increase in the generating capacity of existing generation, under Western's Tariff.~~

~~12.1.2.2 Transmission Service Projects. Transmission Service Projects are New Transmission Access Projects that are needed to provide for requests for new Point To Point Transmission Service, or requests under Western's Tariff for Network Service or a new designation of a Network Resource(s).~~

~~12.1.3 Regionally Beneficial Projects (RBP). A RBP is a transmission network upgrade that shall be: (a) proposed in accordance with the MAPP Planning Process; (b) found to be eligible for inclusion in the MAPP Regional Plan; (c) determined not to be a New Transmission Access Project; and (d) found to have regional benefits. RBPs may include projects that expand the scope of a project that would otherwise qualify as a Baseline Reliability Project.~~

~~12.2 Cost Allocation. The allocation rules for these projects are as follows:~~

~~12.2.1 Allocation of Baseline Reliability Project Costs. Each transmission owner is obligated to construct and/or upgrade those BRP facilities required to meet NERC and MRO Reliability Standards associated with serving its native load customers and to meet its firm transmission commitments. Costs associated with a single Transmission Provider facility addition shall be recovered through Western's rate recovery method. Costs associated with BRP involving multiple transmission owners shall be shared among the affected transmission owners in accordance with this principle, subject to those transmission owners' respective interconnection agreements.~~

~~12.2.2 New Transmission Access Projects. New Transmission Access Projects may consist of a number of individual facilities that constitutes a single project for cost allocation purposes. Cost allocation methods applicable to specific requests for interconnection and transmission service under Western's Tariff shall be used for new Transmission Access Projects.~~

~~12.2.3 Allocation Rules for RBPs. The MAPP Regional Plan shall classify transmission projects as described above. Any economic planning study authorized by the MAPP RTC for a RBP and performed in compliance with Section 11 of this Attachment P, which identifies the need for a new MAPP region transmission facility or the upgrade of an existing transmission facility as a proposed Economic Network Upgrade, shall treat such proposed facility upgrade(s) as commercial transmission.~~

~~— This procedure ("Auction Procedure") describes the process by which the MAPP transmission owner on whose transmission system the Economic Network Upgrade is located (Host TO) shall solicit participation for the proposed Economic Network Upgrade. The MAPP transmission owner shall have the right to elect to be an Affected System and not serve as the Host TO, provided that the MAPP RTC identifies another qualified transmission owner, including a consortium of transmission owners and/or independent transmission owners, as the Host TO. A transmission owner that has protested a project as causing undue burden, which has not been satisfactorily resolved, has the option to decline participation.~~

~~12.2.3.1 — Applicability. This Auction Procedure is applicable to MAPP Region transmission owners and Eligible Transmission Customers, including but not limited to Affected Generators and MAPP Region Load Serving Entities (“LSEs”), collectively referred to as “Eligible Participants.”~~

~~12.2.3.2 — First Call Offer of Subscription Rights. The Contractor (i.e., MAPP COR acting on behalf of the Host TO) shall submit an offer to participate in the Economic Network Upgrade to all Eligible Participants and to any Affected System Operators participating on a reciprocal basis in accordance with the benefit allocation defined on a cost causation basis in the economic planning studies performed in compliance with Section 11 of this Attachment P, in exchange for Subscription Rights to the new transmission capacity.~~

~~The Contractor shall offer, on OASIS on a non-discriminatory, basis to all Eligible Participants the opportunity to participate in the Economic Network Upgrade by purchasing a portion of the Subscription Rights made available by such Auction Procedure. If an Eligible Participant accepts the subscription offer for participation in the Economic Network Upgrade, the subscription shall be granted to such Eligible Participant as a Subscription Rights buyer. If demand for the Subscription Rights offered exceeds the number of Subscription Rights available, the Contractor shall offer such Subscription Rights to the interested Eligible Participants on a pro rata basis, based on each Eligible Participant’s designated level of transmission capacity megawatts requested in its submitted offer to participate to the total transmission capacity megawatts requested. Each participating interested Eligible Participant shall have 60 days to accept such an offer for pro rata Subscription Rights.~~

~~12.2.3.3 — Second Round Offer of Subscription Rights. Within 30 days following the close of the above first call offer of Subscription Rights, the Contractor shall release any Subscription Rights that remain unsubscribed to all Eligible Participants. The Contractor shall allow thirty (30) days for recipients of the second round offer to indicate interest in acquiring the residual Subscription Rights. If the Subscription Rights offered are acquired by an Affected System Operator’s transmission business unit, the revenue requirements will be rolled into the Affected System Operator’s rate structure and the acquired transmission capacity shall be available under the Affected System Operator’s open access transmission tariff (“OATT”). The Affected System Operator, including the Host TO, shall adjust the point to point and network service charges to reflect the addition of any revenue requirements to the Affected System Operator’s OATT embedded cost rates, provided that any such Affected System Operator subject to the jurisdiction of the Commission shall obtain approval of the Commission prior to causing such rate adjustment to be effective. Furthermore, any subscribing Eligible Participant may roll the revenue requirements associated with the acquired Subscription Rights into the Affected System Operator’s rate structure, as approved by the Commission, if the subscribing Eligible Participant makes the acquired transmission capacity available under the Affected System Operator’s OATT.~~

~~12.2.3.4 — Resale and Reassignment of Subscription Rights. The MAPP transmission provider shall provide resale and reassignment provisions for Subscription Rights on the same basis as provided in the *pro forma* OATT for firm point to point transmission service.~~

~~12.2.3.5 — Failure to Obtain Subscriptions. If, after the first and second rounds of the Auction Procedure have concluded, Subscription Rights sufficient to cover the total cost of the Economic Network Upgrade project have not been successfully subscribed, the Contractor shall notify subscribing Eligible Participants of the Subscription Rights shortfall. Such notice shall be in writing, include the amount of available Subscription Rights and provide thirty (30) days for such subscribing Eligible Participant to increase its Subscription Rights election. At the end of the expiration of the thirty (30) day notice period, the proposed project may be cancelled if it is still not fully subscribed. The Host TO or another Affected System Operator may choose to fund the remaining portion of the necessary subscription rights and roll those costs into their transmission revenue requirements. If a project is cancelled under such circumstances, the Contractor shall notify all of the subscribers in writing within thirty (30) days of its decision to terminate. If an Economic Network Upgrade is terminated for lack of subscriptions or for defaults on subscriptions, the project shall be deemed to have insufficient economic benefit to market participants, and the project shall not qualify for reconsideration as an Economic Network Upgrade until the latter of a) the next biennial MAPP Regional Plan planning cycle, or b) two years from the date of notice of cancellation.~~

~~12.2.3.6 — Facilities Agreement. If the Economic Network Upgrade is fully subscribed, the Host TO shall offer the subscribers a Facilities Agreement within sixty (60) days of full subscription.~~

~~12.2.3.7 — Defaulting Subscribers. If any of the subscribers fail to execute the Facilities Agreement within thirty (30) days of receipt of such agreement, the Contractor shall use its best efforts to award the non-signing subscriber's Subscription Rights to all Eligible Participants. If the Contractor is unable to secure an alternative subscriber, the Host TO shall pursue resolution with the non-signing/defaulting subscriber(s) pursuant to Article 9, Dispute Resolution, of the MAPP Restated Agreement. Any dispute that has not been resolved through the MAPP Article 9 Dispute Resolution process shall be resolved through the appropriate regulatory or jurisdictional dispute resolution proceedings. A party seeking to invoke FERC jurisdiction over a Dispute shall file with the Commission the Facilities Agreement unexecuted by the non-signing/defaulting subscriber. The Commission shall determine the obligations of the non-signing/defaulting subscriber. If, as a result of the dispute resolution process the non-signing/defaulting subscriber is relieved of its obligations, the Host TO may cancel the project with no further obligations to the remaining subscribers, except to notify all of the subscribers in writing within thirty (30) days of its decision to terminate.~~

~~12.2.3.8 — Post Auction Host Owner Option. In the event the defined Economic Network Upgrade is not fully subscribed after the Auction Procedure described in Sections 12.2.3.2-12.2.3.7 is exhausted, the Host TO may, of its own accord, elect to perform such Economic Network Upgrade, and roll the upgrade costs into the next update of its transmission revenue requirements.~~

~~12.2.3.9 — Conversion of Subscription Rights to Physical Transmission Rights. The Facilities Agreement associated with an Economic Network Upgrade shall convert the~~

~~Subscription Rights allocated pursuant to Sections 12.2.3.2, 12.2.3.3, 12.2.3.5 and 12.2.3.7 above, to Physical Transmission Rights. Subscription Rights and Physical Rights shall be the same transmission capability rights with the principal distinction merely being the stage of project commitment. Subscription Rights shall be associated with a good faith expression of intent, albeit still based on non-binding estimated planning costs, to invest in the Economic Network Upgrade. Upon signing a Facilities Agreement, the Eligible Participant's expression of intent to invest as a holder of Subscription Rights becomes a binding contractual commitment with the prescribed Physical Rights to the discrete transmission capability defined in the Facilities Agreement. The additional transmission capability achieved by the project shall be allocated to the Subscription Rights holders as Physical Transmission Rights in proportion to their respective payment for the network upgrade. The Physical Transmission Rights do not in themselves convey a form of transmission service under Part II or Part III of the Tariff. The holder of the Physical Transmission Rights may use those rights in conjunction with a specific application of transmission service under Part II or Part III of the Tariff of the Host TO, or the holder may sell or assign the Physical Transmission Rights to another party. Physical Transmission Rights may be used by a generator owner to secure firm transmission service and/or provide a hedge against potential congestion charges.~~

~~12.2.3.10 — Completion of Economic Network Upgrades. Once an Economic Network Upgrade is fully subscribed and Facilities Agreements are in place for all subscribers, the Host TO shall apply good faith efforts to obtain approvals for, design, construct, own, operate and maintain the proposed Economic Network Upgrade facilities under the terms and conditions set forth in the Facilities Agreement(s).~~

~~12.2.3.11 — Inter-Regional Coordination. This Procedure may be applied for inter-regional Economic Network Upgrades demonstrating inter-regional economic benefits. MAPP Transmission Owners may use this Procedure to fulfill any requirements of reciprocal obligations for inter-regional transmission upgrades identified by the planning processes of adjacent regional entities, including but not limited to the Midwest ISO Transmission Expansion Plan. This Procedure shall also be available to transmission owners in adjacent regions that may be invited to participate in a subscription rights offering from a MAPP Transmission Owner, based on demonstrations of benefits under Section 11 of this Attachment P.~~

~~12.2.3.12 — Transmission Projects for Renewable Energy Zones. The Subscription Rights procedures of Sections 12.2.3.3 through 12.2.3.7 above may also be applied to a regional transmission project that is designed to develop deliverability from Renewable Energy Zones to a market in the same manner that the Subscription Rights procedures are applied for Economic Network Upgrades. However, this procedure shall not be an alternative for requirements of Transmission Access Projects under Parts II and III of the Tariff, or for the obligations of Attachment I, "Standard Large Generator Interconnection Procedures (LGIP)". The Renewable Energy Zone transmission project must be included in the MAPP Regional Plan or in the transmission plan of an adjacent region that has been coordinated with the MAPP Regional Plan.~~

~~12.3 — Existing Cost Allocation Methodologies. The cost allocation methodology set forth in this Section 12.0 shall not modify or be inconsistent with (a) existing mechanisms to allocate~~

~~costs for projects that are constructed by a single transmission owner and billed under existing rate structure, or (b) existing cost allocation methods applicable to specific requests for interconnection or transmission service under the pro forma OATT. Further, the cost allocation methodology set forth in this Section 12.0 shall not supersede cost allocation, cost sharing or joint investment obligations to which an individual Host TO or Affected System may be subject.~~

~~13.0—Western’s Upper Great Plains Region Local Planning Process~~

~~Western’s UGPR Local Transmission Planning Process covers transmission facilities under Western’s Tariff contained within both the Eastern and Western Interconnection of Western’s Upper Great Plains Region. The Local Transmission Plan (LTP) is the transmission plan of the Transmission Provider that identifies the upgrades and other investments to the Western UGPR Transmission System necessary to reliably satisfy, over the planning horizon, Network Customers’ resource and load growth expectations for Native Load Customers; Transmission Provider’s obligations pursuant to grandfathered, non-OATT agreements; and Transmission Provider’s Point to Point Transmission Service customers’ projected service needs including obligations for rollover rights. In addition to this local process, Western UGPR participates in the regional planning efforts as described in Part I of this Attachment P and utilizes these forums also to coordinate new projects with Transmission Customers, Affected Generators, or other relevant stakeholders.~~

~~13.1—Scope. The purpose of Western’s UGPR Local Transmission Planning Process is to conduct local long-term planning for transmission facilities typically on a two-year planning cycle with annual assessments to serve Western’s network load and firm transmission commitments. The preparation of the LTP shall be done in accordance with the general policies, procedures, and principles set forth in this Attachment P.~~

~~13.1.1—Service Requests. Point to Point transmission service request must be made as a separate and distinct submission by an Eligible Customer in accordance with the procedures set forth in Transmission Provider’s Tariff. Similarly, Network Customers must submit Network Resource and load additions/removals pursuant to the process set forth in Transmission Provider’s Tariff.~~

~~13.1.2—Comparability between Customers. The process provides comparable long-term transmission system planning for similarly situated wholesale customers. The process provides long-term reliability and economic planning of transmission facilities for Western’s UGPR firm commitments (e.g., point-to-point service with rollover rights) and Network Customers served from the UGPR Transmission System that is comparable to the long-term planning of its own Native Load Customers from the UGPR System. In developing the LTP, Transmission Provider shall apply applicable reliability criteria, including criteria established by the Transmission Provider, the Midwest Reliability Organization, the WECC, the North American Electric Reliability Corporation, and the Federal Energy Regulatory Commission.~~

~~13.1.3—Comparability between Resources. Comparability between resources, including similarly situated customer-identified projects, will be accomplished by modeling from the generation to~~

~~the Network Load on the UGPR Transmission System. Comparability between resources will be achieved in Western UGPR's LTP by including all valid data received from customers (including load forecast data, generation data and Demand Resource data) in the LTP development. Comparability will be achieved by allowing customer defined projects sponsor participation throughout the transmission planning process and by considering customer defined projects (transmission solutions and solutions utilizing Demand Resources load modeled as a load adjustment) in the LTP development. The Transmission Provider retains discretion as to which solutions to pursue and is not required to include all customer identified projects in its plan.~~

~~13.2—Responsibilities. Western will be responsible for the development of the transmission plans that result from Western's UGPR Local Transmission Planning Process. Western's UGPR Local Planning Process will allow timely and meaningful stakeholder input and participation in the development of the LTP. Western's UGPR Local Planning Process will follow regional planning procedures provided in Sections 1 through 12 and Sections 14 of this Attachment P. The transmission plans and studies on the eastern interconnect resulting from Western's UGPR Local Planning Process that are to be included in MAPP Regional Plans will be submitted to the applicable MAPP Committees and on the Western Interconnection resulting from Western's UGPR Local Planning Process that are to be included in WECC Regional Plans will be submitted to the applicable WECC Committees, to their successor regional or sub-regional committees, and/or to the successor regional transmission organization, independent transmission coordinator, or independent system operator, as appropriate.~~

~~In addition to developing transmission plans to be provided for regional coordinated planning, Western's UGPR Local Planning Process will develop plans to address local UGPR transmission issues, such as transmission facility updates that do not significantly change network system flows. The plans will be provided in reports with executive summaries that are brief and designed to be understandable to stakeholders.~~

~~13.3—Open Planning Process.~~

~~13.3.1 Openness: Western's UGPR Local Planning Process will be open to all stakeholders during the development of the LTP. All meetings related to the LTP process shall be: (1) noticed by the Transmission Provider via the OASIS; and (2) provide for alternate means of participation, to the extent practical and economical, such as teleconference, videoconference or other similar means. The mode, method, schedule, process, and instructions for participation in Western's UGPR Local Planning Process shall be posted and maintained on the OASIS.~~

~~13.3.2 Limitations on Disclosure: While Western's UGPR Local Planning Process will be conducted in the most open manner possible, Transmission Provider has an obligation to protect sensitive information such as, but not limited to, Critical Energy Information and the proprietary materials of third parties. Nothing in this Attachment P shall be construed as compelling the Transmission Provider to disclose materials in contravention of any applicable regulation, contractual arrangement, or lawful order unless otherwise ordered by a governmental agency of competent jurisdiction. Transmission Provider may employ mechanisms such as confidentiality~~

~~agreements, protective orders, or waivers to facilitate the exchange of sensitive information where appropriate and available.~~

~~13.3.3 Compliance: Transmission Provider will adhere to all applicable regulations in preparing the LTP, including but not limited to the Standards of Conduct for Transmission Providers and Critical Information Energy Information.~~

~~13.4 Study Process. A local study group process will be instituted in addition to the open planning process described in Section 13.3. The purpose of the local study group process is to expand stakeholder participation in Western's UGPR Local Planning Process as provided in the following:~~

~~(a) A working group will be formed at the first semi-annual stakeholder meeting to receive information and provide comment on planning issues that are the subject of Western's UGPR Local Planning Process that arise between stakeholder meetings. Western UGPR will provide (subject to confidentiality, CEII, cyber security and Standards of Conduct requirements):~~

~~The initial assumptions used in developing the annual local process transmission assessment and will provide an opportunity for feedback.~~

~~The models used for local process transmission planning.~~

~~Information regarding the status of local process transmission upgrades and how such upgrades are reflected in future local process transmission plan development.~~

~~The draft study scope for those studies conducted by the working group as part of the local process, which will include or provide references to the basic assumptions for the study, the model or models used in the working group study including information regarding significant changes in the model.~~

~~The draft transmission report for those studies conducted by the working group as part of the local process, as prepared by Western UGPR or Western UGPR's designate. Stakeholders who do not participate on the working group will be given the opportunity to comment on the draft report after Western UGPR has considered the comments of the working group. The report will include an executive summary that is brief and is designed to be understandable to stakeholders.~~

~~Draft transmission plans that result from Western's UGPR Local Planning Process before they are distributed to stakeholders pursuant to the open planning process described in Section 13.3 above.~~

~~(b) The working group meetings will be established by Western UGPR on an as needed basis. Working group meetings will also be established if need is expressed by 10 members of the respective working group; however, Western UGPR will not be required to hold meetings of the working group more than on a semi-annual basis. Meetings will typically be conference calls and/or web casts, but face-to-face meetings may be called if necessary. Meeting notices will be~~

~~distributed via email to the respective study group mailing list. Meeting materials may be distributed via email respecting email size limitations and CEH, cyber security, and Standards of Conduct requirements. A password-protected FTP site or internet may be used to transmit study models or large amounts of data.~~

~~(e) — Western UGPR will chair and provide leadership to the working group, including facilitating the group meetings.~~

~~(d) — Input from the working group members will be considered in the local planning process. Comments will generally be expected via email or during working group meetings. Comments will be solicited within the defined comment periods of the study group process.~~

~~13.5 — Transparency. In addition, Western’s UGPR Local Planning Process will be open and transparent to facilitate comment and exchange of information, as described below:~~

~~(a) — Western UGPR will make available the basic criteria that underlie its transmission system plans by posting Western UGPR’s Transmission Planning Criteria for facilities covered by this Attachment P on the Western UGPR OASIS page.~~

~~(b) — Western UGPR will make available to registered stakeholders (subject to CEH, cyber security, and Standards of Conduct requirements) the basic criteria, assumptions, and data that underlie its transmission system plans. For this purpose, Western UGPR will make the following documents available in a way that maintains confidentiality and complies with CEH and cyber security requirements: i. Western’s FERC Form 714, ii. Western’s FERC Form 715.~~

~~(c) — Western UGPR will provide information on the location of applicable NERC/MAPP/Midwest Reliability Organization (“MRO”)/WECC planning criteria, reliability standards, regional power flow models, or other pertinent information, as available.~~

~~(d) — Western UGPR will provide its regional planning model submittal in accordance with Section 13.6 of this Attachment P.~~

~~(e) — Western UGPR will set the planning study horizons and study frequencies considering NERC and or regional entity standards and the MAPP SPG planning cycle and the WECC Regional Planning Process.~~

~~(f) — Western UGPR will simultaneously disclose transmission planning information where appropriate in order to alleviate concerns regarding the disclosure of information with respect to the FERC Standards of Conduct.~~

~~(g) — Western UGPR will consider customer demand response resources in Western’s UGPR Local Planning Process on a comparable basis with generation resources in developing transmission plans provided that~~

~~such resources are capable of providing measurable transmission system support needed to correct transmission system problems assessed in the Western's UGPR Local Planning Process;~~

~~such resources can be relied upon on a long-term basis;~~

~~such resources meet NERC Reliability Standards and applicable laws, rules, and regulations; and~~

~~the inclusion of such resources in corrective action plans are permitted by the NERC Reliability Standards.~~

~~13.6—Information Exchange. Certain information exchanges associated with the open planning process and the local study group process are described in Sections 13.3 and 13.4 in this Attachment P. In addition, information exchange for base regional model development will take place as follows:~~

~~(a)—Western participates in the annual development of the regional base case power flow and stability models currently for the PSSE computer application. These regional models provide the basis for studies of transmission service requests, generator interconnection requests, local planning studies and regional planning studies. To assist in the development of accurate base case regional models and thereby develop appropriate local transmission plans for the Western UGPR system, Western will request at a minimum the following data of its Transmission Customers:~~

~~Network Customers and other Load Serving Entities (LSE) within the Western UGPR Control Area will be requested annually to submit existing loads and future loads for the horizon of the regional base case models (typically 10 years) for each of its load points. Information for firm loads will be separated from information for interruptible loads.~~

~~Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to provide a list of all existing and proposed new demand response resources including behind the meter generation or load curtailment; the MW impact on peak load; the historical and expected future operating practice of the demand response resources such as the conditions under which the customer intends to initiate each resource, and whether each resource is available for use in providing measurable transmission system support to correct problems assessed in Western's UGPR Local Planning Process, as well as, other information required to consider such resources as provided in Section 13.5 (g). Network Customers and other LSEs will be requested to provide updates of this information when substantive changes occur.~~

~~Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to provide a list of existing and proposed new generation resources and historical and expected future dispatch practices such as the load level at which the customer plans to start each generating unit and plant, and whether each generation resource is available for use in providing measurable transmission system support to correct problems assessed in Western's UGPR Local Planning Process, as well as, other information required to consider such resources as provided in~~

~~Section 13.5 (g). Network Customers and other LSEs will be requested to provide updates of this information when substantive changes occur.~~

~~Registered point to point customers including Western UGPR's marketing and energy affiliates, as appropriate, will be requested annually to submit projections of their quantifiable transmission service needs over the planning horizon, including applicable receipt and delivery points and the transmission service reservations anticipated to be scheduled.~~

~~Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to submit existing and expected future generation for the horizon of the regional base case models (typically 10 years).~~

~~Additional modeling data will be requested as necessary to conform to the requirements of the NERC MOD standards.~~

~~(b) — The data submitted by Transmission Customers will be included to the extent appropriate in the base case model.~~

~~(c) — The Western UGPR data request will be sent annually in coordination with the regional data request. Western UGPR will send a data request to its Transmission Customers typically prior to expected transmittal of the regional data request. Transmission Customers will be expected to respond to the Western UGPR data request in a timely fashion.~~

~~(d) — Responses to the data request will be accepted in forms such as PSS^{TME} raw data format or in spreadsheet format with appropriately labeled headings.~~

~~(e) — Each Transmission Customer and LSE within the Western UGPR control area will be responsible for providing Western with an email address of its data modeling contact. Western will send the annual data request to these contacts via email.~~

~~(f) — The Western data response will be made available subject to CEH, cyber security and Standards of Conduct restrictions upon request to registered stakeholders.~~

~~13.7 — Western's UGPR Local Economic Planning Studies. Local economic planning studies are performed to identify significant and recurring congestion on the transmission system and/or address the integration of new resources and loads. Such studies may analyze any, or all, of the following: (i) the location and magnitude of the congestion, (ii) possible remedies for the elimination of the congestion, in whole or in part, including transmission solutions, generation solutions and solutions utilizing demand response resources, (iii) the associated costs of congestion (iv) the costs associated with relieving congestion through system enhancements (or other means), and, as appropriate, (v) the economic impacts of integrating new resources and loads. All local economic planning studies will be performed through Western UGPR's participation in the regional economic planning studies as described in this Attachment P.~~

~~(a) — Any Transmission Customers, Affected Generators, or other relevant stakeholders (“Requester”) may submit a study request for an economic planning study directly to Western, the MAPP TPSC, or the WECC TEPPC. All requests must be electronically submitted to Western’s Regional Office Contact e-mail Address as posted on the Transmission Providers OASIS. Western will not perform local economic planning studies but will coordinate the performance of such studies with the MAPP TPSC or the WECC TEPPC. The economic planning study cycle will be that of the MAPP TPSC or WECC TEPPC process as outlined in this Attachment P.~~

~~(b) — Western shall ensure that any economic planning study requests submitted to Western are properly handled by forwarding the Requestor to MAPP TPSC or WECC TEPPC for inclusion in the regional economic planning studies as outlined in this Attachment P.~~

~~(c) — If the MAPP TPSC or WECC TEPPC determines, after reviewing through an open stakeholder process, that the requested economic planning study as forwarded by Western is not a high priority study, the Requester may perform the economic planning analysis at the Requester’s expense. Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.~~

~~(d) — Western cannot fund any high priority and other local economic planning studies due to its spending authorization being contingent upon Congressional Appropriations. In the event that Western is requested to perform a local economic planning study, Western will, at the Requester’s expense, provide its assistance in having a third party perform the local economic planning study. Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.~~

~~14.0 — Introduction to the WECC Regional Planning Process for Western’s UGPR~~

~~Western UGPR will coordinate its Western Interconnection LTP through the WECC SPGs. The WECC SPGs will coordinate their subregional plans with the other subregional plans in the Western Interconnection and at the TEPPC level.~~

~~14.1 — WECC Procedures for Regional Planning Project Review.~~

~~(a) — WECC develops the Western Interconnection wide coordinated base cases for transmission planning analysis such as power flow, stability and dynamic voltage stability studies. The WECC approved base cases are used for study purposes by transmission planners, subregional planning groups, and other entities that have signed confidentiality agreements with WECC.~~

~~(b) — WECC also maintains a data base for reporting the status of all planned projects throughout the Western Interconnection.~~

~~(c) — WECC provides for coordination of planned projects through its Procedures for Regional Planning Project Review.~~

~~(d) — WECC’s Path Rating Process ensures that a new project will have no adverse effect on existing projects or facilities.~~

~~14.2 — WECC Open Stakeholder Meetings. Western Interconnection wide economic planning studies are conducted by the WECC TEPPC in an open stakeholder process that holds region-wide stakeholder meetings on a regular basis. The WECC TEPPC Transmission Planning Protocol, including the TEPPC procedures for prioritizing and completing regional economic studies, is posted on the WECC website. Western participates in the region wide planning processes, as appropriate, to ensure that data and assumptions are coordinated.~~

~~14.3 — Role of WECC TEPPC. WECC TEPPC provides two main functions in relation to Western’s planning process:~~

~~(a) — Development and maintenance of the west wide economic planning study database. TEPPC uses publicly available data to compile a database that can be used by a number of economic congestion study tools. Also, TEPPC’s database is publicly available for use in running economic congestion studies. For an interested transmission customer or stakeholder to utilize WECC’s Pro Mod planning model, it must comply with WECC confidentiality requirements.~~

~~(b) — TEPPC has an annual study cycle described in the WECC TEPPC Transmission Planning Protocol, during which it will update databases, develop and approve a study plan that includes studying transmission customer high priority economic study requests as determined by the open TEPPC stakeholder process, perform the approved studies and document the results in a report.~~

PART II – Western Interconnection of Western’s Rocky Mountain, Desert Southwest and Sierra Nevada Regional Offices

Western coordinates its transmission planning with other transmission providers and stakeholders in the Rocky Mountain – located in Loveland, CO, Desert Southwest – located in Phoenix, AZ, and Sierra Nevada - located in Folsom, CA, Regional Offices, and the Western Interconnection as a whole, through its active participation in the Southwest Area Transmission Planning (SWAT) group, the Colorado Coordinated Planning Group (CCPG), the Sierra Subregional Planning Group (SSPG), membership in WestConnect¹, membership in the Western

¹ WestConnect was formed under a memorandum of understanding (MOU) that has been entered into by 13 transmission providing electric utilities in the Western Interconnection. The purposes of WestConnect are to investigate the feasibility of wholesale market enhancements, work cooperatively with other Western Interconnection organizations and market stakeholders, and address seams issues in the appropriate forums. WestConnect has initiated an effort to facilitate and coordinate regional transmission planning across the WestConnect footprint. Current parties to the WestConnect MOU are: Arizona Public Service Company, El Paso Electric Company, Imperial Irrigation District, Nevada Power Company/Sierra Pacific Power Company, Public Service Company of Colorado, Public Service Company of New Mexico, Sacramento Municipal Utility District, Salt River Project, Southwest Transmission Cooperative, Transmission Agency of Northern California, Tri-State Generation and Transmission Association, Tucson Electric Power Company, and Western Area Power Administration.

Electricity Coordinating Council (WECC), and participation in the WECC Transmission Expansion Planning Policy Committee (TEPPC) and its Technical Advisory Subcommittee (TAS).

Three subregional planning groups (SPG) operate within the WestConnect footprint: SWAT, CCPG and SSPG. WestConnect's planning effort, which includes funding and provision of planning management, analysis, report writing and communication services, supports and manages the coordination of the subregional planning groups and their respective studies. Such responsibilities are detailed in the WestConnect Project Agreement for Subregional Transmission Planning (WestConnect STP Project Agreement), dated May 23, 2007 (see Western Attachment P Hyperlinks List at www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm). Western is a signatory to this Agreement.

The subregional planning groups within the WestConnect footprint, assisted by the WestConnect planning manager, coordinate with other Western Interconnection transmission providers and their subregional planning groups through TEPPC. TEPPC provides for the development and maintenance of an economic transmission study database for the entire Western Interconnection and performs annual congestion studies at the Western Interconnection region level.

1.0 Western Transmission Planning

1.1 Western Planning Process.

Participation in Western's planning process is open to all affected parties, including but not limited to all transmission and interconnection customers, state authorities, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, and other stakeholders.

1.1.1 Confidential or Proprietary Information

Western's transmission planning studies may include base case data that are WECC proprietary data or classified as Critical Energy Infrastructure Information (CEII) by the Federal Energy Regulatory Commission (FERC). A stakeholder must hold membership in or execute a confidentiality agreement with WECC (see Western Attachment P Hyperlinks List at www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm) in order to obtain requested base case data from Western. A stakeholder may obtain transmission planning information classified as CEII from Western upon execution of a confidentiality agreement with Western.

1.1.2 Overview

Western's transmission planning process consists of an assessment of the following needs:

- (a) Provide adequate transmission to serve Firm Electric Service (FES) customers.
- (b) Where feasible, identify alternatives such as demand response resources that could meet or mitigate the need for transmission additions or upgrades.
- (c) Access adequate resources in order to reliably and economically serve FES and network loads.
- (d) Provide for interconnection for new generation resources.
- (e) Coordinate new interconnections with other transmission systems.
- (f) Accommodate requests for long-term transmission access.

1.1.3 Western's Transmission Planning Cycle

- (a) Calendar Year Planning Cycle. Western conducts its transmission planning on a calendar year cycle for a ten year planning horizon.
- (b) Annually Updated Ten Year Plan. Western updates its ten year plan annually and publishes an annual Ten Year Transmission Plan document typically in November.

1.1.4 Transmission Customer's Responsibility for Providing Data

- (a) Use of Customer Data. Western uses information provided by its transmission customers to, among other things; assess network load and resource projections (including demand response resources), transmission needs, in-service dates to update regional models used to conduct planning studies.
- (b) Submission of Data by Network Transmission Customers. Network transmission customers shall supply information on their ten year projected network load and network resources (including demand response resources) to Western on an annual basis. Western requires that this information be submitted electronically to Western Regional Office Contact e-mail address

(www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)
by March 15 each year.

- (c) Submission of Data by Other Transmission Customers. To maximize the effectiveness of the Western planning process, it is essential that all other transmission customers provide their ten year needs in the form of relevant data for inclusion in the Western transmission planning process. Western requires that this information be submitted electronically to Western Regional Office Contact e-mail address (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm) by March 15 each year. This will facilitate inclusion of transmission customer data in the planning process for the annual transmission plan.
- (d) Transmission Customer Data to be Submitted. To the maximum extent practical and consistent with protection of proprietary information, data submitted by network transmission customers and other transmission customers should include for the ten year planning horizon:
- i. Generators – planned additions or upgrades (including status and expected in-service dates) and planned retirements.
 - ii. Demand response resources – existing and planned demand resources and their impacts on peak demand.
 - iii. Network customers – forecast information for load and resource requirements over the planning horizon and identification of demand response reductions.
 - iv. Point-to-point transmission customers – projections of need for service over the planning horizon, including transmission capacity, duration, and receipt and delivery points.
- (e) Notification of Material Changes to Transmission Customer Data. Each transmission customer is responsible for timely submittal of written notice to Western of material changes in any of the information previously provided related to the transmission customer's load, resources (including demand response resources), or other aspects of its facilities or operations which may, directly or indirectly, affect Western's ability to provide service.

1.1.5 Types of Planning Studies

- (a) Economic Planning Studies. Economic planning studies are performed to identify significant and recurring congestion on the transmission system and/or address the integration of new resources and loads. Such studies may analyze any, or all, of the following: (i) the location and magnitude of the congestion, (ii) possible remedies for the elimination of the congestion, in whole or in part, including transmission solutions, generation solutions and solutions utilizing demand response resources, (iii) the associated costs of congestion (iv) the costs associated with relieving congestion through system enhancements (or other means), and, as appropriate, (v) the economic impacts of integrating new resources and loads. All economic planning studies will be performed either by a sub-regional planning group or TEPPC, and will utilize the TEPPC public data base.
- (b) Reliability Studies. Western will conduct reliability planning studies to ensure that all transmission customers' requirements for planned loads and resources are met for each year of the ten year planning horizon, and that all NERC, WECC, and local reliability standards are met. These reliability planning studies will be coordinated with the other regional transmission planning organizations through the SWAT, CCPG, and SSPG studies.

1.1.6 Economic Planning Study Requests (*See* Flow Chart Attached as Exhibit 1)

Requesting Economic Planning Studies. Any Western transmission customer or other stakeholder, including transmission solutions, generation solutions and solutions utilizing demand response resources ("Requester") may submit a study request for an economic planning study directly to Western or TEPPC. All requests must be electronically submitted to Western at Western Regional Office Contact e-mail address (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm). Western will not perform economic planning studies but will coordinate the performance of such studies with TEPPC. The economic planning study cycle will be that of the TEPPC process

- (a) Process for Handling Economic Transmission Planning Study Requests by Western. Western shall ensure that any economic planning study requests are properly handled under this Attachment P by:

- i. TEPPC Master List. Forwarding the Requestor to TEPPC for inclusion in the TEPPC Master List of economic planning studies for the Western Interconnection and for consideration by TEPPC as a priority request. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).
- (b) Process for Handling Economic Study Requests Received by TEPPC. TEPPC will review economic planning study requests received from Requesters directly or from Western. TEPPC shall review such study requests during its open stakeholder meeting and, together with its stakeholders, prioritize requests for economic planning studies. Western will participate in the TEPPC prioritization process and provide input as to whether a study request should be included in the TEPPC study plan. The Requester is also encouraged to participate and provide input in the TEPPC prioritization process. For more detail regarding the TEPPC economic planning study process, see the executive summary overview of the TEPPC Transmission Planning Protocol. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).
- (c) Low Priority Economic Study Requests. If TEPPC determines, after reviewing through an open stakeholder process, that the requested economic planning study is not a priority study, the Requester may have a third party perform the economic planning analysis at the Requester's expense. The Requester will have use of the TEPPC economic study data base and Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.
- (d) Clustering Local Priority Economic Planning Studies. TEPPC may determine that any number of Requesters' economic planning study requests should be studied together with other requests.
- (e) Cost Responsibility for Economic Planning Studies
 - i. Priority and Non-Priority Local Economic Planning Studies. Western cannot fund any Priority and Non-Priority local economic planning studies due to its spending authorization being contingent upon Congressional Appropriations. In the event that Western is requested to perform an economic planning study, Western will, at the Requesters expense,

provide its assistance in having a third party perform the economic planning study. The Requester will have use of the TEPPC economic study data base and Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.

- ii. Priority Regional Economic Planning Studies. Regional economic studies are performed by TEPPC and funded by WECC.

(f) Exchange of Data Unique to Economic Planning Studies

- i. All data used for its economic planning studies from the TEPPC data base.
- ii. Requester's request for detailed base case data must be submitted to WECC in accordance with the WECC procedures.
- iii. All requests made to Western for economic planning studies and responses to such requests shall be posted on the Western OASIS and the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)), subject to confidentiality requirements.

- (g) Western Point of Contact for Study Requests. Western will identify a Point of Contact on its OASIS to respond to customer/stakeholder questions regarding modeling, criteria, assumptions, and data underlying economic planning studies. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).

- 1.1.7 Stakeholder Participation in Western Study Plans and Planning Results. Western will hold a public planning meeting to review and discuss its transmission study plans and planning results (see Part II Section 1.2.2 below).

- 1.1.8 Western Study Criteria and Guidelines. Requesters should refer to the Western Planning Criteria document for Western planning criteria, guidelines, assumptions and data. The Western Planning Criteria are posted on the OASIS. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).
- 1.1.9 Western and Stakeholder Alternative Solutions Evaluation Basis. Western's planning process is an objective process that evaluates use of the transmission system on a comparable basis for all customers. All solution alternatives that have been presented on a timely basis (per Part II Section 1.1.4 of this Attachment P), including transmission solutions, generation solutions and solutions utilizing demand response resources, whether presented by Western or another Stakeholder, will be evaluated on a comparable basis. The same criteria and evaluation process will be applied to competing solutions and/or projects, regardless of type or class of Stakeholder. Solution alternatives will be evaluated against one another on the basis of the following criteria to select the preferred solution or combination of solutions: (1) ability to practically fulfill the identified need; (2) ability to meet applicable reliability criteria or NERC Planning Standards issues; (3) technical, operational and financial feasibility; (4) operational benefits/constraints or issues; (5) cost-effectiveness over the time frame of the study or the life of the facilities, as appropriate (including adjustments, as necessary, for operational benefits/constraints or issues, including dependability); and (6) where applicable, consistency with State or local integrated resource planning requirements, or regulatory requirements, including cost recovery through regulated rates.
- 1.2 Open Public Planning Meetings. Western will conduct at least two open public planning meetings each year, in coordination with four SWAT open public transmission planning meetings, including one joint meeting with CCPG and SSPG that will allow and encourage customers, interconnected neighbors, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, and other stakeholders to participate in a coordinated, nondiscriminatory process for development of Western's transmission plan.
- 1.2.1 Purpose and Scope. Western's open public transmission planning meetings will provide an open transparent forum whereby electric transmission stakeholders can comment and provide advice to Western during all stages of its transmission planning. These public transmission planning meetings will serve to:
- (a) Provide a forum for open and transparent communications among area transmission providers, customers, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, and other interested stakeholders;

- (b) Promote discussion of all aspects of Western's transmission planning activities, including, but not limited to, methodology, study inputs and study results; and
- (c) Provide a forum for Western to understand better the specific electric transmission interests of all stakeholders.

1.2.2 Public Planning Meeting Process.

- (a) **Open_Stakeholder_Meetings.** All public transmission planning meetings will be open to all stakeholders.
- (b) **Planning_Meeting Schedule.** Western will establish its public planning meeting schedule as needed, but no less than twice annually.
- (c) **Meeting Purpose.** Meetings will be conducted to (i) allow Western to maximize its understanding of its customers' forecast needs for Western's transmission system; (ii) offer customers, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, and other stakeholders an opportunity to be informed about, offer input and advice into, Western's transmission system and planning process, as well as to propose alternatives for any upgrades identified by Western; (iii) review study results; and (iv) review transmission plans.
- (d) **Coordination with SWAT, CCPG and SSPG.** Western's local transmission planning process will be coordinated with the SPGs through quarterly planning meetings described in more detail below (see Part II Section 2.2.7).
- (e) **Posting of Meeting Notices.** All meeting notices, including date, time, place and draft meeting agenda, will be posted on Western's OASIS and the WestConnect website (see Western Attachment P Hyperlinks List(www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)), and distributed to Western customer 30 days prior to the public planning meeting.
- (f) **Posting of Study Plans and Planning Results.** Study plans and planning results will be posted on Western's OASIS and the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)),

and distributed to Western's customers two weeks prior to the public planning meeting.

- (g) Meeting Process. At the public planning meetings, Western will (i) review its transmission planning process and current study plan with stakeholders; (ii) request stakeholder review of the current study plan; (iii) provide an opportunity for comment on any aspect of its transmission planning process; (iv) invite the submittal of transmission study requests from stakeholders for review and discussion; and (v) provide updates on its planned projects. During the meeting, and for fifteen (15) calendar days following the meeting, all stakeholders and interested parties will be encouraged to provide Western with any comments on the study results presented in the public meeting. The final local study results and study plan will be posted on Western's OASIS and the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).
- (h) Electronic Input and Comments. Stakeholders and interested parties are also encouraged to provide input, comments, advice and questions on Western's transmission planning process at any time by sending e-mails to Western Regional Office Contact e-mail address (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm).
- (i) Public Planning Meeting Agenda.
- i. It is anticipated that in the 2nd Quarter meetings, Western will review information on loads, resources (including demand response resources) and other needs received by March 15 from its transmission customers pursuant to Part II Sections 1.1.4(b) and (c) for inclusion in a draft study plan.
 - ii. It is anticipated that in the 4th Quarter meetings, Western will review planning study requests received by each Regional Office pursuant to Part II Section 1.1.6 and present a draft of its ten year plan for stakeholder review and comment.
 - iii. This schedule may be modified to coordinate with the subregional and regional transmission planning processes, subject to posting on Western's OASIS and the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).

- (j) Western Customer Distribution List. All existing Western customers, network and point-to-point, will be included on the distribution list and actively notified via e-mail of all upcoming public planning meetings. Any other stakeholder, including but not limited to, sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, wanting to be included on Western's e-mail distribution list should submit its information to Western's Point of Contact at Western Regional Office Contact e-mail address (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm).
- (k) Posting of Meeting Documents. Western will post all meeting-related notes, documents and draft or final reports on its OASIS and the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).
- (l) Posting of Public Documents. In order to permit all stakeholders access to the information posted on the OASIS and WestConnect websites, only public information will be shared, and public business conducted, in the open public planning meetings.

1.3 Ten Year Transmission System Plan. Each year Western uses the planning process described in Part II Section 1.1 above to update its Ten Year Transmission System Plan. The Ten Year Transmission System Plan identifies all of its new transmission facilities, 115 kV and above, and all facility replacements/upgrades required over the next ten years to reliably and economically serve its loads.

2.0 Subregional and Regional Coordination

Regional Planning and Coordination at the WestConnect-SWAT,-CCPG and-SSPG subregional level.

2.1 Overview. Western is a party to the WestConnect STP Project Agreement ((see Western Attachment P Hyperlinks List) (www.wapa.gov/Transmission/Planning.htm)), and is actively engaged in the SWAT, CCPG and SSPG planning groups. The WestConnect footprint, which includes the regions covered by SWAT, CCPG and SSPG, encompasses the states of Arizona, Colorado, New Mexico, Nevada, and parts of California, Texas, and Wyoming. Western submits its transmission plans to its relevant subregional transmission planning group as required for inclusion in and coordination with the SPG's transmission plan. Western actively participates in the SPG transmission planning process to ensure that Western's data and assumptions are coordinated with the subregional plan. The WestConnect planning manager will ensure that

the subregional transmission plan is coordinated to produce the WestConnect Transmission Plan.

2.2 The Subregional Transmission Planning Process.

2.2.1 SWAT,-CCPG and SSPG's Role. Each SPG tasked with bringing transmission planning information together and sharing updates on active projects within the various subregions. The SPG's provide an open forum where any stakeholder interested in the planning of the transmission system in each footprint including sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, can participate and obtain information regarding base cases, plans, and projects and to provide input or express its needs as they relate to the transmission system. SWAT, CCPG and SSPG do not conduct economic planning studies.

2.2.2 Membership. The subregional transmission planning groups are comprised of transmission providers, transmission users, transmission operators, state regulatory entities and environmental entities. Membership is voluntary and open to all interested stakeholders including sponsors of transmission solutions, generation solutions and solutions utilizing demand resources. Western will participate in SWAT, CCPG and SSPG and relevant SPG subcommittees and work groups and will submit its Ten Year Transmission Plans to the relevant work groups. Western's Ten Year Transmission Plans will then be incorporated with the SWAT, CCPG and SSPG subregional transmission plans in accordance with the WestConnect STP Project Agreement. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)). Western will incorporate any applicable information, data or study results from SWAT, CCPG or SSPG into its planning process.

2.2.3 Subregional Coordination. The SPG's role is to promote subregional transmission planning and development and to ensure that all of the individual transmission plans are coordinated in order to maximize use of the existing transmission system and identify the transmission expansion alternatives that most effectively meet future needs.

2.2.4 Open Subcommittee Forum. All SPG subcommittee planning groups provide a forum for entities including sponsors of transmission solutions, generation solutions and solutions utilizing demand resources, within each respective region, and any other interested parties, to determine and study the needs of the region as a whole.

- 2.2.5 Forum for Project Sponsors. The SPGs also provide a forum for transmission project sponsors to introduce their specific projects to interested stakeholders and potential partners and allows for joint study of these projects, coordination with other projects, and project participation, including ownership from other interested parties.
- 2.2.6 Subregional Open Planning Meetings. All SPG transmission planning process for the high voltage and extra high voltage system is open to all transmission customers and stakeholders wishing to participate. Western will assist transmission customers and stakeholders interested in becoming involved in the subregional transmission planning process including sponsor of transmission solutions, generation solutions, and solutions utilizing demand resources, by directing them to appropriate contact persons and websites. All transmission customers and stakeholders are encouraged to bring their plans for future generators, demand resources, loads or transmission services to the SPG planning meetings.
- 2.2.7 Meeting Agendas. The meeting agendas for the SPG's, WestConnect, Western and any other planning meetings scheduled in conjunction with the SPG meetings will be sufficiently detailed, posted on the WestConnect website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)) and circulated in advance of the meetings in order to allow customers and stakeholders the ability to choose their meeting attendance most efficiently.
- 2.3 WestConnect's Role in the Subregional Transmission Planning Process.
- 2.3.1 WestConnect STP Project Agreement. Each WestConnect party is a signatory to the West Connect STP Project Agreement ((see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)) which formalizes the parties' relationships and establishes obligations among the signatory transmission providers to coordinate subregional transmission planning among the WestConnect participants and the subregional planning groups (SWAT, CCPG, and SSPG), participate in the SWAT, CCPG and SSPG subregional transmission planning groups, as appropriate, and produce a WestConnect Transmission Plan. The WestConnect STP Project Agreement is also open for participation by other non-WestConnect transmission providers that participate in the transmission planning activities of SWAT, CCPG and SSPG or any other subregional transmission planning group that may form within the WestConnect footprint.

2.3.2. WestConnect Objectives and Procedures for Regional Transmission Planning. Under the WestConnect Objectives and Procedures for Regional Transmission Planning, Western, along with the other WestConnect STP Project Agreement participants, agrees to work through the SWAT, CCPG and SSPG planning processes to integrate its Ten Year Transmission Plans with the other WestConnect participant transmission plans into one ten year regional transmission plan for the WestConnect footprint by:

- (a) Actively participating in the subregional transmission planning processes, including submitting its respective expansion plan, associated study work and pertinent financial, technical and engineering data to support the validity of Western's plan;
- (b) Coordinating, developing and updating common base cases to be used for all study efforts within the SWAT, CCPG and SSPG planning groups and ensuring that each plan adheres to the common methodology and format developed jointly by WestConnect subregional planning groups for this planning purpose;
- (c) Providing funding for the WestConnect STP Project Agreement planning management functions pursuant to the WestConnect STP Project Agreement;
- (d) Retaining an independent facilitator to oversee the WestConnect STP Project Agreement process, ensure comparability among the subregional processes and perform the study work required to pull all the plans together;
- (e) Maintaining a regional planning section on the WestConnect website where all WestConnect planning information, including meeting notices, meeting minutes, reports, presentations, and other pertinent information is posted; and
- (f) Posting detailed notices on all SWAT, CCPG and SSPG meeting agendas on the WestConnect website. (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).

2.3.3. WestConnect Planning Meetings. WestConnect hosts two open public stakeholder meetings for transmission planning per year, one in the 1st Quarter and one in the 4th Quarter.

2.3.4. WestConnect Role in Economic Planning. WestConnect will provide advice, on an as needed basis, to TEPPC regarding prioritizing regional economic planning study requests and potential clustering of requested regional economic planning studies, if those studies involve facilities in the WestConnect footprint. WestConnect will not conduct economic planning studies.

2.4. Quarterly Schedule of Subregional and Local Transmission Planning Meetings. Western will coordinate with SWAT, CCPG and SSPG in order to assure that quarterly meetings are times in order to allow projects to escalate from local to subregional to regional councils in a timely fashion.

The proposed focus of the SPG meetings, WestConnect transmission planning meetings and Western public planning meetings will be:

2.4.1. 1st Quarter Meetings

SPG Meetings.

- Approve the final SPG reports for the previous year's study work.
- Approve the SPG study plans for the new year.

WestConnect Planning Annual Meeting (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)).

- Present the WestConnect Ten Year Transmission Plan and WestConnect Transmission Planning Study Report to the Planning Management Committee.
- Recommend approval of the WestConnect Ten Year Transmission Plan by the WestConnect Steering Committee.
- Recommend approval of the WestConnect Transmission Planning Study Report by the WestConnect Steering Committee.
- Approve WestConnect study plans for the new year.
- Propose adjustments to the planning process or budget for the current year as necessary or appropriate.

2.4.2. 2nd Quarter Meeting

SPG Meetings.

- Present preliminary SPG study results.
- Determine additional SPG study sensitivities

Western Planning Stakeholder Meetings:

- Western reviews its transmission planning process and current study plan with transmission customers and stakeholders, and requests their review, comment and advice on any aspect of its transmission planning process. Additionally, Western reviews information on loads, resources and other needs received by March 31 from its transmission customers.

2.4.3. 3rd Quarter Meeting

SPG Meetings.

- Annual Joint SWAT-CCPG-SSPG meeting. SWAT, CCPG and SSPG present current study results and approve key results, findings, and conclusions.
- SWAT specifically invites customer and stakeholder review, comment, advice and transmission study requests for the SWAT transmission planning process.

2.4.4. 4th Quarter Meeting

SWAT Meeting:

- Present draft SPG reports for approval with modifications.
- Specifically invite the submittal of transmission study requests from stakeholders for inclusion in their respective study plans.

WestConnect Planning Workshop:

- Present each current year study supported by (i) final report or (ii) status summary report.
- Present each WestConnect transmission provider's draft ten year transmission plan. Present proposed study plans from SWAT, CCPG and SSPG.
- Discuss future study needs with input from
 - Study groups

- TEPPC
 - Other subregional planning groups
 - Stakeholders at large
- Draft the WestConnect Ten Year Transmission Plan.
 - Draft the WestConnect Transmission Planning Study Report.

Western Planning Stakeholder Meeting:

- Western reviews its transmission planning process and current study plan with stakeholders, and requests stakeholder review, comment and advice on any aspect of its transmission planning process. Additionally, Western reviews planning study requests received and presents a draft of its ten year plan for stakeholder review and comment per each Regional Office calendar.

3.0. Coordination at the Western Interconnection Level

Western will coordinate its plan on a west-wide regional basis through the SPGs and WestConnect. WestConnect will coordinate its subregional plan with the other subregional plans in the Western Interconnection and at the TEPPC level.

3.1. Procedures for Regional Planning Project Review.

3.1.1. WECC coordination of reliability planning.

- (a) WECC develops the Western Interconnection-wide coordinated base cases for transmission planning analysis such as power flow, stability and dynamic voltage stability studies. The WECC approved base cases are used for study purposes by transmission planners, subregional planning groups, and other entities that have signed confidentiality agreements with WECC.
- (b) WECC also maintains a data base for reporting the status of all planned projects throughout the Western Interconnection.
- (c) WECC provides for coordination of planned projects through its Procedures for Regional Planning Project Review.
- (d) WECC's Path Rating Process ensures that a new project will have no adverse effect on existing projects or facilities.

- 3.1.2. WECC Open Stakeholder Meetings. Western Interconnection-wide economic planning studies are conducted by the WECC TEPPC in an open stakeholder process that holds region-wide stakeholder meetings on a regular basis. The WECC-TEPPC Transmission Planning Protocol, including the TEPPC procedures for prioritizing and completing regional economic studies, is posted on the WECC website (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)). Western participates in the region-wide planning processes, as appropriate, to ensure that data and assumptions are coordinated.
- 3.1.3. Role of WECC TEPPC. WECC TEPPC provides two main functions in relation to Western's planning process:
- (a) Development and maintenance of the west-wide economic planning study database.
 - i. TEPPC uses publicly available data to compile a database that can be used by a number of economic congestion study tools.
 - ii. TEPPC's database is publicly available for use in running economic congestion studies. For an interested transmission customer or stakeholder to utilize WECC's Pro-Mod planning model, it must comply with WECC confidentiality requirements.
 - (b) Performance of economic planning studies. TEPPC has an annual study cycle described in the WECC-TEPPC Transmission Planning Protocol (see Western Attachment P Hyperlinks List (www.oasis.oati.com/WAPA/WAPAdocs/Planning-Process.htm)), during which it will update databases, develop and approve a study plan that includes studying transmission customer high priority economic study requests as determined by the open TEPPC stakeholder process, perform the approved studies and document the results in a report.

4.0. Dispute Resolution

Western Interconnection Western Regional Offices adhere to the WECC Dispute Resolution process.

5.0. Cost Allocation for New Transmission Projects

5.1. Western will utilize a case-by-case approach to allocate costs for new transmission projects. This approach will be based on the following principles:

5.1.1. Open Season Solicitation of Interest. Project sponsor announces project and actively or verbally solicits interest in the project through informational meetings, information posted on the project sponsor's website, and industry press releases. For any transmission project identified in a Western reliability study in which Western is the project sponsor, Western may elect to hold an "open season" solicitation of interest to secure additional project participants. Upon a determination by Western to hold an open season solicitation of interest for a transmission project, Western will:

- (a) Announce and solicit interest in the project through informational meetings, its website and/or other means of dissemination as appropriate.
- (b) Hold meetings with interested parties and meetings with public utility staffs from potentially affected states.
- (c) Post information via WECC's planning project review reports
- (d) Develop the initial transmission project specifications, the initial cost estimates and potential transmission line routes; guide negotiations and assist interested parties to determine cost responsibility for initial studies; guide the project through the applicable line siting processes; develop final project specifications and costs; obtain commitments from participants for final project cost shares; and secure execution of construction and operating agreements.

5.1.2. Western Coordination within a Solicitation of Interest Process.

Western, whether as a project sponsor or a participant, will coordinate as necessary with any other participant or sponsor, as the case may be, to integrate into Western's Ten Year Transmission Plan any other planned project on or interconnected with Western's transmission system.

5.1.3 Western Projects without a Solicitation of Interest.

Western may elect to proceed with small and/or reliability transmission projects without an open season solicitation of interest, in which case Western will proceed with the project pursuant to its rights and obligations as a transmission provider.

5.1.4 Allocation of Costs.

(a) Proportional Allocation.

For any transmission project entered into pursuant to an open season solicitation process, project costs and associated transmission rights, will generally be allocated proportionally to project participants' respective ownership shares, subject to a negotiated participation agreement. In the event the open season process results in a single participant, the full cost and transmission rights will be allocated to that participant. Nothing in this section precludes project participants from utilizing another cost allocation methodology, provided, all project participants agree to the alternative.

(b) Economic Benefits or Congestion Relief.

For a transmission project wholly within Western's local transmission system that is undertaken for economic reasons or congestion relief at the request of a Requester, the project costs will be allocated to the Requester.

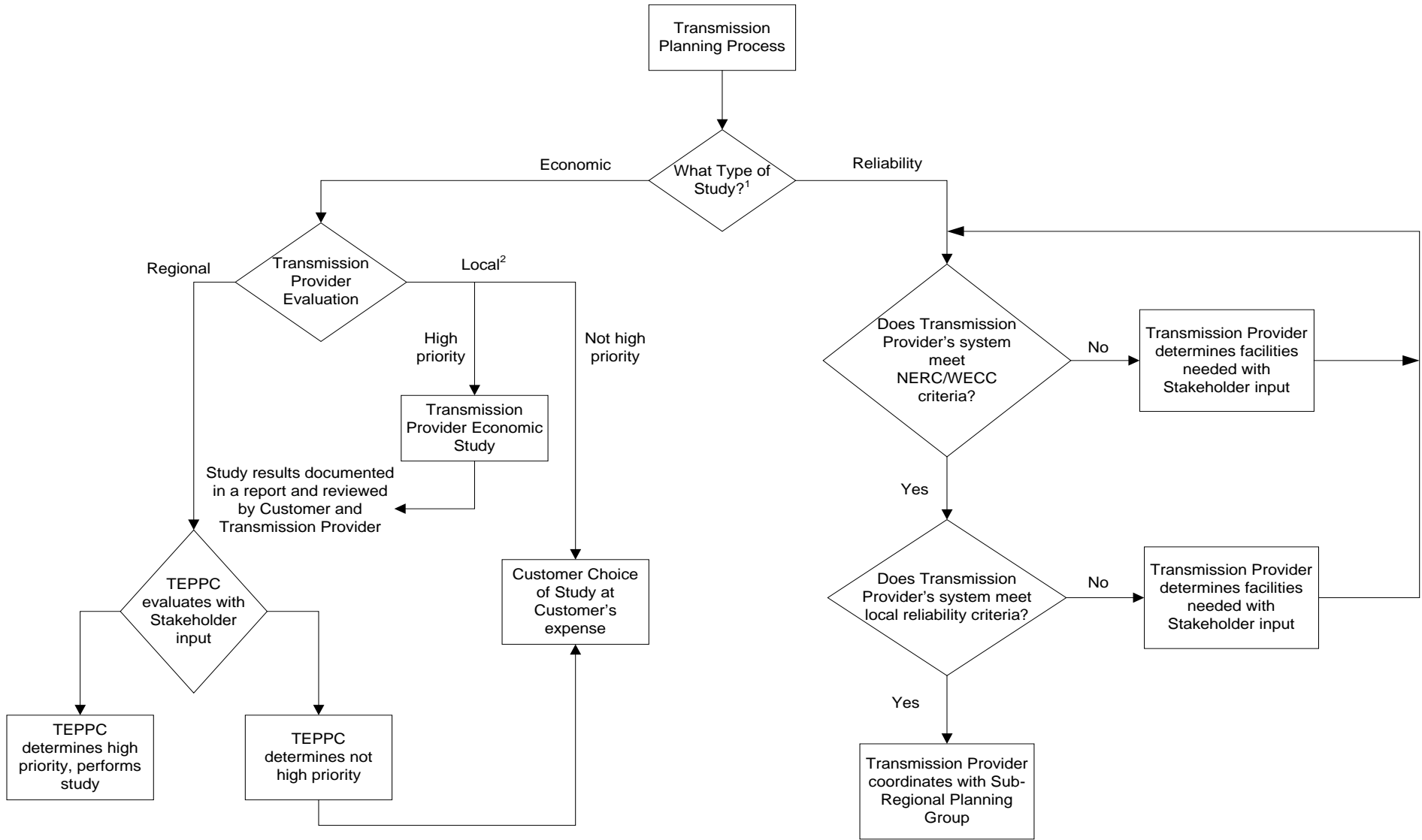
(c) Western Rate Recovery.

Notwithstanding the foregoing provisions, Western will not assume cost responsibility for any transmission project if the cost of the project is not reasonably expected to be recoverable in its transmission rates.

(d) Exclusions.

The cost for transmission projects undertaken in connection with requests for interconnection or transmission service on Western's transmission system, which are governed by existing cost allocation methods within Western's OATT, will continue to be so governed and will not be subject to the principles of this section 5.1.

Exhibit 1



1. Generator Interconnection Request studies are performed pursuant to the Large Generator Interconnection Procedure contained in the Transmission Provider's Open Access Transmission Tariff (OATT). Transmission Service Requests are also performed pursuant to OATT procedures.

2. All requests for economic planning studies received by the Transmission Provider are forwarded to TEPPC for inclusion in the TEPPC Master List. TEPPC will evaluate only those requests that have regional impacts.

ATTACHMENT Q

Creditworthiness Procedures

1.0 OVERVIEW OF CREDITWORTHINESS POLICY

1.1 Introduction.

1.1.1 Application of Policy. For the purpose of determining the ability of the Transmission Customer to meet its obligations, the Transmission Provider will consistently apply credit review procedures to evaluate the Transmission Customer's credit risk in accordance with standard commercial practices. In addition, the Transmission Provider may require the Transmission Customer to provide and maintain in effect during the term of the Service Agreement financial assurance(s) to meet its responsibilities and obligations.

1.1.2 Creditworthiness Process. The creditworthiness procedures consist of data collection (quantitative, qualitative information), credit evaluation, credit score determination, and overall determination of the Transmission Customer's creditworthiness. The Transmission Customer shall provide information to the Transmission Provider as part of its data collection process and as part of the Transmission Customer's Credit Application, or as part of the periodic review to continue receiving services. For credit qualification purposes, prior to the Transmission Customer receiving service, there must be a completed Credit Application and a creditworthiness evaluation.

1.2 Overview of Procedures.

1.2.1 Entity Definition. In order to differentiate Transmission Customers and clarify determination of a Transmission Customer's credit requirements, the Transmission Customer shall be defined as either a new or existing Public Power Entity or Non-Public Power Entity for calculating credit scores. A Public Power Entity shall be defined as a Transmission Customer that is a not-for-profit organization such as but not limited to municipalities, cooperatives, joint action agencies, Native American Tribes, or any other governmental entity. A Non-Public Power Entity shall be defined as any Transmission Customer that is not a Public Power Entity.

1.2.2 Review. The Transmission Provider shall conduct a creditworthiness review, outlined in Section 3.1 below, of the Transmission Customer using information provided by the Transmission Customer from the data

collection process (Section 2.0) and upon its initial request for services and thereafter pursuant to Section 4.1 or at the request of the Transmission Customer. Existing Transmission Customers with a timely payment history at the date of implementation of this policy will be deemed to have satisfied the creditworthiness requirements at that time and be subject to re-evaluation pursuant to Section 4.1. The Transmission Provider can require the Transmission Customer to provide or increase its provided financial assurances before service will be initiated or continued (Section 4.2)

- 1.2.3 **Credit Score.** The Transmission Provider shall use the creditworthiness procedures in Section 3.1.1 to establish a credit score for Non-Public Power Transmission Customers. Credit scores will not be calculated for existing Non-Public Power Transmission Customers with a timely payment history at the date of implementation of this policy. Credit scores for such Transmission Customers will be calculated if and when a re-evaluation is required pursuant to Section 4.1. Public Power Transmission Customers will not receive a credit score. Such Transmission Customers will instead be evaluated based on criteria outlined in Section 3.1.2.

2.0 DATA COLLECTION

2.1 Non-Public Power Entity.

A non-public power entity shall provide the following information to the Transmission Provider as part of the Transmission Provider's creditworthiness evaluation:

- 2.1.1 **Agency Ratings.** If available to the Transmission Customer, the senior unsecured long-term debt ratings assigned to the Transmission Customer by Standard & Poor's and/or Moody's Investor Service or any other similar bond rating agency, and the long-term issuer rating if the senior unsecured long-term rating is not available.
- 2.1.2 **Financial Statements.** The two (2) most recent quarters of financial statements signed by the company controller or other authorized company officer AND the two (2) most recent audited annual financial statements [including, but not limited to the balance sheet, income statement, statement of cash flows, management's discussion and analysis, report of independent auditor (audit opinion), and accompanying notes] of the Transmission Customer's Annual Report, 10K, 10Q, or 8K, as applicable.

2.1.3 **Material Issues/Changes.** Any pending information not incorporated in the financial reports that could materially impact the viability of the Transmission Customer including, but not limited to litigation, investigations, arbitrations, contingencies, liabilities, and affiliate relationships.

2.1.4 **Additional Information.** The Transmission Provider may request additional information as it determines is necessary and appropriate for the credit evaluation, and the Transmission Customer shall provide such additional information in a timely manner. At any time, the Transmission Customer may provide the Transmission Provider with additional information that the Transmission Customer considers relevant to the credit evaluation.

2.2 Public Power Entity.

A public power entity will answer questions specific to its financial viability on the Credit Application and be evaluated on the criteria set forth in Section 3.1.2.

2.3 Information Concerning Material Changes/Issues.

2.3.1 The Transmission Customer, public or non-public, must give the Transmission Provider notice of any material change in its financial condition within five (5) business days of the occurrence of the material change. A material change in financial condition includes but is not limited to the following:

- (a) For entities that initially met the creditworthiness requirements under the policy and are not required to post financial assurance to the Transmission Provider, a change in financial condition that results in a downgrade of long or short-term debt rating by a major bond rating agency or being placed on a credit watch with negative implications by a major credit rating agency; or
- (b) The resignation of key officer(s); or
- (c) The issuance of a regulatory order or the filing of a lawsuit that could materially adversely impact current or future results; or
- (d) A default in payment obligations; or
- (e) Any new investigations, arbitrations, contingencies or changes in affiliate relationships; or

- (f) The filing of a voluntary or involuntary petition to institute bankruptcy proceedings under the United States Bankruptcy Code or any successor statute, or the filing to institute any proceedings under state law concerning actual or potential insolvency.

2.4 Format.

All data must be submitted in the English language. Financial data must be denominated in U.S. currency and conform to U.S. Generally Accepted Accounting Principles (GAAP). The Transmission Provider will maintain any non-public data included in such information on a confidential basis.

2.5 Consolidated Entity.

If the Transmission Customer's financial information is consolidated with other entities, the Transmission Customer must extract and submit as separate documents all data and information related solely to the Transmission Customer. This must include all financial information, associated notes, and all other information that would comprise a full financial report conforming to GAAP.

3.0 CREDIT EVALUATION

3.1 Determining Creditworthiness.

3.1.1 Non-Public Power Entities

In order to be found creditworthy, the Transmission Customer must meet the following standards:

- (a) The Transmission Customer is not in default of its payment obligations under the Tariff and has not been in persistent default under the provisions of the Tariff; and
- (b) The Transmission Customer is not on Western's subscribed rating service watch list; and
- (c) The Transmission Customer is not in default of any payment obligation to the Transmission Provider; and
- (d) The Transmission Customer is not in bankruptcy proceedings; and
- (e) The Transmission Customer meets credit score requirements consisting of the following quantitative and qualitative factors. The Transmission Customer shall receive a score for meeting or exceeding each qualitative or quantitative factor. A Non-Public

Power Entity may receive a minimum score of zero (0) and a maximum score of six (6), six being best. One point will be awarded for each of the following items.

- i. Total Debt/Total Capital less than 70%.
- ii. EBIT coverage (Earnings Before Interest and Income Taxes/Interest Expense) greater than 1.5 times.
- iii. Current Ratio greater than 1.0.
- iv. Have Cash Flow from Operations to Total Debt (includes short-term debt, long-term debt, current portion of long-term debt, and off-balance sheet operating lease obligations) greater than 10%.
- v. Agency Ratings of investor grade or higher (e.g., S&P of BBB- and/or Moody's Baa3). Transmission provider will use the lower of the ratings if rated by multiple agencies.
- vi. Positive Payment Record with the Transmission Provider (if previous or existing Transmission Customer).

The Transmission Customer will be determined to be creditworthy and granted unsecured credit if it complies with the criteria above and receives a credit score of four (4) or higher.

3.1.2 Public Power Entities

Public Power Entities are considered creditworthy and granted unsecured credit if the following exist:

- (a) The Transmission Customer is not in default of its payment obligations under the Tariff and has not been in persistent default under the provisions of the Tariff; and
- (b) The Transmission Customer is not on Western's subscribed rating service watch list; and
- (c) The Transmission Customer is not in default of any payment obligation to the Transmission Provider; and
- (d) The Transmission Customer is not in bankruptcy proceedings; and

- (e) If the Transmission Customer or its guarantor is a federal, state or other governmental agency/entity and its financial obligations are backed by the full faith and credit of the United States, state or other governmental entity as applicable; and/or
- (f) The Transmission Customer has the ability to raise rates to cover outstanding obligations.

3.2 Notification.

The Transmission Provider shall notify the Transmission Customer whether it has been found to be creditworthy or whether relevant financial assurance is required within five (5) business days after: (a) receiving the Transmission Customer's applicant with all required information; (b) receiving the Transmission Customer's written request for re-evaluation of creditworthiness with all required information; or (c) determining that a change in creditworthiness status or change in financial assurance is required as determined by the rotational review or other reviews performed pursuant to Section 4.1.

The Transmission Provider shall, upon the Transmission Customer's written request, provide a written explanation of the basis for the Transmission Provider's determination via e-mail within five (5) business days for any: (a) non-creditworthy determination; (b) changes in creditworthiness status; or (c) changes in requirements for financial assurances.

3.3 Establishing Credit Limits.

If an entity is determined to be creditworthy no credit limit will be established. For non-creditworthy entities, the credit limit will equal five (5) months of total estimated service charges as determined by the Transmission Provider from time to time. If at any time the Transmission Provider determines according to these creditworthiness standards that the Transmission Customer is not able to fully support its credit exposure based solely on its financial viability, the Transmission Provider may require collateral be provided.

3.4 Secured Credit.

3.4.1 Posting Collateral

If collateral is required by the Transmission Provider, the Transmission Customer will be asked to provide an acceptable form of collateral as defined in Section 3.4.3 below within 30 days of the Transmission Provider's request. No service to the Transmission Customer shall commence until this requirement is satisfied.

If service to the Transmission Customer already has commenced (existing Transmission Customer) and the Transmission Customer fails to provide the collateral as defined in Section 3.4.3 below and required by the Transmission Provider within five (5) business days of notification, the Transmission Customer will be deemed in default of its Service Agreement.

3.4.2 Required Amount of Collateral

Given the Transmission Provider's current billing practices and payment terms, the required amount of security will be based on the maximum total estimated service charge for five (5) months. This represents the potential value of services rendered prior to termination of service in the event of a default arising from a failure of nonpayment.

3.4.3 Acceptable Collateral

Acceptable collateral, totaling five (5) months of estimated service charges, includes:

- (a) Prepayment for service; or
- (b) An unconditional and irrevocable letter of credit as security to meet the Transmission Customer's responsibilities and obligations. If this form of collateral is used, it will comply with the requirements as stated in the Uniform Customs and Practice for Documentary Credits; or
- (c) A cash deposit; or
- (d) An irrevocable and unconditional corporate guaranty from an entity that satisfies the creditworthiness requirements.

4.0 RE-EVALUATION

4.1 Timeframe.

The Transmission Provider will review its credit evaluation for each Transmission Customer annually. Timely payments will be sufficient evidence for re-affirming the current credit arrangements, barring the reporting of any of the material changes outlined in Section 2.3. The Transmission Provider, at its sole discretion, may conduct additional reviews and updates of its credit evaluation in response to new facts or occurrences that may bear upon the Transmission Customer's creditworthiness due to material changes in financial condition of the Transmission Customer, or if the Transmission Customer fails to pay invoices

from the Transmission Provider on time. These updates will follow the procedures set forth in Section 3.1 of this Attachment.

4.2 Change in Limit/Collateral.

As a result of the Transmission Provider's creditworthiness review or in response to the Transmission Customer's request for re-evaluation or the Transmission Customer's notice of any material change in its financial condition, the Transmission Provider may adjust the Transmission Customer's credit limit and collateral requirements in accordance with Section 3.3 and Section 3.4, respectively. If required, additional collateral must be posted in accordance with Section 3.4.1.

The Transmission Customer may make reasonable requests for the Transmission Provider to re-evaluate the Transmission Customer's creditworthiness pursuant to the criteria detailed in Section 3.1.

5.0 RIGHT TO DRAW UPON FINANCIAL ASSURANCES UPON DEFAULT

The Transmission Provider shall have the right to liquidate, or draw upon, all or a portion of the Transmission Customer's form of financial assurance(s) in order to satisfy the Transmission Customer's total net obligation to the Transmission Provider upon a default. The Transmission Customer shall within five (5) business days replace any liquidated or drawn-upon financial assurances.

6.0 SUSPENSION OF SERVICE

6.1 Notification.

Notwithstanding any other provision of this Tariff, if the Transmission Customer fails to provide the entirety of required financial assurances when due under this Attachment, the Transmission Provider may suspend service to such Transmission Customer thirty (30) days after the Transmission Provider's notification to such Transmission Customer. The Transmission Provider will provide at least thirty (30) days written notice to the Commission before suspending service pursuant to this provision.

Any notices sent to the Transmission Customer and to the Commission pursuant to the Attachment may be sent concurrently.

6.2 Length of Suspension.

The suspension of service shall continue only for as long as the circumstances that entitle the Transmission Provider to suspend service continue.

6.3 Obligation to Pay.

A Transmission Customer is not obligated to pay for transmission service that is not provided as a result of a suspension of service.

7.0 CONTESTING CREDITWORTHINESS PROCEDURE DETERMINATIONS

The Transmission Customer may contest a determination by the Transmission Provider by submitting a written notice to the Transmission Provider explaining its reasons for contesting the determination and include the name of a designated senior representative authorized to represent the Transmission Customer. The written notice of a dispute of a determination by the Transmission Provider under these Creditworthiness Procedures shall be referred to a designated senior representative of the Transmission Provider for resolution on an informal basis with the designated senior representative of the Transmission Customer as promptly as practicable. It is expected that a final written decision from the Transmission Provider will issued within thirty (30) days, or such other period as the Parties may agree upon by mutual agreement.

**WESTERN AREA POWER ADMINISTRATION
CREDIT APPLICATION**

Complete all sections of this form and submit by mail or e-mail to:

Western Area Power Administration

ATTN: ~~Compliance and Audit Liaison~~ Accounting and Reporting, Credit Applications
(A8220300)

P.O. Box 281213

Lakewood, CO 80228-8213

WesternCreditApplications@wapa.gov

Date: _____

Applicant Name (Customer): _____

Address: _____

Type of Service Requested: _____

Expected Monthly Business: _____

Federal Tax ID Number: _____

DUNS Number: _____

Credit Rating (if applicable): _____

Credit Manager or Point of Contact: _____

Phone: _____ Fax: _____ Email: _____

Is your company a subsidiary or affiliate of another company? Yes ___ No ___

If Yes, please provide information on the related company:

Company Name: _____

Address: _____

Federal Tax ID Number: _____

DUNS Number: _____

Does your company plan to establish credit with a guarantee from the related company listed above? Yes ___ No ___

If Yes, all required information necessary for credit qualification is needed from the company guaranteeing credit.

Public Power Entities (not-for-profit):

Is your company a not-for-profit entity (governmental entity)? Yes ____ No ____

If your company is a not-for-profit entity, is it backed by the full faith and credit of a governmental entity (United States, state government or other government, as applicable)?
Yes ____ No ____ If Yes, state type of governmental entity and provide evidence.

If your company is a not-for-profit entity, do you have the ability to raise rates to cover outstanding obligations? Yes ____ No ____

Provide any material issues/changes that could impact the viability of the Transmission Customer and/or the credit decision including, but not limited to, litigation, investigations, arbitrations, contingencies, liabilities and affiliate relationships which have occurred within the past year.

Non-Public Power Entities:

To enable the Transmission Provider to conduct the proper analysis required to determine creditworthiness, the information below must be submitted with the Credit Application.

1. Rating agency reports (if applicable).
2. The most recent two quarters of financial statements signed by the company controller or other authorized company officer and the most recent two years of audited financial statements. Financial statements should include, but not be limited to:
 - a. Annual report;
 - b. Balance sheet;
 - c. Income statement;
 - d. Statement of cash flows;
 - e. Management's discussion and analysis;
 - f. Report of independent auditor and accompanying notes for the Annual report, 10K, 10Q or 8K, as applicable.
3. Material issues that could impact the viability of the Transmission Customer and/or the credit decision including, but not limited to, litigation, investigations, arbitrations, contingencies, liabilities and affiliate relationships which have occurred since the last audited financial statements.

Note: The Transmission Provider may request additional information as it determines is necessary and appropriate for the credit evaluation.

(Contract Number)
(Interconnection Customer)

**Appendix 6 to the Standard Large
Generator Interconnection Procedures**

**STANDARD LARGE GENERATOR
INTERCONNECTION AGREEMENT (LGIA)**

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(Interconnection Customer)

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Appendix G – Interconnection Requirements For A Wind Generating Plant

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STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

("Agreement") is made and entered into this ____ day of _____
20__, by and between _____, a _____
organized and existing under the laws of the State/Commonwealth of _____
("Interconnection Customer" with a Large Generating Facility), and Western Area Power
Administration, a Federal power marketing administration organized under the United States
Department of Energy ("Transmission Provider and/or Transmission Owner"). Interconnection
Customer and Transmission Provider each may be referred to as a "Party" or collectively as the
"Parties."

Recitals

WHEREAS, Transmission Provider operates the Transmission System; and

WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the
Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement;
and,

WHEREAS, Interconnection Customer and Transmission Provider have agreed to enter into this
Agreement for the purpose of interconnecting the Large Generating Facility with the
Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein,
it is agreed:

When used in this Standard Large Generator Interconnection Agreement, terms with initial
capitalization that are not defined in Article 1 shall have the meanings specified in the Article in
which they are used or the Open Access Transmission Tariff (Tariff).

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Article 1. Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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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.

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

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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 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

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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

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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

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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

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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.

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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, 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

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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.

Variable Energy Resource shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

Article 2. Effective Date, Term, and Termination

2.1 Effective Date. This LGIA shall become effective upon execution by the Parties.

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. Notwithstanding this Article 2.2 or 2.3, the maximum effective period of this LGIA shall be forty (40) years from the Effective Date. Five years prior to termination, Interconnection Customer shall provide written notice of its intention to extend the LGIA. Upon receiving such notice, Transmission Provider shall enter into good faith discussions regarding an extension of the LGIA at Interconnection Customer's request.

2.3 Termination Procedures.

2.3.1 Written Notice. This LGIA may be terminated either by Interconnection Customer after giving Transmission Provider ninety (90) Calendar Days advance written notice, or by Transmission Provider if the Generating Facility has ceased Commercial Operation for three (3) consecutive years, beginning on the last date of Commercial Operation for the Generating Facility, after giving Interconnection Customer ninety (90) Calendar Days advance written notice.

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.

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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:

2.4.1 With respect to any portion of Transmission Provider's Interconnection Facilities 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.

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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. [This Article intentionally left blank.]

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. (check if selected)

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 Appendix 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

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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. (check if selected)

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 Appendix 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

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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

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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.
- 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 and security practices, its

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material and equipment specifications, its design criteria and construction procedures, its labor agreements, Applicable Laws and Regulations, and Good Utility Practice. 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.

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- 5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Transmission Provider, Transmission Provider shall use Reasonable Efforts to 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.
- 5.1.3 Option to Build.** If the dates designated by Interconnection Customer are not acceptable to Transmission Provider, Transmission Provider shall use Reasonable Efforts to 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, 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

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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, at Interconnection Customer's cost, 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

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(11) Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information, and any other documents in compliance with Transmission Provider's standards 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 [This Article intentionally left blank.]

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;

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- 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

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review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Provider, and shall use Reasonable Efforts to 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. Unless the Parties agree on another mutually acceptable deadline, Transmission Provider shall use Reasonable Efforts to deliver to Interconnection Customer within one hundred twenty (120) Calendar Days after the Commercial Operation Date 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.

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- 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 Federal or state law, as applicable, 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.

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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 [This Article intentionally left blank.]

5.18 Tax Status. Each Party shall cooperate with the other to maintain the other Party's tax status.

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 use Reasonable Efforts to 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

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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 use Reasonable Efforts to 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

6.1 Pre-Commercial Operation Date Testing and Modifications. Prior to the Commercial 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

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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.

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7.4 Testing of Metering Equipment. Transmission Provider shall inspect and test all Transmission Provider-owned Metering Equipment in accordance with Transmission Provider's regional meter testing policies. If requested to do so by Interconnection Customer, Transmission Provider shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than the periods set forth in Transmission Provider's regional meter testing policies. 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 at its expense 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.

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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.

8.4 Provision of Data from a Variable Energy Resource. The Interconnection Customer whose Generating Facility is a Variable Energy Resource shall provide meteorological and forced outage data to the Transmission Provider to the extent necessary for the Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The Interconnection Customer with a Variable Energy Resource having wind as the energy source, at a minimum, will be required to provide the Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. The Interconnection Customer with a Variable Energy Resource having solar as the energy source, at a minimum, will be required to provide the Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. The Transmission Provider and Interconnection Customer whose Generating Facility is a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. The Interconnection Customer whose Generating Facility is a Variable Energy Resource also shall submit data to the Transmission Provider regarding all forced outages to the extent necessary for the Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by the Interconnection Customer to the Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with

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the power production forecasting employed by the Transmission Provider. Such requirements for meteorological and forced outage data are set forth in Appendix C, Interconnection Details, of this LGIA, as they may change from time to time.

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.

9.4.1 General 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.

9.4.2 Generator Balancing Obligation. Interconnection Customer shall at its own expense be responsible for ensuring that its actual Large Generating Facility

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output matches the scheduled delivery from the Large Generating Facility to Transmission Provider's Transmission System, consistent with the scheduling requirements of the Transmission Provider's Tariff and any applicable FERC-approved market structure in which the Transmission Provider participates, including ramping into and out of such scheduled delivery, as measured at the Point of Interconnection. To the extent Interconnection Customer's Large Generating Facility output does not match the scheduled delivery from the Large Generating Facility to Transmission Provider's Transmission System, any such disparate amounts shall be subject to Transmission Provider's Energy Imbalance rate and/or any other applicable scheduling incentives set forth under Transmission Provider's Tariff.

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 Appendix G to this LGIA shall 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

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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.

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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;

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- 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.

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- 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.
- 9.7.5 Requirements for Protection.** In compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Provider's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility

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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

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Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology.

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

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- 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 ongoing credits to its transmission charges, the total amount of which will be paid in a timely manner and will equal the total amount paid to Transmission Provider and Affected System Operator, if any, for the Network Upgrades, to be credited 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 or Affected System's Tariff for transmission services with respect to the Large Generating Facility; provided, that Transmission Provider shall net bill or bill credit Interconnection Customer for any amounts to be credited. Any credits shall include interest calculated 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, with such interest to be fixed for the length of the crediting period at the lower of either (1) Interconnection Customer's interest rate applicable to the Network Upgrades or (2) the Federal interest rate applicable to Transmission Provider's Transmission System at the time the Network Upgrades are placed in service and ownership thereof is transferred to Transmission Provider. With Transmission Provider's approval, Interconnection Customer may assign such crediting rights to any person having an executed net billing or bill crediting agreement with Transmission Provider that is effective throughout the entire term of the assignment.

Notwithstanding the foregoing, Transmission Provider or Affected System Operator will continue to provide credits to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission

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charges, without any restriction as to the period of time under which such crediting will occur.

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; provided, that the party making use of the Network Upgrades must first pay to Transmission Provider all amounts to be reimbursed to Interconnection Customer. Such amounts shall be subsequently credited by Transmission Provider to the new party in accordance with Article 11.4 of this LGIA. 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 transmission credits for transmission service that is not associated with the Large Generating Facility.

11.5 Advance Payment.

11.5.1 Interconnection Customer shall be required to pay Transmission Provider for all actual costs incurred by Transmission Provider for the procurement, installation, or construction of a discrete portion of a Transmission Provider's Interconnection Facilities or Network Upgrades and shall pay Transmission Provider, in advance, for all work to be conducted, under the terms and conditions set forth in this LGIA. Such advance payments shall be considered estimated costs for project planning, management, design, engineering, land purchase, environmental investigations, procurement, construction, inspection and commissioning activities for which such advance payments are then due. The funds shall be deposited by Interconnection Customer according to the instructions on individual invoices from Transmission Provider, which shall be

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delivered by Transmission Provider to Interconnection Customer at least ten (10) Business Days prior to the date of such payment being due. Transmission Provider shall not provide any labor, equipment, materials, parts, travel, or incur incidental costs associated with tasks described above, or commence any other work until applicable advance payment(s) is/are received in full.

11.5.2 Interconnection Customer shall not be required to make any subsequent payment in the event tasks relating to the prior payment have not been substantially completed.

11.5.3 Transmission Provider shall keep detailed records for actual costs incurred. Interconnection Customer shall be entitled, during normal business hours and at its own expense, to review such records and supporting documentation. If, during procurement, installation, or construction of a discrete portion of a Transmission Provider's Interconnection Facilities or Network Upgrades, or upon close-out of any phase of such activities, costs by Transmission Provider are expected to exceed the sum of payments made by Interconnection Customer, Transmission Provider will inform Interconnection Customer of the additional expenses and provide a written revision to the estimate, together with an invoice for the amount due. Interconnection Customer shall then promptly pay Transmission Provider in full and without interest for the billed amount. If, upon completion of the procurement, installation, or construction of a discrete portion of Transmission Provider's Interconnection Facilities or Network Upgrades, costs incurred by Transmission Provider are less than the sum of payment(s) made to Transmission Provider by Interconnection Customer, Transmission Provider shall refund the difference, without interest, as soon as the necessary vouchers may be prepared.

11.6 Interconnection Customer Compensation. If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.5.1 of this LGIA, Transmission Provider shall compensate Interconnection Customer in accordance with Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to an RTO or ISO FERC-approved rate schedule. Interconnection Customer shall serve Transmission Provider or RTO or ISO with any filing of a proposed rate schedule at the time of such filing with FERC. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb any Reactive Power under this LGIA, 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

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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.** Transmission Provider shall submit to Interconnection Customer invoices of amounts due in accordance with Articles 11.5.1 and 11.5.2 of this LGIA. Interconnection Customer shall submit to Transmission Provider, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the time period 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 owed by the Interconnection Customer, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 12.2 Final Invoice.** Within six months after completion of the construction of Transmission 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 in accordance with Article 11.5.3 of this LGIA.
- 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 the Interconnection Customer to pay the amount due plus interest calculated in accord with the methodology set forth in FERC's regulations at 18 CFR § 35.19a(a)(2)(iii).

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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.**

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- 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

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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 Federal law or by the laws of the state where the Point of Interconnection is located, as applicable.
- 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

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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

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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. Interconnection Customer shall at all times indemnify, defend, and hold 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, 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 Transmission Provider's action or inactions of its obligations under this LGIA on behalf of Interconnection Customer, except in cases of gross negligence or intentional wrongdoing by Transmission Provider. The liability of Transmission Provider shall be determined in accordance with the Federal Tort Claims Act provision set forth in Attachment J of Transmission Provider's Tariff.

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 Interconnection Customer 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 Interconnection Customer contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

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18.1.2 Indemnifying Party. If Interconnection Customer 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 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 Interconnection Customer of such fact. Any failure of or delay in such notification shall not affect Interconnection Customer's indemnification obligation unless such failure or delay is materially prejudicial to Interconnection Customer.

Interconnection Customer shall have the right to assume the defense thereof with counsel designated by such Interconnection Customer and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and Interconnection Customer, 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 Interconnection Customer, 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, Interconnection Customer 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 Interconnection Customer. Notwithstanding the foregoing, Interconnection Customer (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 Interconnection Customer, in such event Interconnection Customer 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. 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,

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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 Interconnection Customer Insurance. Interconnection customer shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by Transmission Provider, 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 non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
- 18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name Transmission Provider and its 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.

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- 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. Interconnection Customer 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 Interconnection Customer are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by Interconnection Customer 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, Interconnection Customer 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, Interconnection Customer 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, Interconnection Customer'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 Interconnection Customer's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, Interconnection Customer shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that Interconnection Customer is permitted to self-insure pursuant to this article, it shall notify Transmission Provider 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.

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18.4 Transmission Provider Insurance. Transmission Provider shall self-provide the insurance coverages described under Article 18.3 of this LGIA.

Article 19. Assignment

19.1 Assignment. Either party may assign this LGIA with the written consent of the other party to any Affiliate of the assigning Party or other third 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. Interconnection Customer may assign this LGIA with the written consent of Transmission Provider for collateral security purposes to aid in providing financing for the Large Generating Facility. 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. 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

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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.

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- 22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.
- 22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.
- 22.1.10 Disclosure to FERC or its Staff .** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR 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 CFR 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 CFR section 388.112.
- 22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this LGIA ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is: (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by

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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.
- 23.2** Each Party shall remedy as soon as practicable all releases of Hazardous Substances brought to, or created at, real property it owns underlying the Large Generating Facility or Interconnection Facilities, and any such substances migrating from real property it owns at the Large Generating Facility site. The Party that caused the release shall bear the costs of the remedial action, which shall meet applicable Federal and state environmental standards at the time of the action. Such costs may include, but are not limited to, Federal and state supervision, remedial action plans, removal and remedial actions, and negotiation of voluntary and judicial agreements required to meet such environmental standards.
- 23.3** The Parties agree to comply fully with the substantive requirements of all applicable Federal, state and local environmental laws in the performance of their obligations hereunder, and to mitigate and abate adverse environmental impacts accordingly.

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.

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24.2 Information Submission by Transmission Provider. Transmission Provider shall use Reasonable Efforts to submit to Interconnection Customer no later than one hundred eighty (180) Calendar Days prior to Trial Operation the 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

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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 use Reasonable Efforts to 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

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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

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hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

26.3 No Limitation by Insurance. The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

Article 27. Disputes

27.1 Submission. In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

27.2 External Arbitration Procedures. Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

27.3 Arbitration Decisions. Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. 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 non-binding upon the Parties. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the

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decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act.

- 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 Federal law or the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business under Federal law or the laws of 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.

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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.

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- 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, and also incorporating through reference Attachments J and K of Transmission Provider's Tariff as if they were a part hereof, 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.

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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** [This Article intentionally left blank.]
- 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.

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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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(INTERCONNECTION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

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(Interconnection Customer)

Appendix A to LGIA

Interconnection Facilities, Network Upgrades and Distribution Upgrades

1. Interconnection Facilities:

1.1 [insert Interconnection Customer's Interconnection Facilities]:

1.2 [insert Transmission Provider's Interconnection Facilities]:

2. Network Upgrades:

2.1 [insert Stand Alone Network Upgrades]:

2.2 [insert Other Network Upgrades]:

3. Distribution Upgrades:

4. Point of Change of Ownership:

5. Point of Interconnection:

6. Upgrade Requirements on Affected System(s): [To be deleted if not applicable]

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Appendix B to LGIA

Milestones

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(Interconnection Customer)

Appendix C to LGIA
Interconnection Details

(Contract Number)
(Interconnection Customer)

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 National Infrastructure Advisory Council or its successor and, eventually, with 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.

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Appendix E to LGIA
Commercial Operation Date

This Appendix E is a part of the LGIA between Transmission Provider and Interconnection Customer.

[Date]

[Transmission Provider Address]

Re: _____ Large Generating Facility

Dear _____:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. ____.
This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. ____ at the Large Generating Facility, effective as of **[Date plus one day]**.

Thank you.

[Signature]

[Interconnection Customer Representative]

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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:

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

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Appendix G to LGIA Interconnection Requirements For A Wind Generating Plant

This 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 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.

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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.

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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.

ATTACHMENT M

**SMALL GENERATOR
INTERCONNECTION PROCEDURES (SGIP)**

(For Generating Facilities No Larger Than 20 MW)

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Attachment 1 – Glossary of Terms

Attachment 2 – Small Generator Interconnection Request

Attachment 3 – Feasibility Study Agreement

Attachment 4 – System Impact Study Agreement

Attachment 5 – Facilities Study Agreement

Section 1. Application

1.1 Applicability

- 1.1.1 A request to interconnect a Small Generating Facility shall be evaluated under the section 3 Study Process. If the Interconnection Customer wishes to interconnect its Small Generating Facility using Network Resource Interconnection Service, it must do so under the Standard Large Generator Interconnection Procedures and execute the Standard Large Generator Interconnection Agreement.
- 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 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 use Reasonable Efforts to respond within 15 Business Days.
- 1.1.4 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 with electric systems to comply with the recommendations offered by the National Infrastructure Advisory Council or its successor, and with 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.
- 1.1.5 References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).

1.2 Pre-Application

- 1.2.1 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.

1.2.2 In addition to the information described in section 1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of \$300 for a pre-application report on a proposed project at a specific site. The Transmission Provider shall provide the pre-application data described in section 1.2.3 to the Interconnection Customer within 20 Business Days of receipt of the completed request form and payment of the \$300 fee. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system. The written pre-application report request form shall include the information in sections 1.2.2.1 through 1.2.2.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

1.2.2.1 Project contact information, including name, address, phone number, and email address.

1.2.2.2 Project location (street address with nearby cross streets and town)

1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

1.2.2.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)

1.2.2.5 Size (alternating current kW)

1.2.2.6 Single or three phase generator configuration

1.2.2.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)

1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

1.2.3 Using the information provided in the pre-application report request form in section 1.2.2, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The

Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 1.2.4, the pre-application report will include the following information:

- 1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.
- 1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.
- 1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.
- 1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
- 1.2.3.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.
- 1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.
- 1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.
- 1.2.3.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load and absolute minimum load, when available. Solar photovoltaic generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.
- 1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

1.3 Interconnection Request

The Interconnection Customer shall submit its Interconnection Request to the Transmission Provider, together with the 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 time-stamp for the purposes of any timetable in these procedures. The Transmission Provider shall use Reasonable Efforts to notify the Interconnection Customer of receipt of the Interconnection Request within three Business Days of receipt. The Transmission Provider shall use Reasonable Efforts to 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. [This section intentionally left blank.]

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.

3.2 Scoping Meeting

3.2.1 The Transmission Provider shall use Reasonable Efforts to hold a scoping meeting with the Interconnection Customer 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 use Reasonable Efforts to provide a feasibility study agreement (Attachment 3) to the Interconnection Customer within five Business Days after the scoping meeting, 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 use Reasonable Efforts to provide a system impact study agreement (Attachment 4) to the Interconnection Customer within five Business Days after the scoping meeting, 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 Environmental Review Agreement

Unless otherwise agreed, Transmission Provider shall use Reasonable Efforts to tender, within 15 Calendar Days of providing an Interconnection System Impact Study report to Interconnection Customer, an environmental review agreement authorizing Transmission Provider, at Interconnection Customer's expense, to perform environmental review of the proposed interconnection, including review under the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., as amended, and setting forth Interconnection

Customer's responsibilities in connection with such environmental review. Interconnection Customer shall execute the environmental review agreement and return it, along with the required funds set forth in the agreement, to the Transmission Provider within 30 Calendar Days of receipt of the final version offered for execution. If an executed environmental review agreement and the required funds are not provided in the manner set forth above, the Interconnection Request shall be deemed withdrawn. An Interconnection Customer shall have no right to cure the failure to deliver the executed environmental review agreement or the required funds in the timeframe identified above. If the costs incurred by Transmission Provider are less than the deposit submitted by Interconnection Customer, Transmission Provider shall refund the difference, without interest, as soon as the necessary vouchers may be prepared. In addition, if at any time prior to the issuance of Transmission Providers final NEPA decisional document the Interconnection Customer fails to comply with the terms of the environmental review agreement, Transmission Provider reserves the right to deem the Interconnection Request withdrawn.

3.4 Feasibility Study

- 3.4.1 The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.
- 3.4.2 A deposit of the good faith estimated feasibility study costs shall be required from the Interconnection Customer prior to the initiation of the study work.
- 3.4.3 The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement (Attachment 3).
- 3.4.4 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 decide whether to send the Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures.
- 3.4.5 If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

3.5 System Impact Study

- 3.5.1 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.

- 3.5.2 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 use Reasonable Efforts to 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.
- 3.5.3 In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, the Transmission Provider shall use Reasonable Efforts to send the Interconnection Customer a transmission system impact study agreement within five Business Days following 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, if such a study is required.
- 3.5.4 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.
- 3.5.5 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 5), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or shall decide whether to send the Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures, as applicable.
- 3.5.6 In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within 30 Business Days.
- 3.5.7 A deposit of the good faith estimated costs for each system impact study shall be required from the Interconnection Customer prior to the initiation of the study work.
- 3.5.8 The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement (Attachment 4).

- 3.5.9 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.

3.6 Facilities Study

- 3.6.1 Once the required system impact study(s) is completed, the Transmission Provider shall use Reasonable Efforts to prepare and transmit within five Business Days a system impact study report to the Interconnection Customer along with 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 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.
- 3.6.2 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.
- 3.6.3 The facilities study shall specify and provide a non-binding good faith estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).
- 3.6.4 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.
- 3.6.5 A deposit of the good faith estimated costs for the facilities study shall be required from the Interconnection Customer prior to the initiation of study work.

- 3.6.6 The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement (Attachment 5).
- 3.6.7 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 decide whether to send the Interconnection Customer an executable interconnection agreement after completing an environmental analysis under the National Environmental Policy Act of 1969, 42 U.S.C. § 4321, et seq., as amended, concerning the interconnection of the Small Generating Facility; provided, that the Transmission Provider's decision shall not be subject to dispute resolution. If the Transmission Provider decides to send the Interconnection Customer an executable interconnection agreement, the Transmission Provider shall use Reasonable Efforts to send such agreement within five Business Days after rendering its decision.

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. The failure to submit an agreement and/or required funds in accordance with a deadline cannot be cured by the Interconnection Customer providing the agreement and/or required funds to the Transmission Provider after a required deadline.
- 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 the Interconnection Customer will be responsible for all costs to be 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 Interconnection Metering
Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with 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 CFR § 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 CFR § 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 CFR § 388.112.

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

If the Transmission Provider decides to offer the Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures, the Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the interconnection agreement. If the Interconnection Customer does not sign the interconnection agreement, 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 that~~ the Small Generating Facility is capable of injecting into the Transmission Provider's electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider's system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system without such limitations. Furthermore, nothing in this section shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

Attachment 1**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.

Confidential Information – 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.

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.

FERC – The Federal Energy Regulatory Commission or its successor.

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 Interconnection Customer, Transmission 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.

Interconnection Service – The service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Small 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 Small Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

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 Resource – 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 – An Interconnection Service that allows the Interconnection Customer to integrate its Small Generating Facility with the Transmission Provider's 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 – 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.

Notice of Dispute – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

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.

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Procedures, 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 and/or storage for later injection of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and 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.

Tariff – The Transmission Provider or Affected System's Tariff through which open access transmission service and interconnection service are offered, 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.

**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 Small Generation Facility interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the Transmission Provider.

Deposit:

The Interconnection Customer shall submit to the Transmission Provider a deposit of \$5,000 towards the costs of the scoping meeting and the feasibility study.

Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: _____

Tax Identification Number: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Facility Location (if different from above): _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Application is for: _____ New Small Generating Facility
_____ Capacity addition to Existing Small Generating Facility

If capacity addition to existing facility, please describe: _____

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes ___ No ___

To Supply Power to the Interconnection Customer? Yes ___ No ___

To Supply Power to Others? Yes ___ No ___

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

(Local Electric Service Provider*)

(Existing Account Number*)

[*To be provided by the Interconnection Customer if the local electric service provider is different from the Transmission Provider]

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: _____

Interconnection Customer's Requested In-Service Date: _____

Small Generating Facility Information

Data apply only to the Small Generating Facility, not the Interconnection Facilities.

Energy Source: ___ Solar ___ Wind ___ Hydro _____ Hydro Type (e.g. Run-of-River)
___ Diesel ___ Natural Gas ___ Fuel Oil _____ Other (state type)

Prime Mover: ___ Fuel Cell ___ Recip Engine ___ Gas Turb ___ Steam Turb
___ Microturbine ___ PV ___ Other

Type of Generator: ___ Synchronous ___ Induction ___ Inverter

Generator Nameplate Rating: _____ kW (Typical) Generator Nameplate kVAR: _____

Interconnection Customer or Customer-Site Load: _____ kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

Generator (or solar collector)

Manufacturer, Model Name & Number: _____

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor

Rated Power Factor: Leading: _____ Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this

Interconnection Request: _____ Elevation: _____ Single phase Three phase

Inverter Manufacturer, Model Name & Number (if used):

List of adjustable set points for the protective equipment or software:

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous or RMS?

Harmonics Characteristics: _____

Start-up requirements: _____

Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____

(*) Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____ P.U.

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____
 I_2^2t or K (Heating Time Constant): _____
 Rotor Resistance, R_r : _____
 Stator Resistance, R_s : _____
 Stator Reactance, X_s : _____
 Rotor Reactance, X_r : _____
 Magnetizing Reactance, X_m : _____
 Short Circuit Reactance, X_d'' : _____
 Exciting Current: _____
 Temperature Rise: _____
 Frame Size: _____
 Design Letter: _____
 Reactive Power Required In Vars (No Load): _____
 Reactive Power Required In Vars (Full Load): _____
 Total Rotating Inertia, H: _____ Per Unit on kVA Base

Note: Please contact the Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling?
 Yes No

Will the transformer be provided by the Interconnection Customer? Yes No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: single phase three phase? Size: _____ kVA
 Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded
 Transformer Secondary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded
 Transformer Tertiary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____
 Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____
 Load Rating (Amps): _____ Interrupting Rating (Amps): _____
 Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: _ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: _ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _ Proposed Ratio Connection: _____

General Information

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. Is One-Line Diagram Enclosed?
___ Yes ___ No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? ___ Yes ___ No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
Are Schematic Drawings Enclosed? ___ Yes ___ No

Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer: _____

Date: _____

(Contract Number)
(Interconnection Customer)

Attachment 3

Feasibility Study Agreement

THIS AGREEMENT is made and entered into this _____ day of _____, 20__ by and between _____, a _____ organized and existing under the laws of the State of _____, ("Interconnection Customer,") and Western Area Power Administration, a Federal Power Marketing Administration organized under the United States Department of Energy ("Transmission Provider"). The Interconnection Customer and the Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on _____; and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility with the Transmission Provider's Transmission System; and

WHEREAS, the Interconnection Customer has requested the Transmission Provider to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generating Facility with the Transmission Provider's Transmission System, and of any Affected Systems;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects, and the Transmission Provider shall cause to be performed, an interconnection feasibility study consistent with the standard Small Generator Interconnection Procedures in accordance with the Transmission Provider's Tariff.
- 3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The feasibility study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. 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

(Contract Number)
(Interconnection Customer)

- feasibility study and as designated in accordance with the standard Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.
- 5.0 In performing the feasibility 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 any 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 good faith estimated feasibility study costs shall be required from the Interconnection Customer prior to the initiation of study work.
- 10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. The Transmission Provider shall use Reasonable Efforts to complete the feasibility study and transmit the feasibility study report to the Interconnection Customer within 30 Business Days of the Interconnection Customer's agreement to conduct a feasibility study.

(Contract Number)
(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 along with a summary of professional time.
- 12.0 The Interconnection Customer must pay in advance any study costs that exceed the deposit without interest within 15 calendar days on receipt of the invoice or resolution of any dispute. The Transmission Provider shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. If the deposit exceeds the invoiced fees, the Transmission Provider shall use Reasonable Efforts to 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 Federal law or the laws of the state where the Point of Interconnection is located, as applicable. 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 the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this 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.

(Contract Number)
(Interconnection Customer)

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; provided further, that the Transmission Provider shall be liable to the Interconnection Customer for the performance of the Transmission Provider's subcontractors only in accordance with the Federal Tort Claims Act provision set forth in Attachment J of the Transmission Provider's Tariff.

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.

(Contract Number)
(Interconnection Customer)

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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(INTERCONNECTION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

(Contract Number)
(Interconnection Customer)

**Attachment A to
Feasibility Study Agreement**

Assumptions Used in Conducting the Feasibility Study

The feasibility study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on _____:

- 1) Designation of Point of Interconnection and configuration to be studied.

- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Transmission Provider.

(Contract Number)
(Interconnection Customer)

Attachment 4

System Impact Study Agreement

THIS AGREEMENT is made and entered into this ____ day of _____
20__ by and between _____,
a _____ organized and existing under the laws of the State of
_____, ("Interconnection Customer,") and
Western Area Power Administration, a Federal Power Marketing Administration organized
under the United States Department of Energy ("Transmission Provider"). The Interconnection
Customer and the Transmission Provider each may be referred to as a "Party," or collectively as
the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility
or generating capacity addition to an existing Small Generating Facility consistent with the
Interconnection Request completed by the Interconnection Customer on _____;
and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility
with the Transmission Provider's Transmission System; and

WHEREAS, the Transmission Provider has completed a feasibility study and provided the
results of said study to the Interconnection Customer [This recital to be omitted if the Parties
have agreed to forego the feasibility study.]; and

WHEREAS, the Interconnection Customer has requested the Transmission Provider to perform
a system impact study(s) to assess the impact of interconnecting the Small Generating Facility
with the Transmission Provider's Transmission System, and of any Affected Systems;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein
the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Transmission Provider shall cause to be performed a system impact study(s) consistent with the standard Small Generator Interconnection Procedures in accordance with the Transmission Provider's Tariff.
- 3.0 The scope of a system impact study shall be subject to the assumptions set forth in Attachment A to this Agreement.

(Contract Number)
(Interconnection Customer)

- 4.0 A system impact study will be based upon the results of the feasibility study (if one has been completed) and the technical information provided by the 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.
- 6.0 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 shall use Reasonable Efforts to complete within 20 additional Business Days 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.

(Contract Number)
(Interconnection Customer)

- 9.0 If required to complete a distribution system impact study, the Transmission Provider shall use Reasonable Efforts to complete the study and transmit the results to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. If required to complete a transmission system impact study, the Transmission Provider shall use Reasonable Efforts to complete the study and transmit the results 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 good faith estimated cost of a transmission system impact study shall be required from the Interconnection Customer prior to the initiation of study work.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer along with a summary of professional time.
- 12.0 The Interconnection Customer must pay in advance any study costs that exceed the deposit without interest within 15 calendar days on receipt of the invoice or resolution of any dispute. The Transmission Provider shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. If the deposit exceeds the invoiced fees, the Transmission Provider shall use Reasonable Efforts to 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 Federal law or the laws of the state where the Point of Interconnection is located, as applicable. 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.

(Contract Number)
(Interconnection Customer)

- 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 the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this 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; provided further, that the Transmission Provider shall be liable to the Interconnection Customer for the performance of the Transmission Provider's subcontractors only in accordance with the Federal Tort Claims Act provision set forth in Attachment J of the Transmission Provider's Tariff.
- 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

(Contract Number)
(Interconnection Customer)

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.

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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(INTERCONNECTION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

(Contract Number)
(Interconnection Customer)

**Attachment A to System
Impact Study Agreement**

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.

(Contract Number)
(Interconnection Customer)

Attachment 5

Facilities Study Agreement

THIS AGREEMENT is made and entered into this ____ day of _____
20__ by and between _____,
a _____ organized and existing under the laws of the State of _____, ("Interconnection Customer,") and Western Area Power Administration, a Federal Power Marketing Administration organized under the United States Department of Energy ("Transmission Provider"). The Interconnection Customer and the Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on _____;
and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility with the Transmission Provider's Transmission System; and

WHEREAS, the Transmission Provider has completed a system impact study and provided the results of said study to the Interconnection Customer; and

WHEREAS, the Interconnection Customer has requested the Transmission Provider to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generating Facility with the Transmission Provider's Transmission System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Transmission Provider shall cause to be performed a facilities study consistent with the standard Small Generator Interconnection Procedures to be performed in accordance with the Transmission Provider's Tariff.
- 3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.

(Contract Number)
(Interconnection Customer)

- 4.0 The facilities study shall specify and provide a non-binding good faith estimate of 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 shall be required from the Interconnection Customer prior to the initiation of study work.
- 7.0 In cases where Upgrades are required, the Transmission Provider shall use Reasonable Efforts to complete the facilities study 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 Transmission Provider shall use Reasonable Efforts to complete the facilities study within 30 Business Days.
- 8.0 Once the facilities study is completed, a draft facilities study report shall be prepared and transmitted to the Interconnection Customer. The Transmission Provider shall use Reasonable Efforts to complete the facilities study and transmit the draft facilities study report to the Interconnection Customer within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Interconnection Customer may, within 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 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 4.5 of the standard Small Generator Interconnection Procedures.
- 10.0 Within ten Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall

(Contract Number)
(Interconnection Customer)

meet to discuss the results of the Interconnection Facilities Study.

- 911.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer along with a summary of professional time.
- 102.0 The Interconnection Customer must pay in advance any study costs that exceed the deposit without interest within 15 calendar days on receipt of the invoice or resolution of any dispute. The Transmission Provider shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed invoiced fees in compliance herewith. If the deposit exceeds the invoiced fees, the Transmission Provider shall use Reasonable Efforts to refund such excess within 30 calendar days of the invoice without interest.
- 113.0 Governing Law, Regulatory Authority, and Rules
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by Federal law or the laws of the state where the Point of Interconnection is located, as applicable. 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.
- 124.0 Amendment
The Parties may amend this Agreement by a written instrument duly executed by both Parties.
- 135.0 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.
- 146.0 Waiver
- 146.1 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.
- 146.2 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 the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.
- 157.0 Multiple Counterparts

(Contract Number)
(Interconnection Customer)

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.

168.0 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.

179.0 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.

1820.0 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; provided further, that the Transmission Provider shall be liable to the Interconnection Customer for the performance of the Transmission Provider's subcontractors only in accordance with the Federal Tort Claims Act provision set forth in Attachment J of the Transmission Provider's Tariff.

1820.1 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.

1820.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

(Contract Number)
(Interconnection Customer)

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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(INTERCONNECTION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

(Contract Number)
(Interconnection Customer)

**Attachment A to
Facilities Study Agreement**

**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

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:

(Contract Number)
(Interconnection Customer)

Bus length from generation to interconnection station:

Line length from interconnection station to Transmission Provider's Transmission System.

Tower number observed in the field. (Painted on tower leg)*:

Number of third party easements required for transmission lines*:

* To be completed in coordination with Transmission Provider.

Is the Small Generating Facility located in Transmission Provider's service area?

Yes _____ No _____ If No, please provide name of local provider:

Please provide the following proposed schedule dates:

Begin Construction Date: _____

Generator step-up transformers
receive back feed power Date: _____

Generation Testing Date: _____

Commercial Operation Date: _____

(Contract Number)
(Interconnection Customer)

**SMALL GENERATOR
INTERCONNECTION AGREEMENT (SGIA)**

(For Generating Facilities No Larger Than 20 MW)

(Contract Number)
(Interconnection Customer)**TABLE OF CONTENTS**

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- Attachment 1 – Glossary of Terms
- Attachment 2 – Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment
- Attachment 3 – One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades
- Attachment 4 – Milestones
- Attachment 5 – Additional Operating Requirements for the Transmission Provider's Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs
- Attachment 6 – Transmission Provider's Description of its Upgrades and Best Estimate of Upgrade Costs

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This Interconnection Agreement ("Agreement") is made and entered into this _____ day of _____, 20__, by Western Area Power Administration, a Federal power marketing administration organized under the United States Department of Energy ("Transmission Provider"), and _____, a _____ organized and existing under the laws of the State/Commonwealth of _____ ("Interconnection Customer"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

Transmission Provider Information

Transmission Provider: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

Interconnection Customer Information

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

Interconnection Customer Application No: _____

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

Article 1. Scope and Limitations of Agreement

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP).
- 1.2 This Agreement governs the terms and conditions under which the Interconnection 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.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between the 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.
- 1.5.4.1 The Interconnection Customer shall submit initial specifications for its Interconnection Facilities, including system protection facilities, to the Transmission Provider at least 180 calendar days prior to the initial synchronization date, and shall also submit final specifications for review and comment at least 90 calendar days prior to the initial synchronization date. The Transmission Provider shall review such specifications to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, operational control, and safety requirements of the Transmission Provider, and shall use Reasonable Efforts to comment on such specifications within 30 calendar days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.
- 1.5.4.2 The Transmission Provider's review of the 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 Small Generating Facility, or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall make such changes to the Interconnection Customer's

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Interconnection Facilities as may reasonably be required by the Transmission Provider, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, operational control, and safety requirements of the Transmission Provider.

1.5.4.3 Within 120 calendar days after the commercial operation date of the Small Generating Facility, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, a site plan showing the Small Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Small Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Small Generating Facility. The Interconnection Customer shall provide the Transmission Provider specifications for the excitation system, automatic voltage regulator, Small Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

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.

1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for

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a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to article 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

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.

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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 the Interconnection Customer's 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.

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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.

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. Notwithstanding this article 3.2 or 3.3, the maximum effective period of this Agreement shall be 40 years from the Effective Date. Five years prior to termination, the Interconnection Customer shall provide written notice of its intention to extend this Agreement. Upon receiving such notice, Transmission Provider shall enter into good faith discussions regarding an extension of this Agreement at the Interconnection Customer's request.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

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 The Transmission Provider may terminate this Agreement if the Small Generating

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Facility has ceased operation for three consecutive years, beginning on the last date of operation for the Small Generating Facility, after giving the Interconnection Customer 20 Business Days advance written notice.

- 3.3.3 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.4 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.
- 3.3.5 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.6 ~~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.

- 3.4.1 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

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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 use Reasonable Efforts to 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 use Reasonable Efforts to provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

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.

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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.

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5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to ongoing credits to its transmission charges, the total amount of which will be paid in a timely manner and will equal the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be credited 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 or Affected System's Tariff for transmission services with respect to the Small Generating Facility; provided, that the Transmission Provider shall net bill or bill credit the Interconnection Customer for any amounts to be credited. Any repayment shall include interest calculated 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, with such interest to be fixed for the length of the crediting period at the lower of either (1) the Interconnection Customer's interest rate applicable to the Network Upgrades or (2) the Federal interest rate applicable to the Transmission Provider's Transmission System at the time the Network Upgrades are placed in service and ownership thereof is transferred to the Transmission Provider. With Transmission Provider's approval, the Interconnection Customer may assign such repayment rights to any person having an executed net billing or bill crediting agreement with Transmission Provider that is effective throughout the entire term of the assignment.

5.2.1.1 Notwithstanding the foregoing, the Transmission Provider or any applicable Affected System operators will continue to provide credits to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, without any restriction as to the period of time under which such crediting will occur.

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; provided, that the party making use of the Network Upgrades must first pay to Transmission Provider all amounts to be reimbursed to the Interconnection Customer. Such amounts shall be subsequently credited by the Transmission Provider to the new party in accordance with article 5.2.1 of this Agreement. 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.

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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 transmission credits for transmission service that is not associated with the Small Generating Facility.

Article 6. Billing, Payment, Milestones, and Advance Payment

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 in accordance with articles 6.3.1 and 6.3.2 of this Agreement. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within three months of completing the construction and installation of the 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 in accordance with article 6.3.3 of this Agreement. 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 in accordance with article 6.3.3 of this Agreement.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in

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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 Advance Payment

- 6.3.1 The Interconnection Customer shall be required to pay the Transmission Provider for all actual costs incurred by the Transmission Provider for the procurement, installation, or construction of a discrete portion of a the Transmission Provider's Interconnection Facilities or Network Upgrades and shall pay Transmission Provider, in advance, for all work to be conducted, under the terms and conditions set forth in this Agreement. Such advance payments shall be considered estimated costs for project planning, management, design, engineering, land purchase, environmental investigations, procurement, construction, inspection and commissioning activities for which such advance payments are then due. The funds shall be deposited by the Interconnection Customer according to the instructions on individual invoices from the Transmission Provider, which shall be delivered by the Transmission Provider to Interconnection Customer at least 10 Business Days prior to the date of such payment being due. Transmission Provider shall not provide any labor, equipment, materials, parts, travel, or incur incidental costs associated with tasks described above, or commence any other work until applicable advance payment(s) is/are received in full.
- 6.3.2 The Interconnection Customer shall not be required to make any subsequent payment in the event tasks relating to the prior payment have not been substantially completed.
- 6.3.3 The Transmission Provider shall keep detailed records for actual costs incurred. The Interconnection Customer shall be entitled, during normal business hours and at its own expense, to review such records and supporting documentation. If, during procurement, installation, or construction of a discrete portion of a the Transmission Provider's Interconnection Facilities or Network Upgrades, or upon close-out of any phase of such activities, costs by the Transmission Provider are expected to exceed the sum of payments made by the Interconnection Customer, the Transmission Provider will inform the Interconnection Customer of the additional expenses and provide a written revision to the estimate, together with an invoice for the amount due. The Interconnection Customer shall then promptly pay the Transmission Provider in full and without interest for the billed amount.

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If, upon completion of the procurement, installation, or construction of a discrete portion of the Transmission Provider's Interconnection Facilities or Network Upgrades, costs incurred by the Transmission Provider are less than the sum of payment(s) made to the Transmission Provider by the Interconnection Customer, the Transmission Provider shall refund the difference, without interest, as soon as the necessary vouchers may be prepared.

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:

- 7.1.1 Either Party may assign this Agreement with the written consent of the other Party to any affiliate of the assigning Party or other third 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;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, with the written consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility.
- 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 of the Interconnection Customer is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

- 7.2.1 The Interconnection Customer's liability to the Transmission Provider 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 the Interconnection Customer be liable to the Transmission Provider for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.
- 7.2.2 The liability of the Transmission Provider shall be determined only in accordance with the Federal Tort Claims Act provision set forth in Attachment J of the Transmission Provider's Tariff.

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- 7.3.1 This provision protects the Transmission Provider 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 7.2.1.
- 7.3.2 The Interconnection Customer shall at all times indemnify, defend, and hold 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, 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 Transmission Provider's action or failure to meet its obligations under this Agreement on behalf of the Interconnection Customer, except in cases of gross negligence or intentional wrongdoing by the Transmission Provider.
- 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 Interconnection Customer 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 Interconnection Customer contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If the Interconnection Customer 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 Interconnection Customer of such fact. Any failure of or delay in such notification shall not affect the Interconnection Customer's indemnification obligation unless such failure or delay is materially prejudicial to the Interconnection Customer.
- 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

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- 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.

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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 credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.
- 8.2 The Transmission Provider agrees to self-insure consistent with the Transmission Provider's practice. Such 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.

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- 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 CFR § 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 CFR § 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 CFR § 388.112.
- 9.4 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 SGIA. 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.

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

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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 the Interconnection Customer will be responsible for all costs to be 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 Interconnection Customer agrees 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.

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 Federal law or by the laws of the state where the Point of Interconnection is located, as applicable. 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.
- 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

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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, and also incorporating through reference Attachments J and K of Transmission Provider's Tariff as if they were a part hereof, 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 National Infrastructure Advisory Council or its successor, and, eventually, with 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

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12.10.1 — 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 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.

12.10.2 — Each Party shall remedy as soon as practicable all releases of Hazardous Substances brought to, or created at, real property it owns underlying the Small Generating Facility or Interconnection Facilities, and any such substances migrating from real property it owns at the Small Generating Facility site. The Party that caused the release shall bear the costs of the remedial action, which shall meet applicable Federal and state environmental standards at the time of the action. Such costs may include, but are not limited to, Federal and state supervision, remedial action plans, removal and remedial actions, and negotiation of voluntary and judicial agreements required to meet such environmental standards.

12.10.3 — The Parties agree to comply fully with the substantive requirements of all applicable Federal, state and local environmental laws in the performance of their obligations hereunder, and to mitigate and abate adverse environmental impacts accordingly.

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

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way by any limitation of subcontractor's insurance.

12.12 [This article intentionally left blank.]

Article 13. Notices

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 carrier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

If to the Transmission Provider:

Transmission Provider: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

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: _____
City: _____ State: _____ Zip: _____

13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

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Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

If to the Transmission Provider:

Transmission Provider: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This 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: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

Transmission Provider's Operating Representative:

Transmission Provider: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____

13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

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Article 14. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

(INTERCONNECTION CUSTOMER)

(SEAL)

By _____

Attest:

Title _____

By _____

Address _____

Title _____

Date _____

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Attachment 1

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.

Confidential Information – 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.

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.

Effective Date – The date on which the Standard Small Generator Interconnection Agreement becomes effective upon execution by the Parties.

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

FERC – The Federal Energy Regulatory Commission or its successor.

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

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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.

Hazardous Substances – 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.

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.

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Notice of Dispute – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

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 and/or storage for later injection of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and 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 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.

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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. This language will be deleted from a SGIA offered to an Interconnection Customer for execution.]

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Attachment 3

**One-line Diagram Depicting the Small Generating Facility, Interconnection
Facilities, Metering Equipment, and Upgrades**

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Attachment 4

Milestones

In-Service Date: _____

Critical milestones and responsibility as agreed to by 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 _____

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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. This language will be deleted from a SGIA offered to an Interconnection Customer for execution.]

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Attachment 6

**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. This language will be deleted from a SGIA offered to an Interconnection Customer for execution.]

FERC rendition of the electronically filed tariff records in Docket No. NJ19-00010-000

Filing Data:

CID: C000159

Filing Title: OATT_2019-1_-20190401

Company Filing Identifier: 172

Type of Filing Code: 450

Associated Filing Identifier:

Tariff Title: Open Access Transmission Tariff

Tariff ID: 149

Payment Confirmation:

Suspension Motion: N

Tariff Record Data:

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.8, Scheduling of Firm Point-To-Point Transmission Service, 2.0.0, A

Record Narrative Name: 13.8 Scheduling of Firm Point-To-Point Transmission Service Schedules for the Transmission Customers Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 1000 a.m. or a reasonable time that is

Tariff Record ID: 3522

Tariff Record Collation Value: 106000 Tariff Record Parent Identifier: 3514

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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. [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 10:00 a.m. will be accommodated, if practicable. Hour-to-hour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of any capacity and energy that is to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by the Transmission Provider]. 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. Scheduling changes will be permitted up to twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.6, Scheduling of Non-Firm Point-To-Point Transmission ..., 2.0.0, A

Record Narrative Name: 14.6 Scheduling of Non-Firm Point-To-Point Transmission Service Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 200 p.m. or a reasonable time that is generally accepted in the

Tariff Record ID: 3529

Tariff Record Collation Value: 113000 Tariff Record Parent Identifier: 3523

Proposed Date: 2019-06-03

Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

14.6 Scheduling of Non-Firm Point-To-Point Transmission Service: Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 2:00 p.m. [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 2:00 p.m. will be accommodated, if practicable. Hour-to-hour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of energy that are to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by the Transmission Provider]. 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. Scheduling changes will be permitted up to twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

23.1, Procedures for Assignment or Transfer of Service, 2.0.0, A

Record Narrative Name: 23.1 Procedures for Assignment or Transfer of Service Subject to the Transmission Providers prior approval, a Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible

Tariff Record ID: 3578

Tariff Record Collation Value: 162000 Tariff Record Parent Identifier: 3577

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

23.1 Procedures for Assignment or Transfer of Service:

(a) Subject to the Transmission Provider's prior approval, 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. 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 the 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 1, Scheduling, System Control and Dispatch Service, 2.0.0, A

Record Narrative Name: SCHEDULE 1

Tariff Record ID: 3642

Tariff Record Collation Value: 226000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 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 referred to 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.

The Transmission System specific charges for Scheduling, System Control and Dispatch Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Scheduling, System Control and Dispatch Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Scheduling, System Control and Dispatch Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 2, Reactive Supply and Voltage Control ..., 3.0.0, A

Record Narrative Name: SCHEDULE 2 Reactive Supply and Voltage Control from Generation

Tariff Record ID: 3644

Tariff Record Collation Value: 228000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

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 can 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 upon the rates referred to 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.

The Transmission System specific charges for Reactive Supply and Voltage Control from Generation or Other Sources Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Reactive Supply and Voltage Control from Generation or Other Sources Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Reactive Supply and Voltage Control from Generation or Other Sources Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
SCHEDULE 3, Regulation and Frequency Response Service, 2.0.0, A
Record Narrative Name: SCHEDULE 3
Tariff Record ID: 3646
Tariff Record Collation Value: 230000 Tariff Record Parent Identifier: 3417
Proposed Date: 2019-06-03
Priority Order: 500

Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

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 moment-by-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 Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements. The charges for Regulation and Frequency Response Service are referred to below. The amount of Regulation and Frequency Response Service will be set forth in the Service Agreement. 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 System specific charges for Regulation and Frequency Response Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Regulation and Frequency Response Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Regulation and Frequency Response Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
SCHEDULE 4, Energy Imbalance Service, 2.0.0, A
Record Narrative Name: SCHEDULE 4
Tariff Record ID: 3648

Tariff Record Collation Value: 232000 Tariff Record Parent Identifier: 3417
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

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 obtain 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 System specific compensation for Energy Imbalance Service is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the compensation for Energy Imbalance Service upon written notice to the Transmission Customer. Any change to the compensation to the Transmission Customer for Energy Imbalance Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 5, Operating Reserve - Spinning Reserve Service, 2.0.0, A

Record Narrative Name: SCHEDULE 5

Tariff Record ID: 3650

Tariff Record Collation Value: 234000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 charges for Spinning Reserve Service are referred to below. The amount of Spinning Reserve Service will be set forth in the Service Agreement. 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 System specific charges for Operating Reserve - Spinning Reserve Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Operating Reserve - Spinning Reserve Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Operating Reserve - Spinning Reserve Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 6, Operating Reserve - Supplemental Reserve Service, 2.0.0, A

Record Narrative Name: SCHEDULE 6

Tariff Record ID: 3652

Tariff Record Collation Value: 236000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 on-line 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 charges for Supplemental Reserve Service are referred to below. The amount of Supplemental Reserve Service will be set forth in the Service Agreement. 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 System specific charges for Operating Reserve - Supplemental Reserve Service are set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Operating Reserve - Supplemental Reserve Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Operating Reserve - Supplemental Reserve Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 7, Long-Term Firm and Short-Term Firm Point-to-Point ..., 2.0.0, A

Record Narrative Name: SCHEDULE 7

Tariff Record ID: 3654

Tariff Record Collation Value: 238000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 pursuant to the Transmission System specific Firm Point-to-Point Transmission Service Rate Schedule attached to and made a part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Firm Point-to-Point Transmission Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Firm Point-to-Point Transmission Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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.

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 8, Non-Firm Point-To-Point Transmission Service, 2.0.0, A

Record Narrative Name: SCHEDULE 8

Tariff Record ID: 3656

Tariff Record Collation Value: 240000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 pursuant to the Transmission System specific Non-Firm Point-to-Point Transmission Service Rate Schedule attached to and made a part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the charges for Non-Firm Point-to-Point Transmission Service upon written notice to the Transmission Customer. Any change to the charges to the Transmission Customer for Non-Firm Point-to-Point Transmission Service shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

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.

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.

WestConnect Participation and Rate Schedule - Hourly Non-Firm Point-To-Point Regional Transmission Service

The Transmission Provider incorporates by reference and offers service under the WestConnect Amended and Restated Point-to-Point Regional Transmission Service Participation Agreement (Participation Agreement), as amended and supplemented, while Transmission Provider is a party to such Participation Agreement, over the Central Arizona Project, Colorado River Storage Project, Loveland Area Projects, Pacific Northwest-Pacific Southwest Intertie Project, and Parker-Davis Project transmission systems. Details regarding this WestConnect Regional Transmission Service are available on Transmission Provider's OASIS and at:

http://regpricing.westconnect.com/regional_transmission.htm.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 9, Generator Imbalance Service, 2.0.0, A

Record Narrative Name: SCHEDULE 9

Tariff Record ID: 3658

Tariff Record Collation Value: 242000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

SCHEDULE 9

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 System specific compensation for Generator Imbalance Service is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement. The rates or rate methodology used to calculate the charges for service under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the compensation for Generator Imbalance Service upon written notice to the Transmission Customer. Any change to the compensation to the Transmission Customer for Generator Imbalance Service shall be as set forth in a subsequent rate

schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

SCHEDULE 10, Unreserved Use Penalties, 2.0.0, A

Record Narrative Name: SCHEDULE 10

Tariff Record ID: 3660

Tariff Record Collation Value: 244000 Tariff Record Parent Identifier: 3417

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

SCHEDULE 10

Unreserved Use Penalties

The Transmission System specific methodology for assessment of Unreserved Use Penalties is set forth in the appropriate rate schedule attached to and made part of the applicable Service Agreement, if one exists. The rates or rate methodology used to calculate such penalties under this schedule were promulgated and may be modified pursuant to applicable Federal laws, regulations and policies.

The Transmission Provider may modify the methodology for assessment of Unreserved Use Penalties upon written notice to the Transmission Customer. Any change to that methodology shall be as set forth in a subsequent rate schedule promulgated pursuant to applicable Federal laws, regulations and policies and distributed to the Transmission Customer to become attached to and made part of the applicable Service Agreement. If a Transmission Customer does not have an applicable Service Agreement, they will be charged Unreserved Use Penalties in accordance with the Tariff. The Transmission Provider shall charge the Transmission Customer in accordance with the rate then in effect.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.0, The Reseller and the Assignee have negotiated the ..., 2.0.0, A

Record Narrative Name: 8.0 The Reseller and the Assignee have negotiated the charges detailed below in accordance with the terms and conditions of the Tariff, including the price cap specified in Section 23.1 of the Tariff.

Tariff Record ID: 3712

Tariff Record Collation Value: 296000 Tariff Record Parent Identifier: 3704

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

8.0 The Reseller and the Assignee have negotiated the charges detailed below in accordance with the terms and conditions of the Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

PART II, Upper Great Plains Region, 2.0.0, A

Record Narrative Name: Part II - Upper Great Plains RegionThe Transmission Provider must include, at a minimum, the following information concerning its ATC calculation methodology

Tariff Record ID: 3741

Tariff Record Collation Value: 325000 Tariff Record Parent Identifier: 3736

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1
Associated Filing Identifier:

Part II - Upper Great Plains Region

Western's Upper Great Plains Region (UGPR) joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). SPP is the Transmission Provider for UGPR's transmission facilities under the SPP Tariff and utilizes SPP's ATC calculation methodology.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

1, A detailed description of the specific mathematical ..., 2.0.0, A

Record Narrative Name: 1 A detailed description of the specific mathematical algorithm used to calculate firm and non-firm ATC and AFC, if applicable for its scheduling horizon same day and real-time, operating horizon day ahead and pre-schedule and planning

Tariff Record ID: 3742

Tariff Record Collation Value: 326000 Tariff Record Parent Identifier: 3741

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

(1) A detailed description of the specific mathematical algorithm used to calculate firm and non-firm ATC (and AFC, if applicable) for its scheduling horizon (same day and real-time), operating horizon (day ahead and pre-schedule) and planning horizon (beyond the operating horizon);

The Transmission Provider utilizes the Mid-Continent Area Power Pool ("MAPP") procedures for calculating firm and non-firm ATC for those Control Area to Control Area and Controlled Interface contract paths expected to be constraining to sales of transmission service and for calculating all firm and non-firm AFC. The rated system path methodology (contract path) is utilized for contract paths between the UGPR system and other Transmission Providers with whom UGPR has interconnections and for Controlled Interfaces.

UGPR's Controlled Interfaces are those transmission facilities or tie-lines included in its Transmission System where the flow of power across such facilities is controlled to a desired value utilizing a High Voltage Direct Current (HVDC) technology or a phase-shifting transformer. The Controlled Interfaces included in UGPR's Transmission System include: 1) the Miles City Converter Station, which is a 200MW back-to-back HVDC tie-line located in its Miles City 230-kV Substation in eastern Montana; 2) the east-side AC transmission connection to the Rapid City DC Tie, which is a 200MW back-to-back HVDC tie-line located in western South Dakota; 3) the 300 MVA Crossover phase-shifter located on the Crossover-Yellowtail 230-kV transmission line located in eastern Montana, and 4) the Tioga-Boundary Dam 230-kV transmission tie-line between the United States and Saskatchewan, which is controlled by a 200 MVA phase-shifting transformer owned by SaskPower and located at the north end of the transmission line in SaskPower's Boundary Dam 230-kV Substation.

The network response flowgate methodology (network AFC) is utilized for the Transmission Provider's system for facilities expected to be constraining to sales of transmission service and

expected to be congested in real-time operations.

The MAPP region, including the Transmission Provider's system, utilizes two horizons for AFC/ATC calculations:

- The Operating Horizon AFC/ATC calculation evaluates hourly non-firm and secondary non-firm service. The Operating Horizon AFC/ATC calculation determines AFC/ATC values for a sliding 36-hour period. The Operating Horizon includes the "scheduling horizon" (same day and real-time) as well as the "operating horizon" (day ahead and pre-schedule) as such terms are referred to in the FERC Order No. 890.
- The Planning Horizon AFC/ATC calculation evaluates transmission service with a NERC curtailment priority of 3 or higher except for secondary non-firm service. The Planning Horizon AFC/ATC calculation determines AFC/ATC values for a sliding 3 year period beyond the Operating Horizon.

Appendix F of MAPP's document "MAPP Policies and Procedures for Transmission Operations" (MAPP Policies and Procedures) contains the detailed mathematical algorithms used to calculate firm and non-firm AFC/ATC. A summary of the mathematical algorithms is provided below.

a. Non-Recallable (Firm) AFC

Under the MAPP AFC process, non-recallable AFC represents firm AFC. The MAPP formula for Non-recallable AFC is available at:

http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf

Under this formula, Non-recallable AFC is Total Flowgate Capability reduced by: (i) the capacity benefit margin (CBM); (ii) the transmission reliability margin (TRM); (iii) the non-recallable Existing Transmission Commitments (ETC); and (iv) non-recallable transmission reservation impacts.

b. Recallable (Non-Firm) AFC

Under the MAPP AFC process, recallable AFC represents non-firm AFC. The MAPP formula for Recallable AFC is available at:

http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf

Under this formula, Recallable AFC is Total Flowgate Capability reduced by: (i) CBM; (ii) TRM; (iii) Recallable Existing Transmission Commitments; (iv) Non-Recallable transmission reservation impacts; (v) Non-Recallable Existing Transmission Commitments; (vi) Recallable transmission reservation impacts.

c. Non-recallable ATC Computation on a Contract Path

Non-recallable ATC on a contract path is the TTC on the contract path reduced by: (i) CBM, (ii) TRM, (iii) Non-Recallable Existing Transmission Commitments, and (iv) Non-Recallable Transmission Reservation Impacts on the path.

d. Recallable ATC Computation on a Contract Path

Recallable ATC for a MAPP Transmission Provider Flowgate is the TTC reduced by: (i) CBM; (ii) TRM; (iii) Recallable Existing Transmission Commitments; (iv) Non-Recallable transmission reservation impacts; (v) Non-Recallable Existing Transmission Commitments; (vi) Recallable transmission reservation impacts.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2, A process flow diagram that illustrates the various ..., 2.0.0, A

Record Narrative Name: 2 A process flow diagram that illustrates the various steps through which ATC/AFC is calculation; and The process flow diagram of the steps involved in calculating ATC/AFC is provided as Appendix 1 to this Attachment C-2.

Tariff Record ID: 3743

Tariff Record Collation Value: 327000 Tariff Record Parent Identifier: 3741

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

(2) A process flow diagram that illustrates the various steps through which ATC/AFC is calculation; and

The process flow diagram of the steps involved in calculating ATC/AFC is provided as Appendix 1 to this Attachment C-2.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3, A detailed explanation of how each of the ATC ..., 2.0.0, A

Record Narrative Name: 3 A detailed explanation of how each of the ATC components is calculated for both the operating and planning horizons For TTC, a Transmission Provider shall i explain its definition of TTC ii explain its TTC calculation methodology

Tariff Record ID: 3744

Tariff Record Collation Value: 328000 Tariff Record Parent Identifier: 3741

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

(3) A detailed explanation of how each of the ATC components is calculated for both the operating and planning horizons.

a. For TTC, a Transmission Provider shall: (i) explain its definition of TTC; (ii) explain its TTC calculation methodology; (iii) list the databases used in its TTC assessments; and (iv) explain the assumptions used in its TTC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages.

With respect to requirement 3(a)(i), UGPR defines TTC as follows:

For UGPR Control Area to Control Area contract paths:

The TTC is defined as the sum of the seasonal normal facility ratings of the tie lines between the

UGPR Control Area and the other Control Area with whom UGPR has an interconnection. The Control Area to Control Area contract path TTC is determined separately for each adjoining Control Area. The seasonal normal facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).

For UGPR Controlled Interface contract paths:

The TTC is defined as the seasonal normal facility rating of the HVDC line (in each direction), or the seasonal normal facility rating of the phase-shifting transformer (in each direction).

For UGPR flowgates:

For Outage Transfer Distribution Factor ("OTDF") flowgates, the TTC is defined as the seasonal emergency facility rating of the limiting facility. The seasonal emergency facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).

For Power Transfer Distribution Factor ("PTDF") flowgates where the limiting phenomenon is stability related, the TTC is defined as the flow on the monitored facilities above which the limiting phenomenon no longer meets criteria.

With respect to requirement 3(a)(ii), UGPR's TTC calculation methodology is:

For UGPR Control Area to Control Area contract paths:

The TTC is calculated as the sum of the seasonal normal facility ratings of the tie lines between the UGPR Control Area and the other Control Area with whom UGPR has an interconnection. For tie-lines that are jointly-owned, only the UGPR ownership share of the tie-line capacity is included. The Control Area to Control Area contract path TTC is determined separately for each adjoining Control Area. The seasonal normal facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).

For UGPR Controlled Interface contract paths:

The TTC is calculated as the lesser of the seasonal normal facility rating of the HVDC line (in each direction) or the flow on the HVDC line (in each direction) above which the limiting phenomenon (i.e. thermal, voltage angle, or stability related) no longer meets criteria. The TTC is calculated as the lesser of the seasonal normal facility rating of the phase-shifting transformer (in each direction) or the flow on the phase-shifting transformer (in each direction) above which the limiting phenomenon (i.e. thermal, voltage angle, or stability related) no longer meets criteria.

Power flow simulations are performed to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS) are not met. Stability simulations are performed, if applicable, to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS)

are not met. If applicable, in the case of a voltage angle related limit, power flow simulations are performed to determine the flow on the monitored facilities at which a line outage results in a breaker angle differential at which, when the breaker is reclosed, the instantaneous generator response of the most critical generators is such that its delta-power reaches its maximum safe limit (generator shaft torque is within the limits of the generator)

For UGPR flowgates:

For OTDF flowgates, the TTC is calculated as equal to the seasonal emergency facility rating of the limiting facility. The seasonal emergency facility rating is determined in accordance with the UGPR Transmission Facility Ratings Methodology (as posted on the UGPR OASIS page).

For PTDF flowgates where the limiting phenomenon is voltage angle or stability related, the TTC is calculated as equal to the flow on the monitored facilities above which the limiting phenomenon no longer meets criteria. Stability simulations are performed to determine the flow on the monitored facilities at which the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS) are not met. In the case of a voltage angle related limit, power flow simulations are performed to determine the flow on the monitored facilities at which a line outage results in a breaker angle differential at which, when the breaker is reclosed, the instantaneous generator response of the most critical generators is such that its delta-power reaches its maximum safe limit (generator shaft torque is within the limits of the generator).

The methodologies and studies used to determine TTC for each flowgate in the MAPP Region are reviewed and sanctioned through the MAPP Regional Transmission Committee (RTC).

With respect to requirement 3(a)(iii), the databases used in UGPR's TTC assessments are:

For thermal limitations, the seasonal normal and emergency facility ratings and impedance data for UGPR's transmission equipment are documented in internal spreadsheets and provided to MAPP, and to UGPR's Reliability Coordinator, the Midwest ISO, for real-time operations and long-term planning and model development purposes.

For stability limitations, MAPP maintains a database of generator and other equipment modeling data which are used in stability simulations. The North Dakota Export (NDEX) flowgate that is jointly owned by UGPR is limited by stability considerations. For voltage angle limitations, transmission line relaying synchro-check settings may be maintained by MAPP transmission owners in a computer-aided protection engineering computer database. MAPP transmission owners may also use generator shaft torque fatigue capabilities that are developed on an as-needed basis by generator manufacturers.

UGPR considers the information in these databases to be Critical Energy Infrastructure Information ("CEII").

With respect to requirement 3(a)(iv), the assumptions used in TTC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages are:

For Control Area to Control Area contract paths:

Load levels, generation dispatch and planned and contingency outages are not considered in determining the TTC.

For Controlled Interface contract paths:

For Controlled Interface contract paths where the limiting phenomenon is stability related, in accordance with MAPP practice, load levels for the entire MAPP area are modeled at 100% and 85% of peak summer load for summer studies and 100% and 90% of peak winter loads for winter studies. Load levels internal to the stability limited NDEX and other interdependent northern MAPP flowgates are modeled according to MAPP practice for stability simulations. Such modeling of load levels is appropriate for stability simulations because load can be a damping influence on angular instability. Generators in the electrical vicinity of the stability issue are typically dispatched at their maximum outputs in order to provide for a high level of acceleration power to appropriately analyze angular instability. Planned and contingency outages are analyzed in accordance with the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS).

For Controlled Interface contract paths where the limiting phenomenon is voltage angle related, the TTC is dependent on the relative interaction between the voltage differential across an open breaker and the resultant generator shaft torque response relative to the maximum safe limits of the generator. Generation dispatch may be a significant factor with respect to the critical generator (in terms of the generator most sensitive to a delta power fluctuation in excess of its maximum safe shaft torque) and other generators electrically near the critical generator. The critical generator is dispatched at its minimum dispatch level in the power flow simulations because that is the appropriate assumption for a delta power analysis. To the extent that other marginal generators (generators that may or may not be on-line in real-time due to their dispatch costs) are on-line in the base case models, such generators are either taken off-line or dispatched down to minimum output. This assumption results in the critical machine participating to a greater extent in the delta power analysis. Planned and contingency outages are not currently considered in determining the TTC for voltage angle related limitations.

For Controlled Interface contract paths where the limiting phenomenon is thermal loading related, summer load levels are used in the determination of summer season TTC and winter load levels are used in the determination of winter TTC. Generation dispatch is not considered in determining the TTC. Planned and contingency outages of a monitored facility or another facility in the immediate vicinity of a monitored facility are considered in the determination of the TTC. Typically, the posted TTC is based on a system intact (no outages) assumption. During times of outages of facilities near the monitored facilities, the TTC is based on the outage condition.

For flowgates:

For OTDF flowgates, the TTC is only dependent on the facility rating. Load levels, generation dispatch and planned and contingency outages are not considered in determining the TTC.

For PTDF flowgates where the limiting phenomenon is stability related, in accordance with MAPP practice, load levels for the entire MAPP area are modeled at 100% and 85% of peak summer load for summer studies and 100% and 90% of peak winter loads for winter studies. Load levels internal to the stability limited NDEX and other non-UGPR owned interdependent northern MAPP flowgates are modeled according to MAPP practice for stability simulations. Such modeling of load levels is appropriate for stability simulations because load can be a damping influence on angular instability. Generators in the electrical vicinity of the stability issue are typically dispatched at their maximum outputs in order to provide for a high level of acceleration power to appropriately analyze angular instability. Planned and contingency outages are analyzed in accordance with the UGPR Transmission Planning Criteria (as posted on the UGPR OASIS).

For PTDF flowgates where the limiting phenomenon is voltage angle related, the TTC is dependent on the relative interaction between the voltage differential across an open breaker and the resultant generator shaft torque response relative to the maximum safe limits of the generator. Generation dispatch may be a significant factor with respect to the critical generator (in terms of the generator most sensitive to a delta power fluctuation in excess of its maximum safe shaft torque) and other generators electrically near the critical generator. The critical generator is dispatched at its minimum dispatch level in the power flow simulations because that is the appropriate assumption for a delta power analysis. To the extent that other marginal generators (generators that may or may not be on-line in real-time due to their dispatch costs) are on-line in the base case models, such generators are either taken off-line or dispatched down to minimum output. This assumption results in the critical machine participating to a greater extent in the delta power analysis. Planned and contingency outages are not currently considered in determining the TTC for voltage angle related limitations.

For PTDF flowgates where the limiting phenomenon is thermal loading related, summer load levels are used in the determination of summer season TTC and winter load levels are used in the determination of winter TTC. Generation dispatch is not considered in determining the TTC. Planned and contingency outages of a monitored facility or another facility in the immediate vicinity of a monitored facility are considered in the determination of the TTC. Typically, the posted TTC is based on a system intact (no outages) assumption. During times of outages of facilities near the monitored facilities, the TTC is based on the outage condition.

b. For ETC, a transmission provider shall explain: (i) its definition of ETC; (ii) the calculation methodology used to determine the transmission capacity to be set aside for native load (including network load), and non-OATT customers including, if applicable, an explanation of assumptions on the selection of generators that are modeled in service); (iii) how point-to-point transmission service requests are incorporated; (iv) how rollover rights are accounted for; and (v) its processes for ensuring that non-firm capacity is released properly (e.g., when real time schedules replace the associated transmission service requests in its real-time calculations); and (vi) describe the step-by-step modeling study methodology and criteria for adding or eliminating flowgates (permanent and temporary).

With respect to requirement 3(b)(i), within the MAPP region the ETC value is used to account for committed use of a flowgate or contract path other than transmission reservations made after November 1, 1996. For flowgates, ETC accounts for the impacts on a flowgate due to load serving and grandfathered transmission commitments. For contract paths, ETC accounts for grandfathered transmission commitments. ETC used in firm AFC/ATC calculations includes the effect of only firm transmission commitments, and may reflect flows expected under the most limiting conditions for a given time period. ETC used in non-firm AFC/ATC calculations includes the effects of firm transmission commitments, and may reflect average conditions for a given time period.

With respect to requirement 3(b)(ii), the Planning Horizon flowgate ETC value is comprised of several components including:

• MAPP Transmission Provider Generation-to-Load Impacts. These impacts are calculated as follows:

- MAPP Transmission Providers upload, on a daily basis, hourly control area load forecasts for the next seven days and, on a monthly basis, monthly load forecasts for the next 36 months. For UGPR, the load forecast information correlates to the UGPR native load forecast with an adjustment to account for the non-IS loads within UGPR's load balancing area. The adjustment is based on historical average ratios of UGPR native load to total control area load.
- MAPP Transmission Providers supply designated network resource lists for all generators in the control area. For load serving entities within the UGPR Control Area that are not network integration transmission service customers, UGPR relies on data supplied by these entities through the annual MAPP model building process.
- MAPP Transmission Providers supply joint-owned generator information. This information includes information concerning the joint owners and the transmission arrangements for delivering joint owned shares to the joint owners.
- MAPP Transmission Providers supply control area generating unit merit order (block loading) information. The merit order information is used to develop the generation dispatch to serve the load in the Transmission Provider's control area. To the extent resources outside the UGPR Control Area are used to serve load in the UGPR Control Area, these deliveries are represented by the transmission service requests on OASIS, except for generators directly connected to the UGPR system through UGPR transmission facilities. In these cases, the resource is represented in the merit order file and UGPR's share of the resource is not reflected in the calculation of the adjoining control area's generation to load impacts.
- MAPP COR calculates, for each MAPP flowgate including UGPR flowgates, the generation to load impacts of each MAPP Transmission Provider serving load within its control area. MAPP's calculation is based on determining a generation dispatch for each applicable time horizon. The dispatch is based on dispatching generation in merit order up to the designated network resource limits, respecting joint-ownership shares of jointly owned units, until the load plus net interchange are balanced for each control area. The calculation includes the effects of

generation and transmission outages included in the NERC System Data Exchange (SDX). Further details of MAPP's calculation can be found in Section 6.1 of Appendix F to the latest version of the MAPP Policies and Procedures which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

- Centralized Dispatch Market Flow Impacts. The MAPP process can accept flow information from centralized dispatch markets. Such flow information is required to be provided by the Midwest ISO in the Interconnected Operations and Congestion Management Service Agreement ("Seams Agreement") under the Midwest ISO tariff between UGPR and the Midwest ISO. UGPR utilizes MAPPCOR as its Contract Manager under the Seams Agreement. The flow information is provided for all MAPP Transmission Provider flowgates that meet the coordination requirements in the Congestion Management Process described in the Seams Agreement. The market flow impacts seek to represent the parallel flow on the applicable flowgates based on economic dispatch simulations of the expected market dispatch for various time frames.
- Other Third Party Generation-to-Load Impacts. For third party transmission providers not accounted for under the above processes, MAPPCOR utilizes generation block loading files and load forecasts from the NERC SDX to calculate the control area load parallel flow impacts from non-MAPP and non-MISO transmission providers on each MAPP Transmission Provider flowgate. Further details of MAPP's calculation can be found Section 6.1 of Appendix F in the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

The Operating Horizon flowgate ETC value is calculated by MAPP for each MAPP Transmission Provider flowgate. MAPP forecasts flows and ETC on MAPP Transmission Provider flowgates for each hour of the Operating Horizon using historical flow information and reported energy schedules. The forecasting algorithm used by MAPP utilizes a weighted average of metered flows from previous hours and comparable hours from previous days. Further details of MAPP's calculation of Operating Horizon ETC can be found in Section 6.2 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

UGPR considers the data used in calculating ETC to be Critical Energy Infrastructure Information ("CEII").

With respect to requirement 3(b)(iii), MAPPCOR calculates the point-to-point transmission service request impacts for MAPP Transmission Provider flowgates. In addition to MAPP reservations, MAPPCOR downloads OASIS reservations from the Midwest ISO, PJM and SPP OASIS nodes. The reservations are filtered according to certain filtering criteria in order to avoid double-counting reservations. MAPPCOR then utilizes source/sink information from these reservations (to the extent available) or Point-of-Receipt / Point-of-Delivery information to calculate the impacts of the reservations on each MAPP Transmission Provider flowgate.

Impacts of reservations in the forward direction (flows additive to the flowgate flows) and in the reverse direction (flows counterflow to the flowgate flows) are calculated for the operating and planning horizons. Further details of MAPP's calculation can be found in the latest version of Section 11 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

With respect to requirement 3(b)(iv), roll-over rights of MAPP Transmission Provider reservations are accounted for in the calculation of ATC/AFC. Absent any indication to the contrary from the MAPP Transmission Providers, it is assumed that each long-term firm transmission service reservation has rights of first refusal (roll-over rights). In like fashion, since UGPR has a seams agreement with MISO in which both parties have agreed to take into account the roll-over rights of the other party, MISO long-term firm transmission service requests are assumed to have roll over rights unless MISO advises otherwise. The roll-over rights of the MAPP and MISO reservations are reflected in the ATC/AFC calculation by the creation of a TSN in the OASIS system. A TSN is treated the same as a reservation in the calculation of impacts. The TSN utilizes the same source/sink and POR/POD as the parent reservation and thus the impacts of the roll-over rights are calculated in the same way as the impacts of the parent reservation. Further details of MAPP's calculation of the roll-over rights can be found in Section 13 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

With respect to requirement 3(b)(v), the process for ensuring that non-firm capacity is released properly (e.g., when real time schedules replace the associated transmission service requests in real-time calculations) are fully detailed in the MAPP Policies and Procedures. In summary of those procedures, MAPP calculates short-term non-firm AFC for the Operating Horizon by considering known energy schedules for all reservations except hourly non-firm reservations. For hourly non-firm reservations, the reservation amount is used if no schedule has been submitted. If a NERC e-tag has been submitted for hourly non-firm service, the amount on the e-tag is used in the calculation. Details concerning the non-firm AFC calculation can be found in the latest version of Section 6.2 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

With respect to requirement 3(b)(vi), the step-by-step modeling study methodology and criteria for adding or eliminating flowgates (permanent and temporary) are as follows. The Transmission Provider develops flowgates for facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations. The Transmission Provider follows MAPP's requirements for adding or removing flowgates as outlined in Section 5.2.1 of Appendix F to the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>.

Under the MAPP procedures, approval is required from the Transmission Operating Subcommittee (TOS) and the Transmission Schedules and Compensation Subcommittee (TSCSC) under the MAPP Regional Transmission Committee (RTC) for any new MAPP

Transmission Provider flowgates in the MAPP Request Evaluation process. Under the MAPP procedures, a change in the definition of an existing MAPP Transmission Provider flowgate is considered a new flowgate and requires the above approvals.

MAPP's procedures with regard to temporary flowgates are similar to the procedures for permanent flowgates except that approval of the Chairs of the TOS and TSCSC is acceptable in lieu of approval by the committees as a whole. Temporary flowgates are developed for facilities expected to be congested in real-time operations due to unforeseen operational conditions such as short-term conditions due to planned or forced outages. In such cases, temporary flowgates are modeled for the time-frames of the expected unusual operating conditions and then are removed from operation upon restoration of the Transmission System to its normal state.

c. If a Transmission Provider uses an AFC methodology to calculate ATC, it shall: (i) explain its definition of AFC; (ii) explain its AFC calculation methodology; (iii) explain its process for converting AFC into ATC for OASIS posting; (iv) list the databases used in its AFC assessments; and (v) explain the assumptions used in its AFC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages.

UGPR utilizes the MAPP procedures for calculating firm and non-firm ATC and AFC. UGPR utilizes the rated system path methodology (contract path) for contract paths between the UGPR system and other Control Areas with whom UGPR has interconnections. UGPR utilizes the network response flowgate methodology (network AFC) for facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations.

With respect to requirement 3(c)(i), the term "flowgate" refers to a transmission facility(s) on which flow has been correlated with a limiting phenomenon (thermal loading, transient stability, voltage stability or voltage angle). The AFC values posted for identified flowgates is the Available Flowgate Capability on a set of physical transmission facilities, rather than a Control Area to Control Area transfer capability.

Flowgates can be defined as Power Transfer Distribution Factor ("PTDF") or Outage Transfer Distribution Factor ("OTDF").

OTDF flowgates measure the system intact flow on a limiting facility (called the "monitored element") and calculate (by a network response analysis) how much flow from a contingent facility will flow on the limiting facility should an outage of the contingent facility occur. OTDF flowgates are typically only used where the limiting phenomenon is thermal loading on the limiting facility.

PTDF flowgates measure flow for conditions with the transmission system intact and are typically used where the limiting phenomenon is stability or voltage angle related or for thermal loading issues where the limiting facility and the contingent facility are both extra high voltage facilities (e.g., 345 kV lines).

UGPR flowgates include both OTDF and PTDF flowgates.

With respect to requirement 3(c)(ii), UGPR utilizes the MAPP region AFC calculation methodology. In summary, AFC is calculated as the Total Flowgate Capability (referred to as the "TFC" or, equivalently, the "TTC") less CBM less TRM less ETC less transmission service reservation impacts. Detailed information regarding the algorithms used by MAPP for calculating firm and non-firm ATC/AFC is available at: http://toinfo.oasis.mapp.org/oasisinfo/afc_calculation.pdf.

In addition, as part of the Seams Agreement between the UGPR and the Midwest ISO, the MAPP region also calculates Available Share of Total Flowgate Capability ("ASTFC"). The calculation of ASTFC is in accordance with the regional process of allocation of flowgate capability between MAPP and MISO (as well as between other Reciprocal Entities such as PJM, SPP, and TVA). The details of the MAPP's calculation of ASTFC can be found in Section 14 of Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

With respect to requirement 3(c)(iii), MAPP does not presently convert AFC into ATC. Within the MAPP region, ATC is utilized for contract path limitations and AFC is utilized for specific transmission facilities expected to be constraining to sales of transmission service and expected to be congested in real-time operations. Within the MAPP region, both an ATC evaluation and an AFC evaluation are performed for every request for transmission service. After NERC develops rules within the MOD-001 standard for converting AFC into ATC, MAPP will comply with the NERC rules. While MAPP does not convert its AFC values into ATC values, the MAPP Scenario Analyzer is available on the MAPP OASIS to evaluate AFC impacts on ATC on a Control Area to Control Area contract path.

With respect to requirement 3(c)(iv), the databases utilized in AFC assessments are broken down into two areas. First, the databases utilized by UGPR to develop the data inputs it supplies to MAPP for flowgate AFC calculations are the same as those listed in the response to requirement (iii) under Item 3(a) above (for the TTC calculation), as well as those listed in the response to requirement (ii) under 3(b) above (for the ETC calculation) and the data bases listed in the response to requirement 3(d) below (for the TRM calculation). Second, the databases utilized by MAPP in performing the AFC calculation after having been provided the MAPP Transmission Provider data inputs are described in Appendix F to the latest version of the MAPP Policies and Procedures, which can be found at the MAPP OASIS Information Page at <http://toinfo.oasis.mapp.org/oasisinfo/>. The Policies and Procedures are listed under the "Business Practices" area.

UGPR considers the information in these databases to be Critical Energy Infrastructure Information ("CEII").

With respect to requirement 3(c)(v), the assumptions used in AFC assessments regarding load levels, generation dispatch, and modeling of planned and contingency outages are the same as those listed in the response to requirement (iv) under Item 3(a) above (for the TTC calculation), as well as those listed in the response to requirement (ii) under 3(b) above (for the ETC

calculation) and the assumptions listed in the response to requirement 3 (d) below (for the TRM calculation).

d. For TRM, a Transmission Provider shall explain: (i) its definition of TRM; (ii) its TRM calculation methodology (e.g., its assumptions on load forecast errors, forecast errors in system topology or distribution factors and loop flow sources); (iii) the databases used in its TRM assessments; (iv) the conditions under which the transmission provider uses TRM. A Transmission Provider that does not set aside transfer capability for TRM must so state.

With respect to requirement 3(d)(i), within MAPP, TRM is defined as the Transmission Reliability Margin. TRM provides a reserve that ensures the reliability of the interconnected transmission network. TRM accounts for the inherent uncertainty associated with TTC, ETC and ATC/AFC calculations, and the need for operating flexibility to ensure reliable system operation as system conditions change.

With respect to requirement 3(d)(ii), UGPR calculates TRM in accordance with MAPP policies and methodologies. The nature of interfaces dictates how TRM is calculated. MAPP's TRM calculation methodology for flowgates includes the following sub-components, which are described below:

- **General Uncertainty.** ATC/AFC calculations utilize many assumptions and projections of system conditions, which may include such items as transmission system topology, projected customer demand and its distribution, generation dispatch, future weather conditions, and parallel path flows. Therefore, calculations of future TTC and AFC values must consider the inherent uncertainties in projecting such system parameters over longer time periods. Consistent with MAPP region policies for flowgates, UGPR sets the general uncertainty component of TRM at a value equal to 2% of the flowgate TTC. The 2% value is reasonable based on the many uncertainties discussed above.
- **Delivery of Operating Reserves.** The operating reserve component of the TRM is defined within MAPP to be the amount of transmission capability on a flowgate required to provide the amount of operating reserves associated with 100% of the greatest single generator contingency impacting the flowgate in the direction of the constraint. For UGPR, the greatest generator outage affecting each flowgate is determined by studying the effect of tripping various generators within the MAPP region and dispatching generators within each Midwest Contingency Reserve Sharing Group ("MCRSG") member's area to reflect their share of the operating reserves required to be delivered to replace the output of the generator that tripped. The generator outages are analyzed with the contingent facility out of service. The greatest generator outage affecting the flowgate is the outage that results in the greatest incremental flow over the flowgate. The highest incremental flow on the flowgate is the amount of TRM required to deliver operating reserves.
- **Interdependency of Interfaces.** The difference between TTC values developed using simultaneous and non-simultaneous study procedures and the related interdependency of interfaces may be handled by computing a variable TRM. This applies to the North Dakota Export (NDEX) interface.

Within MAPP, the release of TRM on a non-firm basis is allowed provided the flowgate can be operated in compliance with NERC standards. UGPR releases TRM for non-firm AFC postings in three ways. First, the uncertainty sub-component is removed from the TRM for non-firm AFC postings. The removal of the general uncertainty component is appropriate for non-firm AFC postings because non-firm service can be curtailed prior to interrupting firm transmission service. Second, the TRM sub-component related to reserve sharing is reduced to 60% for non-firm ATC postings. This is appropriate because MAPP requires that 40% of the operating reserve must be delivered immediately via spinning reserves and the other 60% must be delivered via fast-start units to be provided within 30-60 minutes. Non-firm curtailments would be expected to be effective before the fast-start 60% portion of the operating reserves needs to be delivered. Third, the TRM sub-component related to TTC values developed using simultaneous and non-simultaneous study procedures is reduced to allow for selling of non-firm capacity identified in a non-simultaneous study; provided that the Transmission Provider has coordinated a procedure for posting of non-firm capability above the simultaneous limit with other affected Transmission Providers.

The methodologies and studies used to determine TRM for each flowgate in the MAPP Region are reviewed and sanctioned through the MAPP Regional Transmission Committee (RTC).

With respect to requirement 3(d)(iii), the databases utilized in TRM assessments include the flowgate TTCs (for the general uncertainty sub-component) and the MCRSG requirements as documented in spreadsheets maintained by the MCRSG and MAPP power flow models, both used for the operating reserve delivery calculation. MAPP, including UGPR, considers the information in these databases to be Critical Energy Infrastructure Information ("CEII").

With respect to requirement 3(d)(iv), TRM is utilized for all firm and non-firm flowgate AFC calculations. 100% of the TRM value is utilized for firm flowgate AFC calculations. Portions of the TRM are released for non-firm flowgate AFC calculations as discussed in the response to requirement 3(d)(ii) above. TRM is not utilized for contract path ATC calculations.

e. For CBM, the Transmission Provider shall include a specific and self-contained narrative explanation of its CBM practice, including: (i) an identification of the entity who performs the resource adequacy analysis for CBM determination; (ii) the methodology used to perform generation reliability assessments (e.g., probabilistic or deterministic); (iii) an explanation of whether the assessment method reflects a specific regional practice; (iv) the assumptions used in this assessment; and (v) the basis for the selection of paths on which CBM is set aside.

UGPR does not include CBM on any of its contract paths or flowgates. These requirements are therefore not applicable to UGPR and no response is provided.

f. In addition, for CBM, a Transmission Provider shall: (i) explain its definition of CBM; (ii) list the databases used in its CBM calculations; and (iii) demonstrate that there is no double-counting of contingency outages when performing CBM, TTC, and TRM calculations.

UGPR does not include CBM on any of its contract paths or flowgates. These requirements are

therefore not applicable to UGPR and no response is provided.

g. The Transmission Provider shall explain its procedures for allowing the use of CBM during emergencies (with an explanation of what constitutes an emergency, the entities that are permitted to use CBM during emergencies and the procedures which must be followed by the transmission providers' merchant function and other load-serving entities when they need to access CBM). If the Transmission Provider's practice is not to set aside transfer capability for CBM, it shall so state.

UGPR does not include CBM on any of its contract paths or flowgates. These requirements are therefore Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4, An explanation of the process for coordinating ATC ..., 2.0.0, A

Record Narrative Name: 4 An explanation of the process for coordinating ATC calculations with neighboring systems. MAPP and the Transmission Provider coordinate ATC calculations with neighboring systems in a number of ways MAPP utilizes the coordination procedures

Tariff Record ID: 3745

Tariff Record Collation Value: 329000 Tariff Record Parent Identifier: 3741

Proposed Date: 2019-06-03

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Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

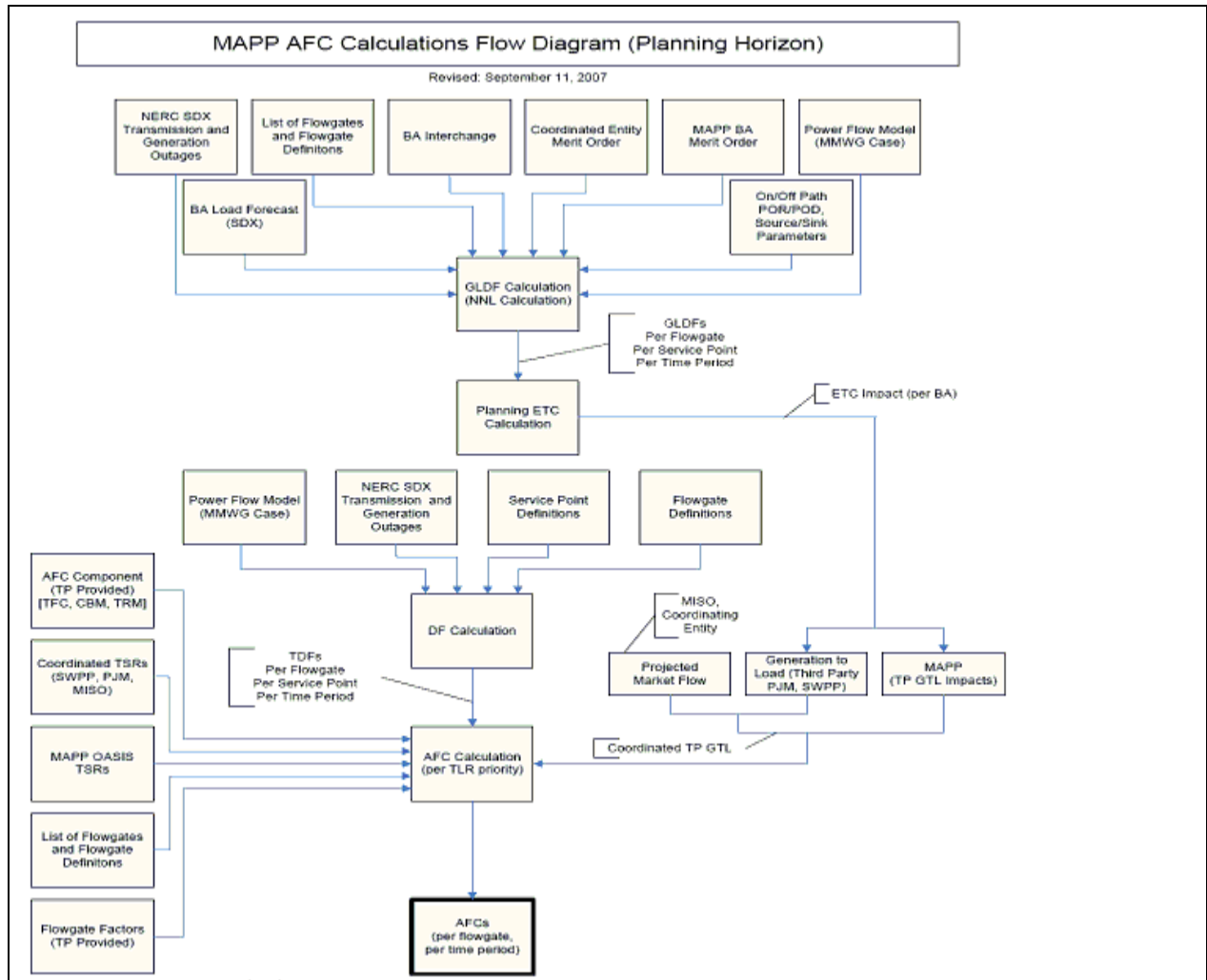
(4) An explanation of the process for coordinating ATC calculations with neighboring systems.

MAPP and the Transmission Provider coordinate ATC calculations with neighboring systems in a number of ways:

- MAPP utilizes the coordination procedures outlined in the Seams Agreement between UGPR and the Midwest ISO. Under that agreement:
 - Flowgates are subjected to a number of tests to determine if the flowgate will be reciprocally coordinated between entities subject to the Congestion Management Process (as such term is used in the Seams Agreement) which entities include not only the Midwest ISO but also PJM, SPP and TVA.
 - MAPP monitors in its evaluation of transmission service requests all flowgates for which it is deemed to be reciprocal. MAPP does not calculate the AFC for these flowgates but rather uses the values provided by the owner of the flowgate.
 - MAPP provides AFC values for all MAPP flowgates to the other reciprocal entities to the various seams agreements. Those entities then monitor the MAPP flowgates in their evaluations of transmission service.
 - MAPP makes its reservations available to other parties for their use in calculating reservation impacts on their flowgates.
 - As discussed in the response to 3(b)(ii), the MAPP process can accept flow information from adjoining centralized dispatch markets. In the case of the Midwest ISO, the flow information is provided for all MAPP Transmission Provider flowgates that meet the coordination requirements

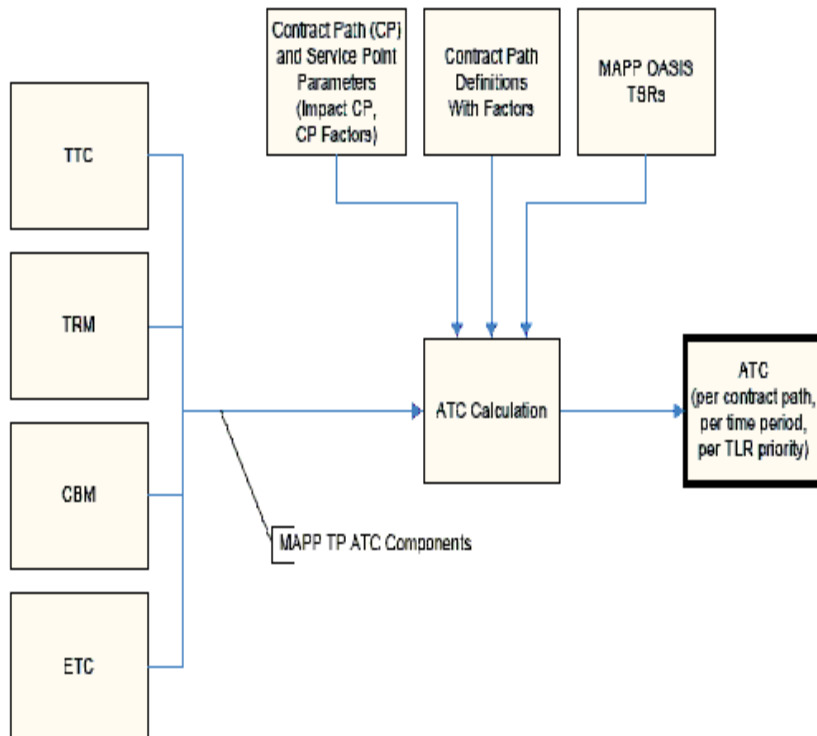
in the Congestion Management Process described in the Seams Agreement.

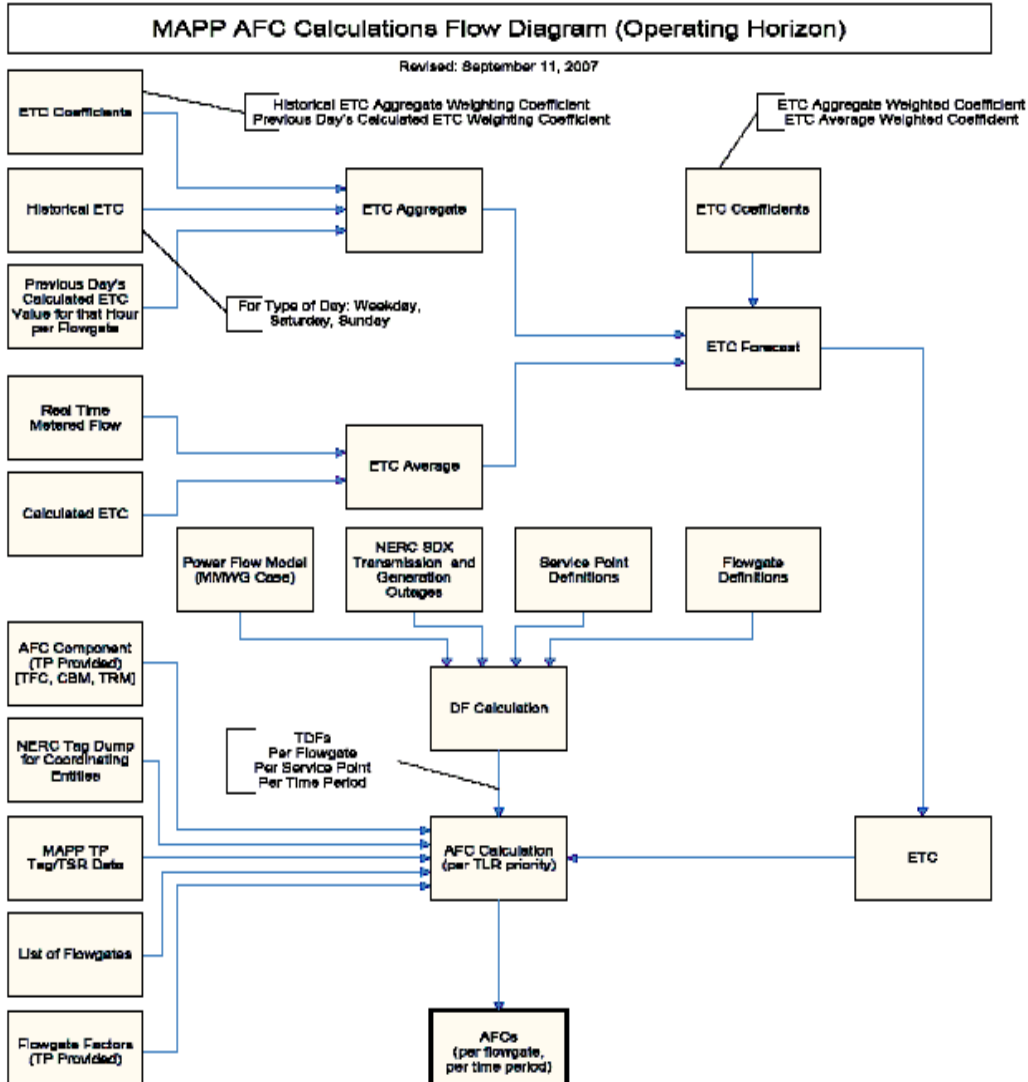
- As discussed in the response to 3(b)(iii), MAPP downloads OASIS reservations from the Midwest ISO, PJM and SPP OASIS nodes. MAPP includes these reservations in its calculation of point-to-point transmission service request impacts for MAPP Transmission Provider flowgates.
- As discussed in the response to 3(b)(iv), MAPP and the Midwest ISO have agreed to take into account the roll-over rights of the other party.
- As discussed in the response to 3(c)(ii), the MAPP region also calculates Available Share of Total Flowgate Capability ("ASTFC"). The calculation of ASTFC is in accordance with the regional process of allocation of flowgate capability between MAPP and MISO (as well as between other Reciprocal Entities such as PJM, SPP, and TVA).
- The Transmission Provider coordinates its calculation of TTC with neighboring systems such that the appropriate facility ratings of the tie-lines are used for setting the Control Area to Control Area contract path TTC. For flowgates that involve tie-lines with other entities, UGPR utilizes the appropriate facility ratings in the determining the flowgate TFC.



MAPP ATC Calculations Flow Diagram (Planning Horizon)

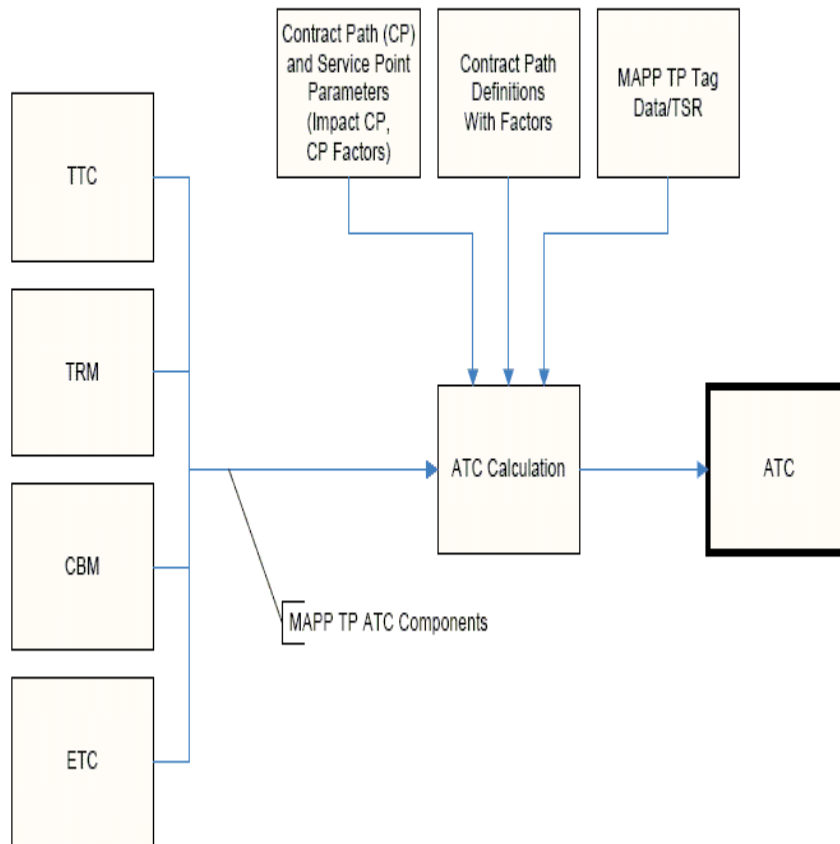
Revised: September 11, 2007





MAPP ATC Calculations Flow Diagram (Operating Horizon)

Revised: September 11, 2007



Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Methodology for, Completing a System Impact Study, 2.0.0, A

Record Narrative Name: Methodology for Completing a System Impact Study
The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Sections 4 and 5 of

Tariff Record ID: 3747

Tariff Record Collation Value: 331000 Tariff Record Parent Identifier: 3746

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

Methodology for Completing a System Impact Study

The Transmission Provider will assess the capability of the Transmission System to provide the service requested using the criteria and process for this assessment as detailed in Sections 4 and 5 of FERC Form 715 submitted to the Commission on behalf of the Transmission Provider by the Western Electricity Coordinating Council (WECC), in those instances where the Transmission Provider is a member of WECC or successor entity (Colorado River Storage Project, Desert

Southwest Region, Rocky Mountain Region, and Sierra Nevada Region). The Transmission Provider will use the Southwest Power Pool, Inc. (SPP) System Impact Study methodology, if necessary, when the Transmission Provider is a transmission owning member of SPP (Upper Great Plains Region).

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 Index of, Point-To-Point Transmission Service Customers, 2.0.0, A
 Record Narative Name: Index of Point-To-Point Transmission Service Customers Customer
 Date of Service Agreement
 Tariff Record ID: 3749
 Tariff Record Collation Value: 333000 Tariff Record Parent Identifier: 3748
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

(Region)

Index of Point-To-Point Transmission Service Customers

Customer	Date of Service Agreement
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(Information is posted on the Transmission Provider’s Regional Office Open Access Same-Time Information System.)

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 1.0, This Service Agreement, dated as of ..., 2.0.0, A
 Record Narative Name: 1.0 This Service Agreement, dated as of , is entered into, by and between the Region of Western Area Power Administration Transmission Provider, and Transmission Customer, each of whom are
 Tariff Record ID: 3752
 Tariff Record Collation Value: 336000 Tariff Record Parent Identifier: 3751
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

1.0 This Service Agreement, dated as of _____, is entered into, by and between the (Region) of Western Area Power Administration (Transmission Provider), and _____ (Transmission Customer), each of whom are sometimes hereinafter individually called Party and both are sometimes hereinafter collectively called the Parties. For purposes of this Service Agreement, the Transmission Provider's Transmission Systems consist of the applicable facilities described in Attachment K to the Tariff. The Transmission Provider may revise charges or losses for Network Integration Transmission Service provided under this Service Agreement pursuant to applicable Federal Laws, regulations and policies upon written notice to the Transmission Customer.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 Index of Network, Integration Customers, 2.0.0, A
 Record Narative Name: Index of Network Integration Customers Customer Date of
 Service Agreement
 Tariff Record ID: 3784
 Tariff Record Collation Value: 368000 Tariff Record Parent Identifier: 3783
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

(Region)

Index of Network Integration Customers

Customer

Date of Service Agreement

(Information is posted on the Transmission Provider's Regional Office Open Access Same-Time Information System.)

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Authorities and, Obligations, 3.0.0, A

Record Narrative Name: Authorities and Obligations Western was established on December 21, 1977, pursuant to Section 302 of the Department of Energy DOE Organization Act, Public Law 95-91, dated August 4, 1977. By law, the Bureau of Reclamation provides Federal power

Tariff Record ID: 3806

Tariff Record Collation Value: 390000 Tariff Record Parent Identifier: 3805

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

Authorities and Obligations

Western was established on December 21, 1977, pursuant to Section 302 of the Department of Energy (DOE) Organization Act, Public Law 95-91, dated August 4, 1977. By law, the Bureau of Reclamation provides Federal power resources to its project use customers. By law, Western markets Federal power resources to its electric service customers. Western's transmission system was built primarily to enable the delivery of Federal power to satisfy these obligations.

Western is not a public utility under Sections 205 and 206 of the Federal Power Act and is not specifically subject to the requirements of the Commission's Final Orders related to Open Access Transmission or Generator Interconnections. Western is a transmitting utility subject to Sections 210-213 of the Federal Power Act. The Department of Energy has issued a Power Marketing Administration Open Access Transmission Policy that supports the intent of the Commission's Notice of Proposed Rulemaking for Open Access Transmission.

Use of transmission facilities that Western owns, operates, or to which it has contract rights for delivery of Federal long-term firm capacity and energy to project use and electric service customers is a Western responsibility under the terms and conditions of marketing criteria and electric service contracts implementing statutory obligations to market Federal power. This is complementary with the provisions of the Tariff. Transmission service provided by Western under the Tariff is solely for the use of Available Transfer Capability (ATC) in excess of the capability Western requires for the delivery of long-term firm capacity and energy to project use and electric service customers of the Federal government. Western will offer to provide others transmission service equivalent to the service Western provides itself.

Western's Regional Offices' reserved transmission capacity shall therefore include capacity sufficient to deliver Federal power resources to customers of the Federal government. Nothing in this Tariff shall alter, amend or abridge the statutory or contractual obligations of Western to market and deliver Federal power resources and to repay the Federal investment in such

projects. The Tariff provides for transmission service, including each Regional Office's use of those facilities for Third Party Sales, on the unused capability of transmission facilities under the jurisdiction or control of each of Western's Regional Offices not required for the delivery of long-term firm capacity and energy to customers of the Federal government in a manner consistent with the spirit and intent of the Commission's Order Nos. 888 and 890, et seq.

Western has prepared this Tariff and Service Agreements to provide transmission service comparable to that required of public utilities by the Commission's open access orders, and to implement those orders consistent with the DOE Policy. An entity desiring transmission service from Western must comply with the application procedures outlined herein. The review and approval requirements detailed herein will apply to all requesting parties. Western will perform the necessary studies or assessments for evaluating requests for transmission service as set forth in the Tariff. Any facility construction or interconnection necessary to provide transmission service will be subject to Western's General Requirements for Interconnection which are available upon request.

Western will provide Firm and Non-Firm Point-to-Point Transmission Service and Network Integration Transmission Service under this Tariff. The specific terms and conditions for providing transmission service to a customer will be included in a Service Agreement. Operating Procedures, ATC, and System Impact Methodology are defined in the Attachments. Western's rates are developed under separate public processes pursuant to applicable Federal law and regulations. Therefore, rates and charges for specific services will be set forth in the appropriate Regional rate schedules attached to each Service Agreement.

Western has marketed the maximum practical amount of power from each of its projects, leaving little or no flexibility for provision of additional power services. Changes in water conditions frequently affect the ability of hydroelectric projects to meet obligations on a short-term basis. The unique characteristics of the hydro resource, Western's marketing plans and the limitations of the resource due to changing water conditions limit Western's ability to provide generation-related services including Ancillary Services and redispatching using Federal hydro resources.

Western operates in 15 central and western states encompassing a geographic area of 3.38 million-square-kilometers (1.3 million-square-miles). Western has four Customer Service Regional Offices, the Desert Southwest Region, Rocky Mountain Region, Sierra Nevada Region, Upper Great Plains Region, and the Colorado River Storage Project Management Center. Each office is referred to in the Tariff as Regional Office. The addresses for submitting applications to Western's Regional Offices by mail, as well as the respective OASIS links, are available on Western's web site at www.wapa.gov.

Colorado River Storage Project Management Center

The Colorado River Storage Project Management Center (CRSP MC), located in Salt Lake City, Utah, markets power from three Federal multipurpose water development projects; the Colorado River Storage Project (CRSP), the Collbran Project, and the Rio Grande Project, collectively called the Integrated Projects. The hydroelectric facilities associated with these projects include:

Flaming Gorge and Fontenelle powerplants on the Green River; Blue Mesa, Morrow Point, and Crystal powerplants on the Gunnison River; Upper and Lower Molina powerplants of the Collbran Project in Western Colorado; the largest of the CRSP facilities, Glen Canyon powerplant on the Colorado River; and Elephant Butte powerplant, part of the Rio Grande Project on the Rio Grande River in South Central New Mexico; McPhee powerplant and Towaoc Canal on the Dolores River in southwestern Colorado. The CRSP transmission system consists of high-voltage transmission lines and attendant facilities extending from Arizona, into New Mexico, through Colorado, and into portions of Utah and Wyoming. The CRSP MC uses the CRSP transmission system to meet its commitments to its Federal customers, point-to-point transmission customers, and exchange power contractors. The CRSP MC must, therefore, reserve sufficient transmission capacity to meet these long-term obligations. The CRSP MC also needs to reserve capacity in its transmission system to enable it to deliver power produced by the Integrated Projects hydroelectric powerplants during periods when flood control water releases produce greater than normal generation levels.

The CRSP MC office, located in Salt Lake City, is a member of the Western Electricity Coordinating Council (WECC).

The CRSP MC does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff from its Integrated Projects hydroelectric resources, including, but not limited to, certain Ancillary Services.

Desert Southwest Region

The Desert Southwest Region (DSR) manages transmission facilities in the states of Arizona, California, and Nevada. The DSR transmission facilities are interconnected with transmission facilities of several non-Federal entities and its system is operated in the WECC. For the purpose of implementing this Tariff the transmission facilities of the Parker-Davis Projects and the Pacific Northwest-Pacific Southwest Intertie Project (Pacific AC Intertie) will be utilized. For the purpose of implementing this Tariff, references in the Tariff to "deliveries of long-term firm capacity and energy" include the deliveries of Boulder Canyon Project electric service over the DSR Transmission System. DSR manages a control area operations center through its Desert Southwest Regional Office located in Phoenix, Arizona.

Rocky Mountain Region

The Rocky Mountain Region (RMR) manages transmission facilities in the states of Colorado, Wyoming, and Nebraska, which were constructed for the primary purpose of marketing power from the Pick-Sloan Missouri Basin Program - Western Division. The RMR office and Control Area operations center is located in Loveland, Colorado and its system is operated in the WECC.

For RMR, the rates for Point-to-Point and Network Integration Transmission Service charged pursuant to the Tariff will be calculated using the costs of the transmission facilities of the Pick-Sloan Missouri Basin Program - Western Division. The rates for the Ancillary Services will be calculated using the costs of the generation facilities of the CRSP within the RMR control area, Pick-Sloan Missouri Basin Program - Western Division and the Fryingpan-Arkansas

Project.

Sierra Nevada Region

The Sierra Nevada Customer Service Region (SNR), located in Folsom, California, manages the Central Valley Project (CVP) transmission facilities in the State of California. These facilities were constructed for the primary purpose of marketing power resources from the CVP. SNR also has ownership rights to capacity in three multi-party transmission systems, the Pacific AC Intertie, the California-Oregon Transmission Project (COTP), and the Los Banos-Gates Transmission Upgrade Project (Path 15). Congress authorized SNR's participation in the Pacific AC Intertie for the purpose of importing power from the Pacific Northwest. COTP rights were acquired pursuant to Public Laws 98-360 and 99-88, primarily for the purpose of delivering power to the United States Department of Energy Laboratories and wildlife refuges in California. Path 15 upgrade rights were also acquired pursuant to Public Laws 98-360 and 99-88. Long-term use of the Pacific AC Intertie, CVP and COTP by third parties is restricted under existing contracts. SNR has turned over operational control of its Path 15 upgrade rights to the California Independent System Operator (CAISO). Therefore, the CAISO, or its successor will offer transmission service on Path 15. SNR is a member of the WECC.

The SNR does not operate a Control Area and as such may be unable to provide some or all of the services under the Tariff, including, but not limited to, certain Ancillary Services.

Upper Great Plains Region

The Upper Great Plains Region (UGPR) manages transmission facilities in the states of Montana, North Dakota, South Dakota, Nebraska, Minnesota, and Iowa which were constructed for the primary purpose of marketing power from the Pick-Sloan Missouri Basin Program - Eastern Division. The UGPR office is located in Billings, Montana. The UGPR manages a Control Area operations center in Watertown, South Dakota. The eastern portion of the UGPR system is operated in the Midwest Reliability Organization (MRO) region, or successor entity. The western portion of the system is operated in the WECC region.

UGPR joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). Ancillary services offered by UGPR as a Balancing Authority operator are also solely available under the SPP Tariff.

Any Transmission Customer taking service under this Tariff shall be subject to a Stranded Cost Charge payable to UGPR if such service is used for the transmission of power or energy that replaces wholly or in part, power or energy supplied by Western.

Stranded costs will be recovered only from a Transmission Customer who obtains transmission service under access rights granted through the Transmission Provider's compliance tariff developed pursuant to the Commission's Final Order Nos. 888 and 888-A and other applicable Commission Orders and causes UGPR to incur stranded costs. Stranded costs will be recovered

through the terms and conditions of a separate contract entered into by UGPRecord Content

Description, Tariff Record Title, Record Version Number, Option Code:

ARTICLE 1, Definitions, 2.0.0, A

Record Narrative Name: Article 1. Definitions

Tariff Record ID: 3902

Tariff Record Collation Value: 486000 Tariff Record Parent Identifier: 3900

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

Article 1. Definitions

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

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

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

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

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

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

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

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

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

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

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

Interconnection Agreement.

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

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

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

Commercial Operation 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.

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 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, 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.

Variable Energy Resource shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.1, Interconnection Product Options, 2.0.0, A

Record Narrative Name: 4.1 Interconnection Product Options. Interconnection Customer has selected the following checked type of Interconnection Service: 4.1.1 Energy Resource Interconnection Service. check if selected 4.1.1.1 The Product.

Energy Resource

Tariff Record ID: 3912

Tariff Record Collation Value: 496000 Tariff Record Parent Identifier: 3911

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

4.1 Interconnection Product Options. Interconnection Customer has selected the following (checked) type of Interconnection Service:

4.1.1 Energy Resource Interconnection Service. (check if selected)

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 Appendix 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. _____ (check if selected)

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 Appendix 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.4, Provision of Data from a Variable Energy Resource, 0.0.0, A

Record Narrative Name: 8.4 Provision of Data from a Variable Energy Resource

Tariff Record ID: 7031

Tariff Record Collation Value: 535500 Tariff Record Parent Identifier: 3948

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: NEW

Record Content Type: 1

Associated Filing Identifier:

8.4 Provision of Data from a Variable Energy Resource. The Interconnection Customer whose Generating Facility is a Variable Energy Resource shall provide meteorological and forced outage data to the Transmission Provider to the extent necessary for the Transmission

Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The Interconnection Customer with a Variable Energy Resource having wind as the energy source, at a minimum, will be required to provide the Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. The Interconnection Customer with a Variable Energy Resource having solar as the energy source, at a minimum, will be required to provide the Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. The Transmission Provider and Interconnection Customer whose Generating Facility is a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. The Interconnection Customer whose Generating Facility is a Variable Energy Resource also shall submit data to the Transmission Provider regarding all forced outages to the extent necessary for the Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by the Interconnection Customer to the Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such requirements for meteorological and forced outage data are set forth in Appendix C, Interconnection Details, of this LGIA, as they may change from time to time.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

1.1, Applicability, 2.0.0, A

Record Narrative Name: 1.1 Applicability1.1.1A request to interconnect a Small Generating Facility shall be evaluated under the section 3 Study Process.1.1.2Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the

Tariff Record ID: 4065

Tariff Record Collation Value: 649000 Tariff Record Parent Identifier: 4064

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

1.1 Applicability

1.1.1 A request to interconnect a Small Generating Facility shall be evaluated under the section 3 Study Process. If the Interconnection Customer wishes to interconnect its Small Generating Facility using Network Resource Interconnection Service, it must do so under the Standard Large Generator Interconnection Procedures and execute the Standard Large Generator Interconnection Agreement.

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 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 use Reasonable Efforts to respond within 15 Business Days.

1.1.4 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 with electric systems to comply with the recommendations offered by the National Infrastructure Advisory Council or its successor, and with 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.

1.1.5 References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

1.2, Pre-Application, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4066

Tariff Record Collation Value: 650000 Tariff Record Parent Identifier: 4064

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

1.2 Pre-Application

1.2.1 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.

1.2.2 In addition to the information described in section 1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of \$300 for a pre-application report on a proposed project at a specific site. The Transmission Provider shall provide the pre-application data described in section 1.2.3 to the Interconnection Customer within 20 Business Days of receipt of the completed request form and payment of the \$300 fee. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system. The written pre-application report request form shall include the information in sections 1.2.2.1 through 1.2.2.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

- 1.2.2.1 Project contact information, including name, address, phone number, and email address.
 - 1.2.2.2 Project location (street address with nearby cross streets and town)
 - 1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.
 - 1.2.2.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)
 - 1.2.2.5 Size (alternating current kW)
 - 1.2.2.6 Single or three phase generator configuration
 - 1.2.2.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)
 - 1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.
- 1.2.3 Using the information provided in the pre-application report request form in section 1.2.2, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 1.2.4, the pre-application report will include the following information:
- 1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.
 - 1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.
 - 1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.
 - 1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
 - 1.2.3.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

1.2.3.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load and absolute minimum load, when available. Solar photovoltaic generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.10, Capacity of the Small Generating Facility, 2.0.0, A

Record Narrative Name: 4.10 Capacity of the Small Generating Facility4.10.1If 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

Tariff Record ID: 4089

Tariff Record Collation Value: 673000 Tariff Record Parent Identifier: 4079

Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

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 capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider's system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system without such limitations. Furthermore, nothing in this section shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

ATTACHMENT 1, Glossary of Terms, 2.0.0, A

Record Narrative Name: Attachment 1 Glossary of Terms Affected System An electric system other than the Transmission Providers Transmission System that may be affected by the proposed interconnection. Applicable Laws and Regulations All duly promulgated applicable

Tariff Record ID: 4090

Tariff Record Collation Value: 674000 Tariff Record Parent Identifier: 4063

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

Attachment 1

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.

Confidential Information - 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.

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.

FERC - The Federal Energy Regulatory Commission or its successor.

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 Interconnection Customer, Transmission 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.

Interconnection Service - The service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Small 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 Small Generator Interconnection Agreement and, if applicable, the Transmission Provider's Tariff.

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 Resource - 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 - An Interconnection Service that allows the Interconnection Customer to integrate its Small Generating Facility with the Transmission Provider's 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 - 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.

Notice of Dispute - A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

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.

Reasonable Efforts - With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Procedures, 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 and/or storage for later injection of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and 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.

Tariff - The Transmission Provider or Affected System's Tariff through which open access transmission service and interconnection service are offered, 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.0, Once the facilities study is completed, a facilities ..., 2.0.0, A

Record Narrative Name: 8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to the Interconnection Customer. The Transmission Provider shall use Reasonable Efforts to complete the facilities study and transmit the

Tariff Record ID: 4155

Tariff Record Collation Value: 739000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

8.0 Once the facilities study is completed, a draft facilities study report shall be prepared and transmitted to the Interconnection Customer. The Transmission Provider shall use Reasonable Efforts to complete the facilities study and transmit the draft facilities study report to the Interconnection Customer within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
9.0, Interconnection Customer may, within 30 Calendar Days..., 0.0.0, A
Record Narrative Name: 9.0 Interconnection Customer may, within 30 Calendar Days...
Tariff Record ID: 7037
Tariff Record Collation Value: 739350 Tariff Record Parent Identifier: 4415
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

9.0 Interconnection Customer may, within 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 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 4.5 of the standard Small Generator Interconnection Procedures.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
10.0, Within ten Business Days of providing a draft..., 0.0.0, A
Record Narrative Name: 10.0 Within ten Business Days of providing a draft...
Tariff Record ID: 7038
Tariff Record Collation Value: 739650 Tariff Record Parent Identifier: 4415
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

10.0 Within ten 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
11.0, Any study fees shall be based on the Transmission ..., 2.0.0, A
Record Narrative Name: 11.0 Any study fees shall be based on the Transmission Providers actual costs and will be invoiced to the Interconnection Customer along with a summary of professional time.
Tariff Record ID: 4156
Tariff Record Collation Value: 740000 Tariff Record Parent Identifier: 4415
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1

Associated Filing Identifier:

11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer along with a summary of professional time.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

12.0, The Interconnection Customer must pay in advance ..., 2.0.0, A

Record Narrative Name: 12.0 The Interconnection Customer must pay in advance any study costs that exceed the deposit without interest within 15 calendar days on receipt of the invoice or resolution of any dispute. The Transmission Provider shall not be obligated to

Tariff Record ID: 4157

Tariff Record Collation Value: 741000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

12.0 The Interconnection Customer must pay in advance any study costs that exceed the deposit without interest within 15 calendar days on receipt of the invoice or resolution of any dispute. The Transmission Provider shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed invoiced fees in compliance herewith. If the deposit exceeds the invoiced fees, the Transmission Provider shall use Reasonable Efforts to refund such excess within 30 calendar days of the invoice without interest.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.0, Governing Law, Regulatory Authority, and Rules, 2.0.0, A

Record Narrative Name: 13.0 Governing Law, Regulatory Authority, and RulesThe validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by Federal law or the laws of the state where the Point of Interconnection is located,

Tariff Record ID: 4158

Tariff Record Collation Value: 742000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 Federal law or the laws of the state where the Point of Interconnection is located, as applicable. 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.0, Amendment, 2.0.0, A

Record Narrative Name: 14.0 AmendmentThe Parties may amend this Agreement by a written instrument duly executed by both Parties.

Tariff Record ID: 4159

Tariff Record Collation Value: 743000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

14.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

15.0, No Third-Party Beneficiaries, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4160

Tariff Record Collation Value: 744000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

16.0, Waiver, 2.0.0, A

Record Narrative Name: 16.0 Waiver

Tariff Record ID: 4161

Tariff Record Collation Value: 745000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

16.0 Waiver

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

16.1, The failure of a Party to this Agreement to insist ..., 2.0.0, A

Record Narrative Name: 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.

Tariff Record ID: 4162

Tariff Record Collation Value: 746000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

16.2, Any waiver at any time by either Party of its ..., 2.0.0, A

Record Narrative Name: 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.

Tariff Record ID: 4163

Tariff Record Collation Value: 747000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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 the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

17.0, Multiple Counterparts, 2.0.0, A

Record Narrative Name: 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.

Tariff Record ID: 4164

Tariff Record Collation Value: 748000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

18.0, No Partnership, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4165

Tariff Record Collation Value: 749000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

19.0, Severability, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4166

Tariff Record Collation Value: 750000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

20.0, Subcontractors, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4167

Tariff Record Collation Value: 751000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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; provided further, that the Transmission Provider shall be liable to the Interconnection Customer for the performance of the Transmission Provider's subcontractors only in accordance with the Federal Tort Claims Act provision set forth in Attachment J of the Transmission Provider's Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

20.1, The creation of any subcontract relationship shall ..., 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4168

Tariff Record Collation Value: 752000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

20.2, The obligations under this article will not be ..., 2.0.0, A

Record Narrative Name: 20.2 The obligations under this article will not be limited in any way by any limitation of subcontractors insurance. IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on

Tariff Record ID: 4169

Tariff Record Collation Value: 753000 Tariff Record Parent Identifier: 4415

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

20.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

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.

WESTERN AREA POWER ADMINISTRATION

By _____

Title _____

Address _____

Date _____

INTERCONNECTION CUSTOMER

By _____

Title _____

Address _____

Date _____

(SEAL)

Attest:

By _____

Title _____

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

1.5, Responsibilities of the Parties, 2.0.0, A

Record Narrative Name: 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

Tariff Record ID: 4175

Tariff Record Collation Value: 759000 Tariff Record Parent Identifier: 4416

Proposed Date: 2019-06-03

Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

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.

1.5.4.1 The Interconnection Customer shall submit initial specifications for its Interconnection Facilities, including system protection facilities, to the Transmission Provider at least 180 calendar days prior to the initial synchronization date, and shall also submit final specifications for review and comment at least 90 calendar days prior to the initial synchronization date. The Transmission Provider shall review such specifications to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, operational control, and safety requirements of the Transmission Provider, and shall use Reasonable Efforts to comment on such specifications within 30 calendar days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

1.5.4.2 The Transmission Provider's review of the 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 Small Generating Facility, or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Transmission Provider, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, operational control, and safety requirements of the Transmission Provider.

1.5.4.3 Within 120 calendar days after the commercial operation date of the Small Generating Facility, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Transmission Provider "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities, such as: a one-line diagram, a site plan showing the Small Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Small Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Small Generating Facility. The Interconnection Customer shall provide the Transmission Provider specifications for the excitation system, automatic voltage regulator, Small Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

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.

1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to article 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a

Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term “voltage ride through” as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.3, Termination, 2.0.0, A

Record Narrative Name: 3.3 Termination No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the

Tariff Record ID: 4187

Tariff Record Collation Value: 771000 Tariff Record Parent Identifier: 4184

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

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 The Transmission Provider may terminate this Agreement if the Small Generating Facility has ceased operation for three consecutive years, beginning on the last date of operation for the Small Generating Facility, after giving the Interconnection Customer 20 Business Days advance written notice.

3.3.3 Either Party may terminate this Agreement after Default pursuant to article 7.6.

3.3.4 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.

3.3.5 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.6 The provisions of this article shall survive termination or expiration of this Agreement.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

ATTACHMENT 1, Glossary of Terms, 2.0.0, A

Record Narrative Name: ATTACHMENT 1 Glossary of Terms

Tariff Record ID: 4417

Tariff Record Collation Value: 830100 Tariff Record Parent Identifier: 4439
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

Attachment 1

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.

Confidential Information - 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.

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.

Effective Date - The date on which the Standard Small Generator Interconnection Agreement becomes effective upon execution by the Parties.

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

FERC - The Federal Energy Regulatory Commission or its successor.

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.

Hazardous Substances - 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.

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.

Notice of Dispute - A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

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 and/or storage for later injection of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and 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 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.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

North American Energy, Standards Board Wholesale Electric Quadrant Standards, 3.0.0, A

Record Narrative Name: North American Energy Standards Board Wholesale Electric Quadrant Standards
The following North American Energy Standards Board Wholesale Electric Quadrant standards are incorporated by reference into Transmission Providers Tariff as described in

Tariff Record ID: 4248

Tariff Record Collation Value: 832000 Tariff Record Parent Identifier: 4247

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

North American Energy Standards Board Wholesale Electric Quadrant Standards

The following North American Energy Standards Board Wholesale Electric Quadrant standards are incorporated by reference into Transmission Provider's Tariff as described in section 4.2 therein:

- WEQ-000, Abbreviations, Acronyms, and Definition of Terms, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Oct. 4, 2012, Nov. 28, 2012 and Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);
- WEQ-001, Open Access Same-Time Information System (OASIS), OASIS Version 2.0, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013) excluding Standards 001-9.5, 001-10.5, 001-14.1.3, 001-15.1.2 and 001-106.2.5;
- WEQ-002, Open Access Same-Time Information System (OASIS) Business Practice Standards and Communication Protocols (S&CP), OASIS Version 2.0, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Nov. 28, 2012 and Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);
- WEQ-003, Open Access Same-Time Information System (OASIS) Data Dictionary Business Practice Standards, OASIS Version 2.0, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);
- WEQ-004, Coordinate Interchange, WEQ Version 003, July 31, 2012 (with Final Action ratified on December 28, 2012);
- WEQ-005, Area Control Error (ACE) Equation Special Cases, WEQ Version 003, July 31, 2012;
- WEQ-006, Manual Time Error Correction, WEQ Version 003, July 31, 2012;
- WEQ-007, Inadvertent Interchange Payback, WEQ Version 003, July 31, 2012;

- WEQ-008, Transmission Loading Relief – Eastern Interconnection, WEQ Version 003, July 31, 2012 (with minor corrections applied November 28, 2012);
- WEQ-011, Gas/Electric Coordination, WEQ Version 003, July 31, 2012;
- WEQ-012, Public Key Infrastructure (PKI), WEQ Version 003, July 31, 2012 (as modified by NAESB final actions ratified on Oct. 4, 2012);
- WEQ-013, Open Access Same-Time Information System (OASIS) Implementation Guide, OASIS Version 2.0, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);
- WEQ-015, Measurement and Verification of Wholesale Electricity Demand Response, WEQ Version 003, July 31, 2012; and
- WEQ-021, Measurement and Verification of Energy Efficiency Products, WEQ Version 003, July 31, 2012.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

PART I, Upper Great Plains Region, 3.0.0, A

Record Narrative Name: PART I Upper Great Plains Region

Tariff Record ID: 4377

Tariff Record Collation Value: 836500 Tariff Record Parent Identifier: 4251

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

PART I - Upper Great Plains Region

Western's Upper Great Plains Region (UGPR) joined the Southwest Power Pool, Inc. (SPP) as a transmission owner and transferred functional control of all of its eligible transmission facilities to SPP on October 1, 2015. Transmission service over those UGPR transmission facilities is available solely under the SPP Open Access Transmission Tariff (SPP Tariff). SPP is the Transmission Provider for UGPR's transmission facilities under the SPP Tariff and the UGPR transmission system is included in the SPP Transmission Planning Process under Attachment O of the SPP Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

1.0, Introduction to the MAPP Sub-regional Planning Process, 2.0.0, A

Record Narrative Name: 1.0 Introduction to the MAPP Sub-regional Planning ProcessThe MAPP Regional Plan integrates the transmission plans developed by individual MAPP Members through the RTCs Transmission Planning Subcommittee TPSC and by subregional planning

Tariff Record ID: 4253

Tariff Record Collation Value: 837000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

1.0 Introduction to the MAPP Sub-regional Planning Process

The MAPP Regional Plan integrates the transmission plans developed by individual MAPP Members through the RTC's Transmission Planning Subcommittee ("TPSC") and by subregional

planning groups ("SPGs"), in order to meet the transmission needs in the MAPP Region of Members and interested parties on a consistent, reliable, environmentally acceptable and economic basis. The MAPP Regional Plan shall be consistent with applicable standards and requirements established by the MAPP Members Reliability Criteria and Study Procedures Manual and by the North American Electric Reliability Council ("NERC") and Midwest Reliability Organization ("MRO") Planning Standards.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.0, Definitions, 2.0.0, A

Record Narrative Name: 2.0 Definitions

Tariff Record ID: 4254

Tariff Record Collation Value: 838000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.0 Definitions

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.1, Host Transmission Owner ("Host TO"), 2.0.0, A

Record Narrative Name: 2.1 Host Transmission Owner Host TO. The transmission owner on whose transmission system a proposed Economic Network Upgrade is to be located. The Host TO shall conduct all related project management activities associated with the Economic

Tariff Record ID: 4255

Tariff Record Collation Value: 839000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.1 Host Transmission Owner ("Host TO"). The transmission owner on whose transmission system a proposed Economic Network Upgrade is to be located. The Host TO shall conduct all related project management activities associated with the Economic Network Upgrade. If facility upgrades are required on more than one transmission owner's transmission system for a given set of transmission facilities comprising an Economic Network Upgrade, the affected Host TOs shall provide a single joint Facilities Agreement to the Subscription Rights buyers.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.2, Affected Generator, 2.0.0, A

Record Narrative Name: 2.2 Affected Generator. A generator owner whose existing or proposed generating units is directly affected by a proposed Economic Network Upgrade as demonstrated in the study analysis performed in conjunction with Section 11, Economic Planning

Tariff Record ID: 4256

Tariff Record Collation Value: 840000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.2 Affected Generator. A generator owner whose existing or proposed generating unit(s) is directly affected by a proposed Economic Network Upgrade as demonstrated in the study analysis performed in conjunction with Section 11, Economic Planning Studies of this Attachment P.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.3, Affected System, 2.0.0, A

Record Narrative Name: 2.3 Affected System. The transmission owners system, including the Host TO, that is affected by the allocations in an economic benefits study performed by the MAPP RTC in accordance with Section 11 of this Attachment P.

Tariff Record ID: 4257
Tariff Record Collation Value: 841000 Tariff Record Parent Identifier: 4377
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

2.3 Affected System. The transmission owner's system, including the Host TO, that is affected by the allocations in an economic benefits study performed by the MAPP RTC in accordance with Section 11 of this Attachment P.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.4, Affected System Operator, 2.0.0, A

Record Narrative Name: 2.4 Affected System Operator. The transmission owner/operator that operates an Affected System.

Tariff Record ID: 4258

Tariff Record Collation Value: 842000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.4 Affected System Operator. The transmission owner/operator that operates an Affected System.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.5, Economic Network Upgrade, 2.0.0, A

Record Narrative Name: 2.5 Economic Network Upgrade. A project, or set of projects, that is designed to relieve a constrained facility by providing additional transmission capacity, and which has been identified to be a local economically beneficial project

Tariff Record ID: 4259

Tariff Record Collation Value: 843000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.5 Economic Network Upgrade. A project, or set of projects, that is designed to relieve a constrained facility by providing additional transmission capacity, and which has been identified to be: (a) a local economically beneficial project within a single transmission owner's system; or (b) an economically beneficial project classified as a Regionally Beneficial Project in the MAPP Plan, and defined by an Economic Planning Study authorized by the MAPP RTC in Section 11 of this Attachment P as having project benefits exceeding project costs.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.6, Physical Transmission Rights, 2.0.0, A

Record Narrative Name: 2.6 Physical Transmission Rights. Rights held by a party to a Facilities Agreement to schedule transmission service across a defined portion of a NERC flowgate or other transmission facility and/or to collect revenue credits, if applicable,

Tariff Record ID: 4260

Tariff Record Collation Value: 844000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.6 Physical Transmission Rights. Rights held by a party to a Facilities Agreement to schedule transmission service across a defined portion of a NERC flowgate or other transmission facility and/or to collect revenue credits, if applicable, against transmission service charges. Physical Transmission Rights will exist for the life of the facility if the holder is an owner, or for the term

stated in the Facilities Agreement. The facility's capabilities that are to be allocated as Physical Transmission Rights, shall be consistent with the owner's or joint-owners' methodologies for determining facility ratings, system operating limits and, if applicable, TTC and ATC in accordance with NERC standards.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.7, Renewable Energy Zone, 2.0.0, A

Record Narrative Name: 2.7 Renewable Energy Zone. A geographic region recognized by the TPSC that has limited or constrained ability to transport electric energy from generating units that had such units been in production they would have utilized renewable resources

Tariff Record ID: 4261

Tariff Record Collation Value: 845000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.7 Renewable Energy Zone. A geographic region recognized by the TPSC that has limited or constrained ability to transport electric energy from generating units that had such units been in production they would have utilized renewable resources for the production of electric energy.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.8, Subscription Rights, 2.0.0, A

Record Narrative Name: 2.8 Subscription Rights. Contractual rights to use the transmission capacity associated with an Economic Network Upgrade defined in a Facilities Agreement with the Host TO in exchange for payments to the Host TO for facility charges and

Tariff Record ID: 4262

Tariff Record Collation Value: 846000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.8 Subscription Rights. Contractual rights to use the transmission capacity associated with an Economic Network Upgrade defined in a Facilities Agreement with the Host TO in exchange for payments to the Host TO for facility charges and continuing operation and maintenance charges.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

2.9, Other Defined Terms, 2.0.0, A

Record Narrative Name: 2.9 Other Defined Terms. All other terms will have the meanings set forth in the MAPP Restated Agreement, the TPSC procedures, and the SPG guidelines.

Tariff Record ID: 4263

Tariff Record Collation Value: 847000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

2.9 Other Defined Terms. All other terms will have the meanings set forth in the MAPP Restated Agreement, the TPSC procedures, and the SPG guidelines.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.0, MAPP Regional Transmission Planning, 2.0.0, A

Record Narrative Name: 3.0 MAPP Regional Transmission Planning

Tariff Record ID: 4264

Tariff Record Collation Value: 848000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

3.0 MAPP Regional Transmission Planning

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.1, Member Plans, 2.0.0, A

Record Narrative Name: 3.1 Member Plans. As part of the MAPP regional transmission planning process, each RTC Member that has transmission facilities under MAPP's Restated Agreement shall prepare and maintain a plan for its transmission facilities Member Plan.

Tariff Record ID: 4265

Tariff Record Collation Value: 849000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

3.1 Member Plans. As part of the MAPP regional transmission planning process, each RTC Member that has transmission facilities under MAPP's Restated Agreement shall prepare and maintain a plan for its transmission facilities ("Member Plan"). Such Member Plans shall conform to applicable reliability standards and requirements, and to applicable methods and assessment practices and other transmission planning standards and requirements established by the RTC. Each Member Plan shall adhere to Local Transmission Planning Standards set forth in Section 13 of this Attachment P. Such plans shall take into account:

- (a) the RTC Member's current and anticipated requirements for transmission to provide all-requirements and partial requirements service and service to its end-use loads;
- (b) the current and anticipated requirements for transmission to provide network transmission service to those entities for which the RTC Member provides such service;
- (c) the RTC Member's other contractual and tariff obligations to provide firm transmission service;
- (d) any other contractual obligations of the RTC Member affecting the use of its transmission facilities;
- (e) any requirements for future transmission service of a Member or interested party communicated to the RTC Member under procedures, standards and requirements established by the RTC;
- (f) the coordination of the RTC Member's transmission plan with the transmission plans of neighboring systems, and in particular any coordination parameters or requirements identified by the relevant subregional working groups used by the RTC; and
- (g) the obligation of the RTC Member under FERC requirements, the MAPP Restated Agreement, and applicable standards and requirements established by the RTC to provide transmission service to other entities on a basis comparable to its own use of its transmission facilities.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.2, Availability of Plans and Information, 2.0.0, A

Record Narrative Name: 3.2 Availability of Plans and Information. The RTC Members transmission plans, along with the information on which the plans are based, shall be made available to the RTC on a regular basis as established by the RTC. Each RTC Member shall make

Tariff Record ID: 4266

Tariff Record Collation Value: 850000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CANCEL
 Record Content Type: 1
 Associated Filing Identifier:

3.2 Availability of Plans and Information. The RTC Members' transmission plans, along with the information on which the plans are based, shall be made available to the RTC on a regular basis as established by the RTC. Each RTC Member shall make its transmission plan available upon request to any other RTC Member, independent Regional Transmission Organization or relevant non-MAPP neighboring transmission owning utilities. Sufficient additional information should be made available to enable the requesting entity to perform planning analyses on the same basis as the RTC Member providing the information. Such information shall be provided in accordance with the MAPP Critical Energy Infrastructure Information ("CEII") policy and the Commission's Standards of Conduct regulations.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.3, Planning Procedures and Requirements, 2.0.0, A

Record Narrative Name: 3.3 Planning Procedures and Requirements. The RTC shall establish procedures and requirements for the communication to an RTC Member by Members and interested parties of their bona fide requirements for transmission service; bThe

Tariff Record ID: 4267

Tariff Record Collation Value: 851000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

3.3 Planning Procedures and Requirements. The RTC shall establish procedures and requirements for:

(a) The communication to an RTC Member by Members and interested parties of their bona fide requirements for transmission service;

(b) The utilization of SPGs for the coordination of RTC Members' transmission plans and the resolution of subregional transmission planning issues on an informal, collaborative basis, which working groups shall be open to any interested RTC Member or other interested party, and shall maintain such records as shall be required by the RTC;

(c) The incorporation of asserted bona fide requirements for transmission service into RTC Member, subregional, and regional transmission plans; and

(d) The development of integrated transmission plans by the subregional working groups, and the integration of the subregional plans into a transmission plan for the MAPP RTC Region.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

3.4, The MAPP Regional Plan, 2.0.0, A

Record Narrative Name: 3.4 The MAPP Regional Plan. No less often than biennially, the RTC shall develop and approve a coordinated transmission plan, including alternatives, for the ensuing 10 years, or other planning period specified by NERC, for all transmission

Tariff Record ID: 4268

Tariff Record Collation Value: 852000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

3.4 The MAPP Regional Plan. No less often than biennially, the RTC shall develop and approve a coordinated transmission plan, including alternatives, for the ensuing 10 years, or other planning period specified by NERC, for all transmission facilities in the MAPP RTC Region at a capacity of 115 kV or greater. The MAPP Regional Plan shall integrate the transmission plans developed by individual RTC Members and by subregional working groups, for the purpose of enabling the transmission needs in the MAPP RTC Region of Member and interested parties to be met on a consistent, reliable, environmentally acceptable and economic basis.

The MAPP Regional Plan shall avoid unnecessary duplication of facilities or the imposition of unreasonable costs on any RTC Member, shall take into account the legal and contractual rights and obligations of all Members, may provide alternative means for meeting transmission needs in the MAPP RTC Region, and shall differentiate proposed transmission projects from projects for which a definitive commitment of resources has been made e.g., projects under the Subscription Rights process or under a Facilities Agreement

The MAPP Regional Plan shall be consistent with standards and requirements established by the applicable reliability entity. The RTC shall develop policies and procedures for updating or modifying the Plan between biennial planning cycles as may be appropriate. Any Member, Regulatory Participant, or interested party may attend any meeting of the RTC or any of its subcommittees dealing with the MAPP Regional Plan.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.0, MAPP Regional Planning Process, 2.0.0, A

Record Narrative Name: 4.0 MAPP Regional Planning Process

Tariff Record ID: 4269

Tariff Record Collation Value: 853000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

4.0 MAPP Regional Planning Process

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.1, MAPP Regional Plan Development Process, 2.0.0, A

Record Narrative Name: 4.1 MAPP Regional Plan Development Process. The TPSC, the RTC Subcommittee responsible for planning in the MAPP region, shall collect the individual Member Plans of the MAPP Members and integrate these Member Plans utilizing Subregional Planning

Tariff Record ID: 4270

Tariff Record Collation Value: 854000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

4.1 MAPP Regional Plan Development Process. The TPSC, the RTC Subcommittee responsible for planning in the MAPP region, shall collect the individual Member Plans of the MAPP Members and integrate these Member Plans utilizing Subregional Planning Groups into four coordinated Subregional Plans. All MAPP Members are obligated to submit their transmission Member Plans to the TPSC under the MAPP Restated Agreement. These Members Plans are to include the needs of all stakeholders in the Member's service area. The Subregional Plans primarily address local load serving needs and subregional issues, but are not precluded

from providing for regional transmission needs

The TPSC collects these Subregional Plans and integrates them into a single coordinated preliminary MAPP Regional Plan. The TPSC assesses the adequacy and security of the preliminary MAPP Regional Plan to meet the local, subregional, regional and inter-regional reliability and market needs, and where required, identifies and evaluates alternatives and recommends preferred plans to address deficiencies. The final MAPP Regional Plan is submitted to the RTC for approval. The appropriate Transmission Owning Members of MAPP, as that term is defined in the MAPP Restated Agreement, are responsible for designing, constructing and placing into service the various transmission projects comprising the MAPP Regional Plan, after satisfying applicable regulatory requirements

The TPSC initiates several activities as part of a planning process to produce the MAPP Regional Plan. These activities included collection of planning input data, preparation of study models, the formation of SPGs to collect and coordinate individual Member Plans, collaboration with regulatory agencies, and a procedure to study and evaluate the effectiveness of proposed enhancements in addressing regional and inter-regional problems.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.2, Process Steps for MAPP Regional Plan Development, 2.0.0, A

Record Narrative Name: 4.2 Process Steps for MAPP Regional Plan Development. The TPSC shall prepare the MAPP Regional Plan as set forth in the MAPP Restated Agreement and this Attachment P and as detailed in the TPSC procedures. The TPSC uses milestone dates as

Tariff Record ID: 4271

Tariff Record Collation Value: 855000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

4.2 Process Steps for MAPP Regional Plan Development. The TPSC shall prepare the MAPP Regional Plan as set forth in the MAPP Restated Agreement and this Attachment P and as detailed in the TPSC procedures. The TPSC uses milestone dates as established in the MAPP Regional Transmission Planning Procedures Manual for the following items:

4.2.1 TPSC Data Collection from Members (Annually)

- (a) Ongoing studies of the SPG Member and Working Group.
- (b) Subregional Plan Addendum report submitted to TPSC.

4.2.2 Data Analysis by TPSC (during the MAPP Regional Plan year):

- (a) Analyze history of constrained interface performance.
- (b) Analyze history of transmission loading relief requests.
- (c) Review of reliability assessment studies and reports.

4.2.3 TPSC Model Preparation:

- (a) Select base case models from appropriate MRO Model Series.
- (b) Add Member and SPG plans to models.
- (c) Solicit input from stakeholders including additions or changes to transmission, generation, and demand resources, in developing base-line assumptions and models.
- (d) Validate firm transactions, major new loads, transmission and new generation.

4.2.4 TPSC Study Procedures:

- (a) Evaluate base system with Member/SPG planned additions (local plans).
- (b) Identify and evaluate alternative plans to meet regional and inter-regional reliability and market requirements (assess impacts on local plans).
- (c) Utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG. Technical analysis may include, but is not limited to, load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members. Engineering judgment may include such factors as the extent to which proposed alternative solutions meet applicable planning criteria and other regulatory requirements, expected levels of public acceptance and projected environmental impacts.
- (d) Perform cost analysis.

4.2.5 Regulatory Collaboration

- (a) Regulatory participation at SPG and TPSC meetings.
- (b) Regulatory input at preliminary planning stages.
- (c) Process to address "why project needed" and "why it is better than other alternatives considered" through SPG Meeting process.

4.2.6 MAPP Regional Plan Report and Approval

- (a) Submit MAPP Regional Plan Report to the RTC for approval of the MAPP Regional Plan year.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.3, Updating the MAPP Regional Plan, 2.0.0, A

Record Narrative Name: 4.3 Updating the MAPP Regional Plan. The TPSC shall update or modify the MAPP Regional Plan between biennial planning cycles in accordance with the procedures below. This update to the MAPP Regional Plan, shall be issued to the RTC for approval.

Tariff Record ID: 4272

Tariff Record Collation Value: 856000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

4.3 Updating the MAPP Regional Plan. The TPSC shall update or modify the MAPP Regional Plan between biennial planning cycles in accordance with the procedures below. This update to the MAPP Regional Plan, shall be issued to the RTC for approval. The established SPGs shall remain active in the planning process for their respective subregions. Individual utility Member Plans and detailed documentation should be submitted to the SPGs.

In order to accomplish this update process, the SPGs shall:

- (a) review the individual utility Member Plans;
- (b) coordinate the individual utility Member Plans within their subregion;
- (c) evaluate the impacts of the individual Member Plans on their subregion and possibly require additional evaluation or study work;
- (d) identify to the TPSC the proposed solution alternatives included in individual Member Plans or proposed by stakeholders in instances where there is no SPG consensus on a preferred alternative; and
- (e) submit subregional plan modifications to the TPSC each off-year.

The TPSC shall:

- (a) evaluate the subregional plan modifications for their impact on the MAPP Regional Plan;
- (b) provide feedback to the SPGs regarding the regional impacts;
- (c) utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG. Technical analysis may include, but is not limited to, load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members. Engineering judgment may include such factors as the extent to which proposed alternative solutions meet applicable planning criteria and other regulatory requirements, expected levels of public acceptance and projected environmental impacts; and
- (d) approve or deny all final modifications to the MAPP Regional Plan each off-year.

Modifications to the MAPP Regional Plan may include: (a) commitments to new generation; (b) new transmission facilities; (c) changes in construction schedules; or (d) changes in project scope. All approved MAPP Regional Plan modifications must be included in the MRO Model building process and should be submitted to the MRO Model Building Subcommittee by the responsible transmission owning entity.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

4.4, Identification of Transmission Requirements, 2.0.0, A

Record Narrative Name: 4.4 Identification of Transmission Requirements. The following process is used to communicate to the TPSC the transmission requirements identified by the Member and interested parties. Interested parties may contact the Member transmission

Tariff Record ID: 4273

Tariff Record Collation Value: 857000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

4.4 Identification of Transmission Requirements. The following process is used to communicate to the TPSC the transmission requirements identified by the Member and interested parties:

(a) Interested parties may contact the Member transmission provider in the area where service is required. If it is unclear as to who is the appropriate transmission provider, the interested parties should contact any member of the TPSC.

(b) The Member is required to take both the Member Plans and interested parties' plans to the appropriate SPGs. The SPG Guidelines indicate the required format Members are to use to submit the data.

(c) The SPGs must prepare coordinated subregional plans incorporating the member and interested parties' needs.

(d) The SPG plans are forwarded to the TPSC.

(e) The TPSC develops a coordinated MAPP Regional Plan addressing SPG, regional and inter-regional needs.

(f) The TPSC forwards the MAPP Regional Plan to the RTC for approval.

The TPSC will establish liaisons with existing neighboring regional planning entities to facilitate addressing inter-regional transmission issues.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

5.0, The Transmission Planning Subcommittee, 2.0.0, A

Record Narrative Name: 5.0 The Transmission Planning Subcommittee

Tariff Record ID: 4274

Tariff Record Collation Value: 858000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

5.0 The Transmission Planning Subcommittee

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

5.1, Procedures for Conduct of TPSC Meetings, 2.0.0, A

Record Narrative Name: 5.1 Procedures for Conduct of TPSC Meetings. 5.1.1 TPSC Role. The MAPP TPSC, under the direction of the RTC, shall develop the MAPP Regional Plan. The TPSC shall utilize the following procedures in developing the MAPP Regional Plan. Costs incurred

Tariff Record ID: 4275

Tariff Record Collation Value: 859000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

5.1 Procedures for Conduct of TPSC Meetings

5.1.1 TPSC Role. The MAPP TPSC, under the direction of the RTC, shall develop the MAPP Regional Plan. The TPSC shall utilize the following procedures in developing the MAPP Regional Plan. Costs incurred related to regional planning activities shall be recovered under the provisions of the MAPP Restated Agreement and related RTC policies.

5.1.2 TPSC Representatives. The TPSC shall be constituted as defined by the MAPP Restated Agreement. In accordance with the MAPP Restated Agreement, such Representatives shall be elected by the RTC, and the RTC sets the size, duties and responsibilities of the TPSC. The TPSC Representatives shall elect the TPSC Chair and Vice-Chair.

5.1.3 TPSC Meeting Notification. The notice of a TPSC meeting shall state the time and place of the meeting and shall include an agenda sufficient to notify an interested party of the substance of the matters considered at the meeting. The TPSC meeting notice and agenda shall be sent at least 10 days prior to the meeting. All meeting notices are communicated electronically through MAPP e-mail distribution lists, and subsequently posted at www.mapp.org. All meeting notices shall be publicly available.

5.1.4 TPSC Meeting Agenda Development. The TPSC agenda shall include the time and place of its meetings. An interested party shall submit a request to the Chair and the Secretary of the TPSC to have an item considered at the next TPSC meeting at least fifteen (15) days in advance, subject to any limitations set forth in the TPSC procedures manual. The Chair of the TPSC has authority to determine action items for the meeting agenda. All action items shall be shown and communicated clearly so that any interested party can determine what is being acted upon

The TPSC meeting agenda shall be posted at www.mapp.org and sent via the TPSC e-mail distribution list at least ten (10) days prior to the meeting. The TPSC will make the best effort attempt to communicate all supporting information for the meeting agenda at least ten (10) days prior to the meeting. The supporting information shall be posted on the www.mapp.org after communicating it via the e-mail distribution list, unless the information has been deemed CEII.

5.1.5 TPSC Action. The publication of an agenda of actions to be voted upon by the TPSC shall include the wording of any proposed motion, and a brief discussion, as needed, of the reasons for the motion to be offered and voted. The member of the TPSC or other entity sponsoring the motion shall provide the wording of the motion and the discussion points. A best effort attempt shall be made by those sponsoring items on a TPSC meeting agenda to have background material, and the action to be voted, distributed with the meeting agenda in a timely manner. In general, an action may not be brought to a vote of the TPSC unless it is noticed on a published agenda at least ten (10) days prior to the meeting date upon which action is to be voted. This requirement for a 10-day notice may be waived either by the approval of the TPSC

Chair or by 90% affirmative vote of the TPSC's voting members present at a TPSC meeting at which a quorum has been established, subject to any limitations set forth in the TPSC procedures.

5.1.6 TPSC Meeting Procedures. The TPSC shall utilize Robert's Rules of Order for guidance regarding conduct of subcommittee meetings. A quorum is necessary to conduct TPSC business. A quorum is established when 50 percent or more of TPSC Representatives are present as currently stated in the MAPP Restated Agreement. A vacant position on the TPSC does not count towards the quorum requirement. All interested parties can attend TPSC and working group meetings subject to signing a MAPP non-disclosure agreement.

5.1.7 Affirmative Votes. Actions or decisions by a subcommittee requires an affirmative vote of two-thirds of both the TPSC Transmission Owning Members and the Transmission Using Members as set forth in the MAPP Restated Agreement.

5.1.8 TPSC Meeting Minutes. All TPSC meetings shall be recorded through accurate and timely meeting minutes. Draft TPSC meeting minutes shall be distributed to TPSC Representatives ten (10) business days following the meeting date for review and comment. The TPSC will attempt to approve their previous meeting's minutes at their next meeting. Once the meeting minutes are approved by the TPSC, the minutes are sent to the TPSC and RTC e-mail distribution lists and posted at www.mapp.org.

5.1.9 Review of TPSC Action. An RTC Member or Regulatory Participant may request a review of TPSC Record Content Description, Tariff Record Title, Record Version Number, Option Code:

5.2, TPSC Responsibilities, 2.0.0, A

Record Narrative Name: 5.2 TPSC Responsibilities. The TPSC shall develop and recommend for approval by the RTC the biennial MAPP Regional Plan required by the MAPP Restated Agreement; b develop procedures and policies for updating and modifying the MAPP Regional

Tariff Record ID: 4276

Tariff Record Collation Value: 860000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

5.2 TPSC Responsibilities. The TPSC shall:

(a) develop and recommend for approval by the RTC the biennial MAPP Regional Plan required by the MAPP Restated Agreement;

(b) develop procedures and policies for updating and modifying the MAPP Regional Plan between biennial planning cycles, and approve modifications to the MAPP Regional Plan;

(c) develop and approve procedures, standards and requirements for the communication of the future transmission requirements of Members and interested parties to the appropriate Transmission Owning Members, and for the inclusion of bona fide requirements in the transmission Member Plans of the Transmission Owning Members, and in the MAPP Regional Plan.

- (d) establish procedures, standards and requirements for the coordination of the transmission Member Plans of the Transmission Owning Members with the plans of neighboring transmission systems, including establishing of subregional planning groups for resolution of subregional planning issues on a cooperative basis;
- (e) establish procedures, standards, and requirements for making available Member Plans and the information on which the Member Plans are based, as required by the MAPP Restated Agreement;
- (f) establish procedures, standards and requirements for public input, including input from Regulatory Participants, in the development of the MAPP Regional Plan;
- (g) determine, subject to RTC approval, the appropriate Member or Members to construct and own, or to receive Rights Equivalent to Ownership in, transmission facilities;
- (h) coordinate with the subcommittees of the RTC, the MRO and Adjacent Systems pertinent to reliability issues, standards, requirements, procedures, models and studies, and conduct or request the MRO to conduct such studies as appropriate to carry out the responsibilities of the TPSC;
- (i) conduct appropriate transmission economic planning studies;
- (j) conduct appropriate transmission cost allocation analysis for new projects;
- (k) assume responsibility for submission of FERC Form 715 information for MAPP;
- (l) conduct transmission adequacy and security assessments as appropriate, including assessments of the intra- and inter-regional transfer capability of the MAPP system,
- (m) oversee the duties and responsibilities of Working Groups; and
- (n) utilize an appropriate combination of technical analysis and engineering judgment to determine preferred solutions when competing solution options proposed to meet system needs are received from a SPG.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

5.3, Transmission Customer Responsibilities, 2.0.0, A

Record Narrative Name: 5.3 Transmission Customer Responsibilities. Transmission Customers in the RTC region shall provide annually to the Transmission Provider the following types of information: Generators All planned additions or upgrades including status and

Tariff Record ID: 4277

Tariff Record Collation Value: 861000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

5.3 Transmission Customer Responsibilities. Transmission Customers in the RTC region shall provide annually to the Transmission Provider the following types of information:

- (a) Generators: All planned additions or upgrades (including status and expected in-service date), planned retirements, and environmental restrictions.
- (b) Demand Response Resources: Existing and planned demand resources and their impacts on demand and peak demand.
- (c) Network Customers: Forecast information for load and resource requirements over the planning horizon and identification of demand response reductions.
- (d) Point-to-Point Transmission Customers: Projections of need for service over the planning horizon, including transmission capacity, duration, and receipt and delivery points.
- (e) Transmission Customers should provide the Transmission Provider with timely written notice of material changes in any information previously provided relating to its load, its resources, or other aspects of its facilities or operations affecting the transmission provider's ability to provide service.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.0, Sub-regional Planning Groups, 2.0.0, A

Record Narrative Name: 6.0 Sub-regional Planning Groups

Tariff Record ID: 4278

Tariff Record Collation Value: 862000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.0 Sub-regional Planning Groups

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.1, Current SPGs, 2.0.0, A

Record Narrative Name: 6.1 Current SPGs. The TPSC has established and recognized the following SPGs to carry out the task of coordinating transmission plans among Members: a Northern MAPP; b Missouri Basin; c Iowa Transmission Working Group; d Nebraska.

Tariff Record ID: 4279

Tariff Record Collation Value: 863000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.1 Current SPGs. The TPSC has established and recognized the following SPGs to carry out the task of coordinating transmission plans among Members:

- (a) Northern MAPP;
- (b) Missouri Basin;
- (c) Iowa Transmission Working Group;
- (d) Nebraska.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.2, Establishment of SPGs, 2.0.0, A

Record Narrative Name: 6.2 Establishment of SPGs. The TPSC can establish new or recognize additional SPGs to carry out the task of coordinating transmission plans among Members. The TPSC may also recognize and coordinate its MAPP

Regional Plan with existing or future
Tariff Record ID: 4280
Tariff Record Collation Value: 864000 Tariff Record Parent Identifier: 4377
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

6.2 Establishment of SPGs. The TPSC can establish new or recognize additional SPGs to carry out the task of coordinating transmission plans among Members. The TPSC may also recognize and coordinate its MAPP Regional Plan with existing or future transmission planning study groups concerned with transmission facilities located outside the MAPP region.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.3, SPG Membership, 2.0.0, A

Record Narrative Name: 6.3 SPG Membership. Membership in a SPG is open to any interested party and any actual or potential user of the relevant transmission facilities. Participation in any SPG meeting is open to any interested party who has signed the MAPP

Tariff Record ID: 4281
Tariff Record Collation Value: 865000 Tariff Record Parent Identifier: 4377
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

6.3 SPG Membership. Membership in a SPG is open to any interested party and any actual or potential user of the relevant transmission facilities. Participation in any SPG meeting is open to any interested party who has signed the MAPP Non-Disclosure Agreement (NDA). A MAPP NDA is obtained by contacting the Secretary of the MAPP TPSC. Neighboring transmission owning utilities and regulatory participants are eligible and encouraged to join the SPG to promote joint planning between MAPP and its neighboring regions.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.4, SPG Guidelines, 2.0.0, A

Record Narrative Name: 6.4 SPG Guidelines. The Subregional Planning Groups, to the extent possible, should develop a coordinated Subregional Plan, the SPG Biennial Plan, including alternatives, for the ensuing ten years, for all transmission facilities in the

Tariff Record ID: 4282
Tariff Record Collation Value: 866000 Tariff Record Parent Identifier: 4377
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

6.4 SPG Guidelines. The Subregional Planning Groups, to the extent possible, should:

- (a) develop a coordinated Subregional Plan, the SPG Biennial Plan, including alternatives, for the ensuing ten years, for all transmission facilities in the subregion at a voltage of 115 kV or greater;
- (b) review and comment on proposed Member Plans for additions and modifications to the subregional transmission system;
- (c) incorporate proposed Member load-serving plans to the subregional transmission system into the SPG Biennial Plan;

- (d) incorporate Member Plans for new generator connections and associated network upgrades into the SPG Biennial Plan as soon as practicable;
- (e) coordinate the Subregional Plans of the SPG with the Subregional Plans of neighboring SPGs;
- (f) update the SPG Biennial Plan as deemed necessary by the SPG or the TPSC;
- (g) form technical study task forces as required to carry out the subregional planning responsibilities;
- (h) encourage non-MAPP member participation to ensure that the TPSC and the SPGs learn of facility changes outside MAPP's system to ensure the impact of parallel path flows are considered in the planning studies;
- (i) encourage participation by stakeholders so that the SPG can consider and incorporate the future transmission needs of the stakeholder into the Subregional Plan;
- (j) ensure SPG studies meet NERC/MRO Planning Standards and requirements; and
- (k) promote stakeholder and Regulatory Participant review and comment on the Subregional Plan and its development.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.5, Submission of Member Plans to SPG, 2.0.0, A

Record Narrative Name: 6.5 Submission of Member Plans to SPG. Each Transmitting Utility Member, as that term is defined in the MAPP Restated Agreement, shall submit its transmission plans to the SPG in which its system is geographically located, or SPGs in situations

Tariff Record ID: 4283

Tariff Record Collation Value: 867000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.5 Submission of Member Plans to SPG. Each Transmitting Utility Member, as that term is defined in the MAPP Restated Agreement, shall submit its transmission plans to the SPG in which its system is geographically located, or SPGs in situations where its system crosses several SPG boundaries. The TPSC requires that all Members submit their individual Member Plans to the appropriate SPG. Each SPG member must be willing to participate in joint SPG studies to assess the adequacy of proposed Member Plans to best meet the needs of the subregion. The TPSC will not be in a position to support the transmission Member Plans of any Member who does not make such Member Plans available to the SPG.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.6, Network Upgrades Out of Planning Cycle, 2.0.0, A

Record Narrative Name: 6.6 Network Upgrades Out of Planning Cycle. When planned transmission upgrades are identified by a Member outside the timing requirements of the Regional Plan including any network upgrades needed for generation interconnection or transmission

Tariff Record ID: 4284

Tariff Record Collation Value: 868000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.6 Network Upgrades Out of Planning Cycle. When planned transmission upgrades are identified by a Member outside the timing requirements of the Regional Plan (including any network upgrades needed for generation interconnection or transmission service):

The Member will submit information about the upgrades at the next SPG meeting and the next TPSC meeting to make every reasonable effort to allow for stakeholder input on such upgrades before those upgrades go in-service.

The Member will include those upgrades in their next Member Plan.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.7, SPG Meetings, 2.0.0, A

Record Narrative Name: 6.7 SPG Meetings. Each SPG should meet at least twice annually to review plans and determine what changes, if any, need to be made to coordinate Member Plans among Members. Participation in any SPG meeting is open to any interested party who

Tariff Record ID: 4285

Tariff Record Collation Value: 869000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.7 SPG Meetings. Each SPG should meet at least twice annually to review plans and determine what changes, if any, need to be made to coordinate Member Plans among Members. Participation in any SPG meeting is open to any interested party who has signed the MAPP NDA. Meeting notices are posted on the MAPP calendar at www.mapp.org. Recommendations carried forward to the TPSC by the SPG should reflect a consensus of the SPG members. However, a SPG member also has the right to reflect a minority opinion in any report to the TPSC. The notice of SPG meetings are to be sent out by the SPG TPSC liaison person, the SPG Chair, or SPG Secretary to the SPG Membership via the SPG and TPSC exploder email list. Other stakeholders, such as interested parties, that request meeting notification shall also be sent a meeting notice. In addition, the meetings are posted on the MAPP website under the calendar of MAPP meetings. The notice shall state the time and place of the meeting, and shall include an agenda sufficient to notify Members of the substance of matters to be considered at the meeting. Additionally, the appropriate subregional Regulatory Participants, who are not SPG Members or may not be subscribed to the SPG and TPSC

exploders list, aRecord Content Description, Tariff Record Title, Record Version Number, Option Code:

6.8, TPSC/SPG Communication, 2.0.0, A

Record Narrative Name: 6.8 TPSC/SPG Communication. Each recognized SPG shall appoint a liaison to the TPSC to facilitate communication of the planning process. The liaison person can be any SPG member including an elected TPSC member. The form of communication the

Tariff Record ID: 4286

Tariff Record Collation Value: 870000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.8 TPSC/SPG Communication. Each recognized SPG shall appoint a liaison to the TPSC to facilitate communication of the planning process. The liaison person can be any SPG member including an elected TPSC member. The form of communication the TPSC expects from the SPG includes: (a) SPG Meeting Agendas; (b) SPG final approved Meeting Minutes; and (c) SPG

liaison status reports to the TPSC at the scheduled meetings. The SPG meeting agendas and approved minutes should be electronically sent to the TPSC Secretary for posting on the MAPP website in the RTC/TPSC area. The SPG status reports are given by the TPSC liaison at the scheduled TPSC meetings.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.9, SPG Planning Responsibilities, 2.0.0, A

Record Narrative Name: 6.9 SPG Planning Responsibilities. The SPG shall develop a coordinated subregional transmission plan the SPG Plan, including alternatives, for the ensuing ten years, for all transmission facilities in the subregion at a capacity of 115 kV or

Tariff Record ID: 4287

Tariff Record Collation Value: 871000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.9 SPG Planning Responsibilities. The SPG shall develop a coordinated subregional transmission plan (the SPG Plan), including alternatives, for the ensuing ten years, for all transmission facilities in the subregion at a capacity of 115 kV or greater. This SPG Plan shall be submitted to the TPSC biennially, each even numbered or MAPP Regional Plan year. The SPG shall update and modify the SPG Plan, as required, between biennial planning year cycles and submit these modifications to the TPSC for approval. The Subregional Plan should:

- (a) identify load serving problems in the subregion;
- (b) identify constrained interface problems within the subregion and with neighboring subregions and regions;
- (c) identify transmission needs for new generation;
- (d) propose and study transmission expansion alternatives to address these problems and needs;
- (e) recommend the preferred alternatives which best address the subregional requirements to the TPSC;
- (f) forward alternative proposed solutions to the TPSC for the evaluation and determination of preferred plan options for inclusion in the MAPP Regional Plan in the absence of consensus agreement by a SPG on the selection of preferred plan options;
- (g) address subregional deficiencies identified in the MAPP Regional Plan; and
- (h) provide feedback assessment of impacts of the published MAPP Regional Plan on the subregion.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.10, Planning Criteria, 2.0.0, A

Record Narrative Name: 6.10 Planning Criteria. The MAPP Restated Agreement states that each Members plan shall conform to applicable reliability standards and requirements, and to applicable methods and assessment practices and other transmission planning standards

Tariff Record ID: 4288

Tariff Record Collation Value: 872000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL
 Record Content Type: 1
 Associated Filing Identifier:

6.10 Planning Criteria. The MAPP Restated Agreement states that each Member's plan shall conform to applicable reliability standards and requirements, and to applicable methods and assessment practices and other transmission planning standards and requirements established by the RTC. In this context, the Subregional Plan shall conform to the requirements of the MAPP Members Reliability Criteria and Study Procedures Manual and the NERC and MRO Planning Standards. In instances where these Standards are different, the more stringent Standard shall be adopted. Such criteria and standards are available at Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.11, SPG Study Models, 2.0.0, A
 Record Narrative Name: 6.11 SPG Study Models. Whenever possible, the SPGs shall adopt the most current approved regional model series to develop their base case study models. Each series provides near term, five-year and ten-year models representing summer peak,
 Tariff Record ID: 4289
 Tariff Record Collation Value: 873000 Tariff Record Parent Identifier: 4377
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CANCEL
 Record Content Type: 1
 Associated Filing Identifier:

6.11 SPG Study Models. Whenever possible, the SPGs shall adopt the most current approved regional model series to develop their base case study models. Each series provides near term, five-year and ten-year models representing summer peak, summer off-peak and winter peak system conditions. The SPG shall determine the appropriate load conditions (summer peak, summer off-peak, winter peak, etc.) and generation schedules for the SPG studies. The SPG shall verify that the load data, new generation data, and all existing firm transactions in the subregion are included and correct. In developing the base case load flow models to be used for the SPG studies, the SPG shall document all modifications required to load flow cases. The SPGs may add underlying transmission detail to these models as required. The SPG shall solicit input from stakeholders including additions or changes to transmission, generation, and demand resources, in developing base-line assumptions and models used in developing the SPG Plan. The SPG may, if appropriate, adopt other models to conduct its studies. However, the SPG shall develop and provide the TPSC with appropriate files to facilitate incorporation of the Subregional Plan study data into the next regional model series that will be used by the TPSC.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 6.12, SPG Studies and Reports, 2.0.0, A
 Record Narrative Name: 6.12 SPG Studies and Reports. A report summarizing the results of the Member and SPG Working Group studies shall be provided for review and consensus approval of the SPG, prior to adopting the plans of Members or the SPG study groups into the
 Tariff Record ID: 4290
 Tariff Record Collation Value: 874000 Tariff Record Parent Identifier: 4377
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CANCEL
 Record Content Type: 1
 Associated Filing Identifier:

6.12 SPG Studies and Reports. A report summarizing the results of the Member and SPG Working Group studies shall be provided for review and consensus approval of the SPG, prior to adopting the plans of Members or the SPG study groups into the Subregional Plan. The SPG shall require its Members or its SPG Study Groups to perform system studies to demonstrate that the performance of the proposed Member and Subregional Plans meets the planning standards

defined above. These studies may include, but not necessarily be limited to load flow (steady state, contingency and loss analysis), transient stability, voltage stability, small signal stability and economic analysis as deemed necessary by the SPG Members.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

6.13, Subregional Plan Report to the TPSC, 2.0.0, A

Record Narrative Name: 6.13 Subregional Plan Report to the TPSC. The Subregional Plan, or modifications to the SPG Plan, shall be provided to the TPSC each year. A report shall be provided describing the Subregional Plan. This report shall include the following

Tariff Record ID: 4291

Tariff Record Collation Value: 875000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

6.13 Subregional Plan Report to the TPSC. The Subregional Plan, or modifications to the SPG Plan, shall be provided to the TPSC each year. A report shall be provided describing the Subregional Plan. This report shall include the following information:

- (a) an executive summary (to be incorporated into the MAPP Regional Plan report);
- (b) a description of needs being addressed;
- (c) a description of the alternatives considered;
- (d) recommendations as to which alternatives should be included in the MAPP Regional Plan;
- (e) a description of alternative plan options in the absence of consensus SPG agreement on preferred solutions;
- (f) a brief description of the SPG studies, including costs, supporting the recommendations, with reference to the detailed SPG study report;
- (g) a description of the new facilities; and
- (h) a description of the Public Input/Review Process.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

7.0, Public Input Process, 2.0.0, A

Record Narrative Name: 7.0 Public Input Process

Tariff Record ID: 4292

Tariff Record Collation Value: 876000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

7.0 Public Input Process

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

7.1, Stakeholder Participation, 2.0.0, A

Record Narrative Name: 7.1 Stakeholder Participation. The TPSC shall invite Members, interested parties, any actual or potential users of the relevant transmission facilities, and neighboring transmission owning utilities referred to collectively as stakeholders,

Tariff Record ID: 4293

Tariff Record Collation Value: 877000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

7.1 Stakeholder Participation. The TPSC shall invite Members, interested parties, any actual or potential users of the relevant transmission facilities, and neighboring transmission owning utilities (referred to collectively as "stakeholders"), as well as Regulatory Participants, to be part of the planning process. The SPG shall invite such stakeholders to SPG meetings as part of the public input process into the Subregional Plan. The SPG shall:

- (a) identify and maintain a list of stakeholders involved in the review and comment on additions to the Transmission System in their subregion;
- (b) add stakeholders to the appropriate SPG email exploder lists following their requests to MAPP COR planning staff to participate;
- (c) verify that stakeholders have signed the MAPP NDA for attendance at the meetings where CEII material is discussed;
- (d) identify comparable contacts from interconnected NERC regions;
- (e) coordinate with stakeholders as to the process required, areas of needs, and possible solutions;
- (f) review the solutions with stakeholders to identify the best options from a transmission and regulatory basis for that subregion to include in the Subregional Plan; and
- (g) report to the TPSC and include in the Subregional Plan documentation of the public process completed for the Subregional Plan such as dates of meetings, number of stakeholders, highlights of key comments and SPG consideration of those comments. The SPG shall include in their Subregional Plan report to the TPSC a listing of the suggestions for economic planning studies that they received from their stakeholders during the year.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

7.2, Regulatory Participation, 2.0.0, A

Record Narrative Name: 7.2 Regulatory Participation. The TPSC shall encourage and facilitate input from Regulatory Participants, in the development of the MAPP Regional Plan. The SPGs, as part of the formal process for regulatory participation, shall maintain a

Tariff Record ID: 4294

Tariff Record Collation Value: 878000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

7.2 Regulatory Participation. The TPSC shall encourage and facilitate input from Regulatory Participants, in the development of the MAPP Regional Plan. The SPGs, as part of the formal process for regulatory participation, shall:

- (a) Maintain a list of Regulatory Participants involved in the review and approval of additions

to the Transmission System in their subregion.

- (b) Maintain a list of comparable contacts from interconnected regions.
- (c) Coordinate with the Regulatory Participants as to the process required, areas of needs, and possible solutions. Review the solutions with such participants to identify the best options from a transmission and regulatory basis for that subregion to include in the MAPP Regional Plan.
- (d) Describe in the Subregional Plan how the proposed facilities address the needs, and identify the Regulatory Participants involved in the Subregional Plan development and what future regulatory approvals are required for development of facilities in the Subregional Plan.

The TPSC, as part of the formal process for the regulatory participation, shall:

- (a) maintain a list of Regulatory Participants involved in the review and approval of additions to the Transmission System for each SPG;
- (b) report in the MAPP Regional Plan the input of the Regulatory Participants obtained in developing the MAPP Regional Plan;
- (c) present the results of the MAPP Regional Plan and the needed facilities to the RTC;
- (d) work with the Members and SPGs on final approvals for needed projects as required and coordinate any regional information that needs to be disseminated;
- (e) make the MAPP Regional Plan available to the public and regulatory community subject to applicable CEII restrictions; and
- (f) as required, sponsor information seminars to facilitate regulatory and public acceptance of the MAPP Regional Plan.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.0, Inter-regional Planning Coordination, 2.0.0, A

Record Narrative Name: 8.0 Inter-regional Planning CoordinationThe TPSC shall coordinate on planning issues with 1 the subcommittees of the RTC; 2 the MRO; 3 relevant non-MAPP neighboring transmission owning utilities and Regional Transmission Organizations

Tariff Record ID: 4295

Tariff Record Collation Value: 879000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

8.0 Inter-regional Planning Coordination

The TPSC shall coordinate on planning issues with: (1) the subcommittees of the RTC; (2) the MRO; (3) relevant non-MAPP neighboring transmission owning utilities and Regional Transmission Organizations ("RTOs").

The TPSC will select a TPSC member who will be responsible for reporting on the relevant

activities of the MAPP RTC, MRO and RTO subcommittees at each TPSC meeting. The TPSC liaison may attend the MAPP RTC, MRO and neighboring RTO subcommittee meetings or employ other effective means to obtain the required information.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.1, Coordination Principles, 2.0.0, A

Record Narrative Name: 8.1 Coordination Principles. The MAPP Regional Plan shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from neighboring regions, or their applicable sub-regions,

Tariff Record ID: 4296

Tariff Record Collation Value: 880000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

8.1 Coordination Principles. The MAPP Regional Plan shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from neighboring regions, or their applicable sub-regions, including adjacent transmission providers or regional transmission organizations, or their designated regional planning organization(s).

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.2, Joint Planning Committee, 2.0.0, A

Record Narrative Name: 8.2 Joint Planning Committee. MAPP shall participate in a Joint Planning Committee JPC with representatives of adjacent transmission providers or regional transmission organizations, or their designated regional planning organizations

Tariff Record ID: 4297

Tariff Record Collation Value: 881000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

8.2 Joint Planning Committee. MAPP shall participate in a Joint Planning Committee ("JPC") with representatives of adjacent transmission providers or regional transmission organizations, or their designated regional planning organizations(s) ("Regional Planning Coordination Entities" or "RPCEs"). The JPC shall be comprised of representatives of MAPP and the RPCE(s) in numbers and functions to be identified from time to time. The JPC may combine with or participate in similarly established joint planning committees amongst multiple RPCEs or established under joint agreements to which MAPP is a signatory, for the purpose of providing for broader and more effective inter-regional planning coordination. The JPC shall have a Chairman. The Chairman shall be responsible for: the scheduling of meetings; the preparation of agendas for meetings; the production of minutes of meetings; and for chairing JPC meetings. The Chairmanship shall rotate amongst MAPP and the RPCEs on a mutually agreed to schedule, with each party responsible for the Chairmanship for no more than one planning study cycle in succession. The JPC shall coordinate planning of the systems of the Western Area Power Administration's Upper Great Plains Customer Service Region and the RPCEs, including the following:

8.2.1 Coordinate the development of common power system analysis models to perform coordinated system planning studies including power flow analyses and stability analyses. For studies of interconnections in close electrical proximity at the boundaries among the systems of MAPP and the RPCEs, the JPC or its designated working group will coordinate the performance of a detailed review of the appropriateness of applicable power system models.

8.2.2 Conduct, on a regular basis, a Coordinated Regional Transmission Planning Study ("CRTPS"), which shall be reviewed by stakeholders, as set forth in Section 8.4.1.

8.2.3 Coordinate planning activities under this section 8, including the exchange of data and developing necessary report and study protocols.

8.2.4 Maintain an Internet site and e-mail or other electronic lists for the communication of information related to the coordinated planning process. Such sites and lists may be integrated with those existing for the purpose of communicating the open and transparent planning processes of MAPP.

8.2.5 Meet at least semi-annually to review and coordinate transmission planning activities.

8.2.6 Establish working groups as necessary to address specific issues, such as the review and development of the regional plans of the RPCE and MAPP, and localized seams issues.

8.2.7 Establish a schedule for the rotation of responsibility for data management, coordination of analysis activities, report preparation, and other activities.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.3, Data and Information Exchange, 2.0.0, A

Record Narrative Name: 8.3 Data and Information Exchange. MAPP shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. MAPP shall provide such data in accordance

Tariff Record ID: 4298

Tariff Record Collation Value: 882000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

8.3 Data and Information Exchange. MAPP shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. MAPP shall provide such data in accordance with the applicable CEII policy, and maintain data and information received from each RPCE in accordance with their applicable confidentiality policies.

8.3.1 Data required for the development of power flow cases, and stability cases, incorporating up to a ten year load forecasts as may be requested, including all critical assumptions that are used in the development of these cases.

8.3.2 Fully detailed planning models (up to the next ten (10) years as requested) on an annual basis and updates as necessary to perform coordinated studies that reflect system enhancement changes or other changes.

8.3.3 The regional plan documents, any long-term or short-term reliability assessment documents, and any operating assessment reports produced by MAPP and the RPCE.

8.3.4 The status of expansion studies, system impact studies and generation interconnection

studies, such that MAPP and the RPCE have knowledge that a commitment has been made to a system enhancement as a result of any such studies.

8.3.5 Transmission system maps for MAPP and the RPCE bulk transmission systems and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.

8.3.6 Contingency lists for use in load flow and stability analyses, including lists of all contingency events required by applicable NERC or Regional Entity planning standards, as well as breaker diagrams, as readily available, for the portions of the MAPP and the RPCE transmission systems that are relevant to the coordination of planning between or among the systems. Breaker diagrams to be provided on an as requested basis.

8.3.7 The timing of each planned enhancement, including estimated completion dates, and indications of the likelihood that a system enhancement will be completed and whether the system enhancement should be included in system expansion studies, system impact studies and generation interconnection studies, and as requested the status of related applications for regulatory approval. This information shall be provided at the completion of each planning cycle of MAPP, and more frequently as necessary to indicate changes in status that may be important to the RPCE system.

8.3.8 Quarterly identification of interconnection requests that have been received and any long-term firm transmission services that have been approved, that may impact the operation of MAPP or the RPCE system.

8.3.9 Quarterly, the status of all interconnection requests that have been identified.

8.3.10 Information regarding long-term firm transmission services on all interfaces relevant to the coordination of planning between or among the systems.

8.3.11 Load flow data initially will be exchanged in PSS/E format. To the extent practical, the maintenance and exchange of power system modeling data will be implemented through databases. When feasible, transmission maps and breaker diagrams will be provided in an electronic format agreed upon by the Transmission Provider and the RPCE. Formats for the exchange of other data will be agreed upon by MAPP and the RPCE.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

8.4, Coordinated System Planning, 2.0.0, A

Record Narrative Name: 8.4 Coordinated System Planning. MAPP shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission system. Results of such coordinated studies will be included in the

Tariff Record ID: 4299

Tariff Record Collation Value: 883000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

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Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

8.4 Coordinated System Planning. MAPP shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission

system. Results of such coordinated studies will be included in the Coordinated System Plan. MAPP shall agree to conduct with the RPCEs such coordinated planning as set forth below.

8.4.1 Stakeholder Review Processes. MAPP, in coordination with coordinating RPCEs shall review the scope, key modeling assumptions, and preliminary and final results of the CRTPS with impacted stakeholders, and shall modify the study scope as deemed appropriate by MAPP in agreement with the coordinating RPCEs, after receiving stakeholder input. Such reviews will utilize the existing planning stakeholder forums of the coordinating parties including as applicable joint Sub Regional Planning Meetings.

8.4.2 Single Entity Planning. MAPP shall engage in such transmission planning activities, including expansion plans, system impact studies, and generator interconnection studies, as necessary to fulfill its obligations under the MAPP Restated Agreement and any other MAPP transmission planning procedures. Such planning shall conform to applicable reliability requirements of NERC, applicable regional reliability councils, and any successor organizations thereto. Such planning shall also conform to any and all applicable requirements of Federal or State regulatory authorities. MAPP will prepare a regional transmission planning report that documents the procedures, methodologies, and business rules utilized in preparing and completing the report. MAPP shall agree to share the transmission planning reports and assessments with each RPCE, as well as any information that arises in the performance of its individual planning activities as is necessary or appropriate for effective coordination among MAPP and the RPCEs on an ongoing basis. MAPP shall provide such information to the RPCEs in accordance with the applicable CEII policy and shall maintain such information received from the RPCEs in accordance with their applicable confidentiality policies.

8.4.3 Analysis of Interconnection Requests. In accordance with the procedures under which a MAPP Transmission Provider provides interconnection service, MAPP will agree to coordinate with each RPCE the conduct of any studies required in determining the impact of a request for generator or merchant transmission interconnection. Results of such coordinated studies will be included in the impacts reported to the interconnection customers as appropriate. Coordination of studies shall include the following:

8.4.3.1 When the Transmission Provider receives a request under its interconnection procedures for interconnection, it will determine whether the interconnection potentially impacts the system of a RPCE. In that event, the Transmission Provider will notify the RPCE and convey the information provided in the interconnection queue posting. The Transmission Provider will provide the study agreement to the interconnection customer in accordance with applicable procedures.

8.4.3.2 If the RPCE determines that it may be materially impacted by an interconnection on the Transmission Provider's system, the RPCE may request participation in the applicable interconnection studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the interconnection on the RPCE System, and who will perform the studies. The Transmission Provider will strive to minimize the costs associated with the coordinated study process undertaken by agreement with the RPCE.

8.4.3.3 Any coordinated studies associated with requests for interconnection to the Transmission Provider's system will be performed in accordance with the study timeline requirements and scope of the applicable generation interconnection procedures of Western.

8.4.3.4 The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider, or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between Transmission Provider and the interconnection customer, will reflect the costs, and the associated roles of the study participants including the RPCE. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation, and responsibilities in the study. If the RPCE agrees to perform any aspects of the study, the RPCE must comply with the timelines and schedule of Western's interconnection procedures.

8.4.3.5 The Transmission Provider will collect from the interconnection customer the costs incurred by the RPCE associated with the performance of such studies and forward collected amounts, no later than thirty (30) days after receipt thereof, to the RPCE. Upon the reasonable request of the RPCE, the Transmission Provider will make its books and records available to the requestor pertaining to such requests for collection and receipt of collected amounts.

8.4.3.6 The Transmission Provider will report the combined list of any transmission infrastructure improvements on either the RPCE and/or the Transmission Provider's system required as a result of the proposed interconnection.

8.4.3.7 Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the proposed interconnection shall be accomplished under the terms of Western's tariff under which the transmission service is provided, consistent with applicable Federal or State regulatory policy and applicable law.

8.4.3.8 Each transmission provider will maintain a separate interconnection queue. The JPC will maintain a composite listing of interconnection requests for all interconnection projects that have been identified as potentially impacting the systems of MAPP and coordinating RPCEs. The JPC will post this listing on the Internet site maintained for the communication of information related to the coordinated system planning process.

8.4.4 Analysis of Long-Term Firm Transmission Service Requests. In accordance with applicable procedures under which the Transmission Provider provides long-term firm transmission service, Transmission Provider will coordinate the conduct of any studies required to determine the impact of a request for such service. Results of such coordinated studies will be included in the impacts reported to the transmission service customers as appropriate. Coordination of studies will include the following:

8.4.4.1 The Transmission Provider will coordinate the calculation of ATC values, if any, associated with the service, based on contingencies on their systems that may be impacted by the granting of the service.

8.4.4.2 When Transmission Provider receives a request for long-term firm transmission service, it will determine whether the request potentially impacts the system of the RPCE. If Transmission Provider determines that the RPCE system is potentially impacted, and that the RPCE would not receive a transmission service request to complete the service path, Transmission Provider will notify the RPCE and convey the information provided in the posting.

8.4.4.3 If the RPCE determines that its system may be materially impacted by granting the service, it may contact Transmission Provider and request participation in the applicable studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the requested service on the RPCE system, and will strive to minimize the costs associated with the coordinated study process. The JPC will develop screening procedures to assist in the identification of service requests that may impact systems of the JPC members other than the Transmission Provider.

8.4.4.4 Any coordinated studies for request on Transmission Provider's system will be performed in accordance with the study timeline and scope requirements of the applicable transmission service procedures of the Transmission Provider.

8.4.4.5 The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider or by providing input to the studies to be performed by Transmission Provider. The study cost estimates indicated in the study agreement between Transmission Provider and the transmission service customer will reflect the costs and the associated roles of the study participants. Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation and responsibilities in the study.

8.4.4.6 Transmission Provider will collect from the transmission service customer, and forward to the RPCE, the costs incurred by the RPCE with the performance of such studies.

8.4.4.7 Transmission Provider will identify any transmission infrastructure improvements required as a result of the transmission service request.

8.4.4.8 Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the transmission service request shall be accomplished under the terms of Western's Open Access Transmission Tariff.

8.4.5 Coordinated Transmission Planning. MAPP agrees to participate in the conduct of a periodic Coordinated Regional Transmission Planning Study ("CRTPS"). The CRTPS shall have as input the results of ongoing analyses of requests for interconnection and ongoing analyses of requests for long-term firm transmission service. The Parties shall coordinate in the analyses of these ongoing service requests in accordance with sections 8.4.3 and 8.4.4. MAPP, in coordination with coordinating RPCEs, shall review the scope, preliminary results and final results of the CRTPS with impacted stakeholders, in accordance with section 8.4.1 and this section. The results of the CRTPS shall be an integral part of the expansion plans of each Party. Construction of upgrades on the Transmission System of the Transmission Provider

identified as necessary in the CRTSP shall be under the terms of the applicable Western documentation applicable to the construction of upgrades identified in the expansion planning process. Coordination of studies required for the development of the Coordinated System Plan will include the following:

8.4.5.1 Every three years, MAPP shall participate in the performance of a CRTPS. Sensitivity analyses will be performed, as required, during the off years based on a review by the JPC of discrete reliability problems or operability issues that arise due to changing system conditions.

8.4.5.2 The CRTPS shall identify all reliability and expansion issues, and shall propose potential resolutions to be considered by MAPP and the coordinating RPCEs.

8.4.5.3 As a result of participation in the CRTPS, neither MAPP nor its members are obligated in any way to construct, finance, operate, or otherwise support any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS. Any decision to proceed with any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS shall be based on the applicable reliability, operational and economic planning criteria established for MAPP as applicable to the development of the MAPP Regional Plan and set forth in this Attachment P.

8.4.5.4 As a result of participation in the CRTPS, the RPCEs are not entitled to any rights to financial compensation due to the impact of the transmission plans of MAPP upon the RPCE system, including but not limited to its decisions whether or not to construct any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS.

8.4.5.5 The JPC will develop the scope and procedure for the CRTPS. The scope of the CRTPSs performed over time will include evaluations of the transmission systems against reliability criteria, operational performance criteria, and economic performance criteria applicable to MAPP and the RPCEs.

8.4.5.6 In the conduct of the CRTPS, MAPP and the coordinating RPCEs will use planning models that are developed in accordance with the procedures to be established by the JPC. Exchange of power flow models will be in a format that is acceptable to the coordinating parties.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

9.0, Member Plans, 2.0.0, A

Record Narrative Name: 9.0 Member Plans The procedures, standards and requirements for making available Members transmission plans Member Plans and the information on which the Member Plans are based, as required by the MAPP Restated Agreement. Members may submit

Tariff Record ID: 4300

Tariff Record Collation Value: 884000 Tariff Record Parent Identifier: 4377

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Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

9.0 Member Plans

The procedures, standards and requirements for making available Members' transmission plans ("Member Plans") and the information on which the Member Plans are based, as required by the

MAPP Restated Agreement. Members may submit information to the TPSC individually, but submittals through the SPGs are preferred. The SPGs provide a forum for members to continue their long-term joint planning relationships with their neighbors, and involve regulatory staff. The Member Plans will be integrated into the SPG Subregional Plan.

The Subregional Plan reports, and subsequent updates, are submitted to the TPSC as part of the MAPP Regional Plan. Additionally, the MAPP Regional Plan will provide an executive summary report of the Member and SPG plans showing the anticipated transmission expansions in the region. Detailed Member planning reports are referenced in the Subregional Plan. Such reports typically provide details of economic evaluations, extensive alternative evaluations and supporting technical studies and minority opinions if consensus is not reached.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

10.0, Dispute Resolution, 2.0.0, A

Record Narrative Name: 10.0 Dispute Resolution All substantive and procedural disputes related to the MAPP Regional Planning Process shall be resolved in accordance with the dispute resolution procedures set forth in the MAPP Restated Agreement. Disputes related to

Tariff Record ID: 4301

Tariff Record Collation Value: 885000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

10.0 Dispute Resolution

All substantive and procedural disputes related to the MAPP Regional Planning Process shall be resolved in accordance with the dispute resolution procedures set forth in the MAPP Restated Agreement. Disputes related to local planning issues shall be resolved in accordance with the dispute resolution procedures set forth in this Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

11.0, Economic Planning Studies, 2.0.0, A

Record Narrative Name: 11.0 Economic Planning Studies The TPSC shall evaluate limitations on MAPP transfer capability through historical Transmission Loading Relief TLR analysis associated with the defined flowgates in the MAPP region. The TPSC shall utilize these

Tariff Record ID: 4302

Tariff Record Collation Value: 886000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

11.0 Economic Planning Studies

The TPSC shall evaluate limitations on MAPP transfer capability through historical Transmission Loading Relief ("TLR") analysis associated with the defined flowgates in the MAPP region. The TPSC shall utilize these comprehensive reviews to determine transmission constraints in the region. The TPSC shall also support economic studies necessary to review the integration of large proposed generation facilities to the regional grid and shall develop concept plans as part of regional study efforts.

The TPSC may also commission SPGs and joint SPGs to address highly constrained regional flowgates and to develop proposed plans for increasing inter-regional transfer capability. SPGs

may also perform regional transfer capability analysis and develop exploratory transmission expansion plans to address the most limiting flowgates within their SPG region. The TPSC may also coordinate and support other joint exploratory economic planning efforts within and adjacent to the RTC Region.

In addition to these types of studies, stakeholders, through the TPSC, may request that the TPSC perform economic planning studies to evaluate potential upgrades or other investments that could reduce congestion or integrate new transmission, generation or demand resources and loads on an aggregated or regional basis. The TPSC shall review such proposals and select a certain number for study each year.

The TPSC may cluster or batch requests for economic planning studies so the TPSC can perform the studies in the most efficient manner. Requests for studies shall be submitted to the chairman of the TPSC. All such requests will be collected over a 12 month period ending January 1 of each year. The TPSC (with stakeholder input) will commit and engage to address up to five requests per year. The TPSC will attempt to combine the scope of such requests such that the scope of actual study work will adequately address multiple requests, so as not to exceed three studies. Requesting parties would be required to submit essential data for their requested study.

As part of this process, the TPSC may also consider economic studies of upgrades to MAPP flowgates. The flowgates studied will be selected among those determined to have recurring congestion, as evidenced by a high number of hours per year with no available firm Available Flowgate Capacity ("AFC") or a high number of historical hours per year under Transmission Loading Relief ("TLR"). Along with stakeholder input, the TPSC will use these or similar metrics to determine which MAPP flowgates are most congested and warrant study of the economic benefits of proposed flowgate upgrades. Any economic planning study, which identifies a new MAPP region transmission facility or the upgrade of an existing transmission facility as a proposed Economic Network Upgrade, shall identify the proposed upgrade subject to the cost allocation principles set forth in Section 12 of this Attachment P. Such economic study shall also include a benefit allocation analysis based on one or more of the following principles: (a) reductions in projected congestion costs; (b) reductions in projected energy costs; or (c) reductions in projected transmission losses.

The economic planning studies performed by the TPSC shall include sensitivity analyses representing various generation price scenarios; however, the TPSC shall study the cost of congestion only to the extent it has information to do so. If a stakeholder requests that a particular congested area be studied, it must supply relevant data within its possession to enable the TPSC to calculate the level of congestion costs that is occurring or is likely to occur in the near future.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

12.0, Cost Allocation, 2.0.0, A

Record Narrative Name: 12.0 Cost Allocation

Tariff Record ID: 4303

Tariff Record Collation Value: 887000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

12.0 Cost Allocation

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

12.1, Categories of Projects, 2.0.0, A

Record Narrative Name: 12.1 Categories of Projects. The TPSC will identify cost responsibility on a regional and subregional basis for Network Upgrades identified in the MAPP Regional Plan for reliability and economic projects subject to any grandfathered project

Tariff Record ID: 4304

Tariff Record Collation Value: 888000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

12.1 Categories of Projects. The TPSC will identify cost responsibility on a regional and subregional basis for Network Upgrades identified in the MAPP Regional Plan for reliability and economic projects subject to any grandfathered project provisions from pre-existing agreements. There will be three categories of projects:

12.1.1 Baseline Reliability Projects (BRP). BRPs are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable NERC and MRO Reliability Standards.

12.1.2 New Transmission Access Projects. New Transmission Access Projects are defined as Network Upgrades identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under Western's Tariff. New Transmission Access Projects include projects that are needed to accommodate the incremental needs associated with requests for new transmission or interconnection service, as determined in Facilities Studies associated with such requests. New Transmission Access Projects are either Generation Interconnection Projects or Transmission Service Projects.

12.1.2.1 Generation Interconnection Projects. Generation Interconnection Projects are New Transmission Access Projects that are associated with either the interconnection of new generation, or an increase in the generating capacity of existing generation, under Western's Tariff.

12.1.2.2 Transmission Service Projects. Transmission Service Projects are New Transmission Access Projects that are needed to provide for requests for new Point-To-Point Transmission Service, or requests under Western's Tariff for Network Service or a new designation of a Network Resource(s).

12.1.3 Regionally Beneficial Projects (RBP). A RBP is a transmission network upgrade that shall be: (a) proposed in accordance with the MAPP Planning Process; (b) found to be eligible for inclusion in the MAPP Regional Plan; (c) determined not to be a New Transmission Access Project; and (d) found to have regional benefits. RBPs may include projects that expand the scope of a project that would otherwise qualify as a Baseline Reliability Project.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

12.2, Cost Allocation, 2.0.0, A

Record Narrative Name: 12.2 Cost Allocation. The allocation rules for these projects are as follows 12.2.1 Allocation of Baseline Reliability Project Costs. Each transmission owner is obligated to construct and/or upgrade those BRP facilities required to meet NERC and

Tariff Record ID: 4305

Tariff Record Collation Value: 889000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

12.2 Cost Allocation. The allocation rules for these projects are as follows:

12.2.1 Allocation of Baseline Reliability Project Costs. Each transmission owner is obligated to construct and/or upgrade those BRP facilities required to meet NERC and MRO Reliability Standards associated with serving its native load customers and to meet its firm transmission commitments. Costs associated with a single Transmission Provider facility addition shall be recovered through Western's rate recovery method. Costs associated with BRP involving multiple transmission owners shall be shared among the affected transmission owners in accordance with this principle, subject to those transmission owners' respective interconnection agreements.

12.2.2 New Transmission Access Projects. New Transmission Access Projects may consist of a number of individual facilities that constitutes a single project for cost allocation purposes. Cost allocation methods applicable to specific requests for interconnection and transmission service under Western's Tariff shall be used for new Transmission Access Projects.

12.2.3 Allocation Rules for RBPs. The MAPP Regional Plan shall classify transmission projects as described above. Any economic planning study authorized by the MAPP RTC for a RBP and performed in compliance with Section 11 of this Attachment P, which identifies the need for a new MAPP region transmission facility or the upgrade of an existing transmission facility as a proposed Economic Network Upgrade, shall treat such proposed facility upgrade(s) as commercial transmission

This procedure ("Auction Procedure") describes the process by which the MAPP transmission owner on whose transmission system the Economic Network Upgrade is located (Host TO) shall solicit participation for the proposed Economic Network Upgrade. The MAPP transmission owner shall have the right to elect to be an Affected System and not serve as the Host TO, provided that the MAPP RTC identifies another qualified transmission owner, including a consortium of transmission owners and/or independent transmission owners, as the Host TO. A transmission owner that has protested a project as causing undue burden, which has not been satisfactorily resolved, has the option to decline participation.

12.2.3.1 Applicability. This Auction Procedure is applicable to MAPP-Region transmission owners and Eligible Transmission Customers, including but not limited to Affected Generators and MAPP-Region Load-Serving Entities ("LSEs"), collectively referred to as "Eligible Participants."

12.2.3.2 First Call Offer of Subscription Rights. The Contractor (i.e., MAPP COR acting on behalf of the Host TO) shall submit an offer to participate in the Economic Network Upgrade to all Eligible Participants and to any Affected System Operators participating on a reciprocal basis in accordance with the benefit allocation defined on a cost causation basis in the economic planning studies performed in compliance with Section 11 of this Attachment P, in exchange for

Subscription Rights to the new transmission capacity.

The Contractor shall offer, on OASIS on a non-discriminatory, basis to all Eligible Participants the opportunity to participate in the Economic Network Upgrade by purchasing a portion of the Subscription Rights made available by such Auction Procedure. If an Eligible Participant accepts the subscription offer for participation in the Economic Network Upgrade, the subscription shall be granted to such Eligible Participant as a Subscription Rights buyer. If demand for the Subscription Rights offered exceeds the number of Subscription Rights available, the Contractor shall offer such Subscription Rights to the interested Eligible Participants on a pro rata basis, based on each Eligible Participant's designated level of transmission capacity megawatts requested in its submitted offer to participate to the total transmission capacity megawatts requested. Each participating interested Eligible Participant shall have 60 days to accept such an offer for pro rata Subscription Rights.

12.2.3.3 Second Round Offer of Subscription Rights. Within 30 days following the close of the above first call offer of Subscription Rights, the Contractor shall release any Subscription Rights that remain unsubscribed to all Eligible Participants. The Contractor shall allow thirty (30) days for recipients of the second round offer to indicate interest in acquiring the residual Subscription Rights. If the Subscription Rights offered are acquired by an Affected System Operator's transmission business unit, the revenue requirements will be rolled into the Affected System Operator's rate structure and the acquired transmission capacity shall be available under the Affected System Operator's open access transmission tariff ("OATT"). The Affected System Operator, including the Host TO, shall adjust the point-to-point and network service charges to reflect the addition of any revenue requirements to the Affected System Operator's OATT embedded cost rates, provided that any such Affected System Operator subject to the jurisdiction of the Commission shall obtain approval of the Commission prior to causing such rate adjustment to be effective. Furthermore, any subscribing Eligible Participant may roll the revenue requirements associated with the acquired Subscription Rights into the Affected System Operator's rate structure, as approved by the Commission, if the subscribing Eligible Participant makes the acquired transmission capacity available under the Affected System Operator's OATT.

12.2.3.4 Resale and Reassignment of Subscription Rights. The MAPP transmission provider shall provide resale and reassignment provisions for Subscription Rights on the same basis as provided in the pro forma OATT for firm point-to-point transmission service.

12.2.3.5 Failure to Obtain Subscriptions. If, after the first and second rounds of the Auction Procedure have concluded, Subscription Rights sufficient to cover the total cost of the Economic Network Upgrade project have not been successfully subscribed, the Contractor shall notify subscribing Eligible Participants of the Subscription Rights shortfall. Such notice shall be in writing, include the amount of available Subscription Rights and provide thirty (30) days for such subscribing Eligible Participant to increase its Subscription Rights election. At the end of the expiration of the thirty (30) day notice period, the proposed project may be cancelled if it is still not fully subscribed. The Host TO or another Affected System Operator may choose to fund the remaining portion of the necessary subscription rights and roll those costs into their transmission revenue requirements. If a project is cancelled under such circumstances, the Contractor shall notify all of the subscribers in writing within thirty (30) days of its decision to

terminate. If an Economic Network Upgrade is terminated for lack of subscriptions or for defaults on subscriptions, the project shall be deemed to have insufficient economic benefit to market participants, and the project shall not qualify for reconsideration as an Economic Network Upgrade until the latter of a) the next biennial MAPP Regional Plan planning cycle, or b) two years from the date of notice of cancellation.

12.2.3.6 Facilities Agreement. If the Economic Network Upgrade is fully subscribed, the Host TO shall offer the subscribers a Facilities Agreement within sixty (60) days of full subscription.

12.2.3.7 Defaulting Subscribers. If any of the subscribers fail to execute the Facilities Agreement within thirty (30) days of receipt of such agreement, the Contractor shall use its best efforts to award the non-signing subscriber's Subscription Rights to all Eligible Participants. If the Contractor is unable to secure an alternative subscriber, the Host TO shall pursue resolution with the non-signing/defaulting subscriber(s) pursuant to Article 9, Dispute Resolution, of the MAPP Restated Agreement. Any dispute that has not been resolved through the MAPP Article 9 Dispute Resolution process shall be resolved through the appropriate regulatory or jurisdictional dispute resolution proceedings. A party seeking to invoke FERC jurisdiction over a Dispute shall file with the Commission the Facilities Agreement unexecuted by the non-signing/defaulting subscriber. The Commission shall determine the obligations of the non-signing/defaulting subscriber. If, as a result of the dispute resolution process the non-signing/defaulting subscriber is relieved of its obligations, the Host TO may cancel the project with no further obligations to the remaining subscribers, except to notify all of the subscribers in writing within thirty (30) days of its decision to terminate.

12.2.3.8 Post-Auction Host Owner Option. In the event the defined Economic Network Upgrade is not fully subscribed after the Auction Procedure described in Sections 12.2.3.2-12.2.3.7 is exhausted, the Host TO may, of its own accord, elect to perform such Economic Network Upgrade, and roll the upgrade costs into the next update of its transmission revenue requirements.

12.2.3.9 Conversion of Subscription Rights to Physical Transmission Rights. The Facilities Agreement associated with an Economic Network Upgrade shall convert the Subscription Rights allocated pursuant to Sections 12.2.3.2, 12.2.3.3, 12.2.3.5 and 12.2.3.7 above, to Physical Transmission Rights. Subscription Rights and Physical Rights shall be the same transmission capability rights with the principal distinction merely being the stage of project commitment. Subscription Rights shall be associated with a good faith expression of intent, albeit still based on non-binding estimated planning costs, to invest in the Economic Network Upgrade. Upon signing a Facilities Agreement, the Eligible Participant's expression of intent to invest as a holder of Subscription Rights becomes a binding contractual commitment with the prescribed Physical Rights to the discrete transmission capability defined in the Facilities Agreement. The additional transmission capability achieved by the project shall be allocated to the Subscription Rights holders as Physical Transmission Rights in proportion to their respective payment for the network upgrade. The Physical Transmission Rights do not in themselves convey a form of transmission service under Part II or Part III of the Tariff. The holder of the Physical Transmission Rights may use those rights in conjunction with a specific application of transmission service under Part II or Part III of the Tariff of the Host TO, or the holder may sell

or assign the Physical Transmission Rights to another party. Physical Transmission Rights may be used by a generator owner to secure firm transmission service and/or provide a hedge against potential congestion charges.

12.2.3.10 Completion of Economic Network Upgrades. Once an Economic Network Upgrade is fully subscribed and Facilities Agreements are in place for all subscribers, the Host TO shall apply good faith efforts to obtain approvals for, design, construct, own, operate and maintain the proposed Economic Network Upgrade facilities under the terms and conditions set forth in the Facilities Agreement(s).

12.2.3.11 Inter-Regional Coordination. This Procedure may be applied for inter-regional Economic Network Upgrades demonstrating inter-regional economic benefits. MAPP Transmission Owners may use this Procedure to fulfill any requirements of reciprocal obligations for inter-regional transmission upgrades identified by the planning processes of adjacent regional entities, including but not limited to the Midwest ISO Transmission Expansion Plan. This Procedure shall also be available to transmission owners in adjacent regions that may be invited to participate in a subscription rights offering from a MAPP Transmission Owner, based on demonstrations of benefits under Section 11 of this Attachment P.

12.2.3.12 Transmission Projects for Renewable Energy Zones. The Subscription Rights procedures of Sections 12.2.3.3 through 12.2.3.7 above may also be applied to a regional transmission project that is designed to develop deliverability from Renewable Energy Zones to a market in the same manner that the Subscription Rights procedures are applied for Economic Network Upgrades. However, this procedure shall not be an alternative for requirements of Transmission Access Projects under Parts II and III of the Tariff, or for the obligations of Attachment L, "Standard Large Generator Interconnection Procedures (LGIP)". The Renewable Energy Zone transmission project must be included in the MAPP Regional Plan or in the transmission plan of an adjacent region that has been coordinated with the MAPP Regional Plan.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

12.3, Existing Cost Allocation Methodologies, 2.0.0, A

Record Narrative Name: 12.3 Existing Cost Allocation Methodologies. The cost allocation methodology set forth in this Section 12.0 shall not modify or be inconsistent with a existing mechanisms to allocate costs for projects that are constructed by a single

Tariff Record ID: 4306

Tariff Record Collation Value: 890000 Tariff Record Parent Identifier: 4377

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Associated Filing Identifier:

12.3 Existing Cost Allocation Methodologies. The cost allocation methodology set forth in this Section 12.0 shall not modify or be inconsistent with (a) existing mechanisms to allocate costs for projects that are constructed by a single transmission owner and billed under existing rate structure, or (b) existing cost allocation methods applicable to specific requests for interconnection or transmission service under the pro forma OATT. Further, the cost allocation methodology set forth in this Section 12.0 shall not supersede cost-allocation, cost-sharing or joint-investment obligations to which an individual Host TO or Affected System may be subject.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.0, Western's Upper Great Plains Region Local Planning ..., 2.0.0, A

Record Narrative Name: 13.0 Westerns Upper Great Plains Region Local Planning ProcessWesterns UGPR Local Transmission Planning Process covers transmission facilities under Westerns Tariff contained within both the Eastern and

Western Interconnection of Westerns
 Tariff Record ID: 4307
 Tariff Record Collation Value: 891000 Tariff Record Parent Identifier: 4377
 Proposed Date: 2019-06-03
 Priority Order: 500
 Record Change Type: CANCEL
 Record Content Type: 1
 Associated Filing Identifier:

13.0 Western's Upper Great Plains Region Local Planning Process

Western's UGPR Local Transmission Planning Process covers transmission facilities under Western's Tariff contained within both the Eastern and Western Interconnection of Western's Upper Great Plains Region. The Local Transmission Plan (LTP) is the transmission plan of the Transmission Provider that identifies the upgrades and other investments to the Western UGPR Transmission System necessary to reliably satisfy, over the planning horizon, Network Customers' resource and load growth expectations for Native Load Customers; Transmission Provider's obligations pursuant to grandfathered, non-OATT agreements; and Transmission Provider's Point-to-Point Transmission Service customers' projected service needs including obligations for rollover rights. In addition to this local process, Western UGPR participates in the regional planning efforts as described in Part I of this Attachment P and utilizes these forums also to coordinate new projects with Transmission Customers, Affected Generators, or other relevant stakeholders.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.1, Scope, 2.0.0, A

Record Narrative Name: 13.1 Scope. The purpose of Westerns UGPR Local Transmission Planning Process is to conduct local long-term planning for transmission facilities typically on a two year planning cycle with annual assessments to serve Westerns network load and

Tariff Record ID: 4308

Tariff Record Collation Value: 892000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

13.1 Scope. The purpose of Western's UGPR Local Transmission Planning Process is to conduct local long-term planning for transmission facilities typically on a two year planning cycle with annual assessments to serve Western's network load and firm transmission commitments. The preparation of the LTP shall be done in accordance with the general policies, procedures, and principles set forth in this Attachment P.

13.1.1 Service Requests. Point-to-Point transmission service request must be made as a separate and distinct submission by an Eligible Customer in accordance with the procedures set forth in Transmission Provider's Tariff. Similarly, Network Customers must submit Network Resource and load additions/removals pursuant to the process set forth in Transmission Provider's Tariff.

13.1.2 Comparability between Customers. The process provides comparable long-term transmission system planning for similarly-situated wholesale customers. The process provides long-term reliability and economic planning of transmission facilities for Western's UGPR firm commitments (e.g., point-to-point service with rollover rights) and Network Customers served from the UGPR Transmission System that is comparable to the long-term planning of its own

Native Load Customers from the UGPR System. In developing the LTP, Transmission Provider shall apply applicable reliability criteria, including criteria established by the Transmission Provider, the Midwest Reliability Organization, the WECC, the North American Electric Reliability Corporation, and the Federal Energy Regulatory Commission.

13.1.3 Comparability between Resources. Comparability between resources, including similarly situated customer-identified projects, will be accomplished by modeling from the generation to the Network Load on the UGPR Transmission System. Comparability between resources will be achieved in Western UGPR's LTP by including all valid data received from customers (including load forecast data, generation data and Demand Resource data) in the LTP development. Comparability will be achieved by allowing customer-defined projects sponsor participation throughout the transmission planning process and by considering customer-defined projects (transmission solutions and solutions utilizing Demand Resources load modeled as a load adjustment) in the LTP development. The Transmission Provider retains discretion as to which solutions to pursue and is not required to include all customer-identified projects in its plan.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.2, Responsibilities, 2.0.0, A

Record Narrative Name: 13.2 Responsibilities. Western will be responsible for the development of the transmission plans that result from Western's UGPR Local Transmission Planning Process. Western's UGPR Local Planning Process will allow timely and meaningful

Tariff Record ID: 4309

Tariff Record Collation Value: 893000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

13.2 Responsibilities. Western will be responsible for the development of the transmission plans that result from Western's UGPR Local Transmission Planning Process. Western's UGPR Local Planning Process will allow timely and meaningful stakeholder input and participation in the development of the LTP. Western's UGPR Local Planning Process will follow regional planning procedures provided in Sections 1 through 12 and Sections 14 of this Attachment P. The transmission plans and studies on the eastern interconnect resulting from Western's UGPR Local Planning Process that are to be included in MAPP Regional Plans will be submitted to the applicable MAPP Committees and on the Western Interconnection resulting from Western's UGPR Local Planning Process that are to be included in WECC Regional Plans will be submitted to the applicable WECC Committees, to their successor regional or sub-regional committees, and/or to the successor regional transmission organization, independent transmission coordinator, or independent system operator, as appropriate.

In addition to developing transmission plans to be provided for regional coordinated planning, Western's UGPR Local Planning Process will develop plans to address local UGPR transmission issues, such as transmission facility upgrades that do not significantly change network system flows. The plans will be provided in reports with executive summaries that are brief and designed to be understandable to stakeholders.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.3, Open Planning Process, 2.0.0, A

Record Narrative Name: 13.3 Open Planning Process. 13.3.1 Openness Western's UGPR Local Planning Process will be open to all stakeholders during the development of the LTP. All meetings related to the LTP process shall be 1 noticed by the Transmission Provider via

Tariff Record ID: 4310
Tariff Record Collation Value: 894000 Tariff Record Parent Identifier: 4377
Proposed Date: 2019-06-03
Priority Order: 500
Record Change Type: CANCEL
Record Content Type: 1
Associated Filing Identifier:

13.3 Open Planning Process.

13.3.1 Openness: Western's UGPR Local Planning Process will be open to all stakeholders during the development of the LTP. All meetings related to the LTP process shall be: (1) noticed by the Transmission Provider via the OASIS; and (2) provide for alternate means of participation, to the extent practical and economical, such as teleconference, videoconference or other similar means. The mode, method, schedule, process, and instructions for participation in Western's UGPR Local Planning Process shall be posted and maintained on the OASIS.

13.3.2 Limitations on Disclosure: While Western's UGPR Local Planning Process will be conducted in the most open manner possible, Transmission Provider has an obligation to protect sensitive information such as, but not limited to, Critical Energy Information and the proprietary materials of third parties. Nothing in this Attachment P shall be construed as compelling the Transmission Provider to disclose materials in contravention of any applicable regulation, contractual arrangement, or lawful order unless otherwise ordered by a governmental agency of competent jurisdiction. Transmission Provider may employ mechanisms such as confidentiality agreements, protective orders, or waivers to facilitate the exchange of sensitive information where appropriate and available.

13.3.3 Compliance: Transmission Provider will adhere to all applicable regulations in preparing the LTP, including but not limited to the Standards of Conduct for Transmission Providers and Critical Information Energy Information.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.4, Study Process, 2.0.0, A

Record Narrative Name: 13.4 Study Process. A local study group process will be instituted in addition to the open planning process described in Section 13.3. The purpose of the local study group process is to expand stakeholder participation in Western's UGPR Local

Tariff Record ID: 4311

Tariff Record Collation Value: 895000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

13.4 Study Process. A local study group process will be instituted in addition to the open planning process described in Section 13.3. The purpose of the local study group process is to expand stakeholder participation in Western's UGPR Local Planning Process as provided in the following:

(a) A working group will be formed at the first semi-annual stakeholder meeting to receive information and provide comment on planning issues that are the subject of Western's UGPR Local Planning Process that arise between stakeholder meetings. Western UGPR will provide (subject to confidentiality, CEII, cyber security and Standards of Conduct requirements):

1. The initial assumptions used in developing the annual local process transmission assessment and will provide an opportunity for feedback.
2. The models used for local process transmission planning.
3. Information regarding the status of local process transmission upgrades and how such upgrades are reflected in future local process transmission plan development.
4. The draft study scope for those studies conducted by the working group as part of the local process, which will include or provide references to the basic assumptions for the study, the model or models used in the working group study including information regarding significant changes in the model.
5. The draft transmission report for those studies conducted by the working group as part of the local process, as prepared by Western UGPR or Western UGPR's designate. Stakeholders who do not participate on the working group will be given the opportunity to comment on the draft report after Western UGPR has considered the comments of the working group. The report will include an executive summary that is brief and is designed to be understandable to stakeholders.
6. Draft transmission plans that result from Western's UGPR Local Planning Process before they are distributed to stakeholders pursuant to the open planning process described in Section 13.3 above.

(b) The working group meetings will be established by Western UGPR on an as needed basis. Working group meetings will also be established if need is expressed by 10 members of the respective working group; however, Western UGPR will not be required to hold meetings of the working group more than on a semi-annual basis. Meetings will typically be conference calls and/or web casts, but face-to-face meetings may be called if necessary. Meeting notices will be distributed via email to the respective study group mailing list. Meeting materials may be distributed via email respecting email size limitations and CEII, cyber security, and Standards of Conduct requirements. A password protected FTP site or internet may be used to transmit study models or large amounts of data.

(c) Western UGPR will chair and provide leadership to the working group, including facilitating the group meetings.

(d) Input from the working group members will be considered in the local planning process. Comments will generally be expected via email or during working group meetings. Comments will be solicited within the defined comment periods of the study group process.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.5, Transparency, 2.0.0, A

Record Narrative Name: 13.5 Transparency. In addition, Westerns UGPR Local Planning Process will be open and transparent to facilitate comment and exchange of information, as described below aWestern UGPR will make available the basic criteria that underlie its

Tariff Record ID: 4312

Tariff Record Collation Value: 896000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

13.5 Transparency. In addition, Western's UGPR Local Planning Process will be open and transparent to facilitate comment and exchange of information, as described below:

(a) Western UGPR will make available the basic criteria that underlie its transmission system plans by posting Western UGPR's Transmission Planning Criteria for facilities covered by this Attachment P on the Western UGPR OASIS page.

(b) Western UGPR will make available to registered stakeholders (subject to CEII, cyber security, and Standards of Conduct requirements) the basic criteria, assumptions, and data that underlie its transmission system plans. For this purpose, Western UGPR will make the following documents available in a way that maintains confidentiality and complies with CEII and cyber security requirements: i. Western's FERC Form 714, ii. Western's FERC Form 715.

(c) Western UGPR will provide information on the location of applicable NERC/MAPP/Midwest Reliability Organization ("MRO")/WECC planning criteria, reliability standards, regional power flow models, or other pertinent information, as available.

(d) Western UGPR will provide its regional planning model submittal in accordance with Section 13.6 of this Attachment P.

(e) Western UGPR will set the planning study horizons and study frequencies considering NERC and or regional entity standards and the MAPP SPG planning cycle and the WECC Regional Planning Process.

(f) Western UGPR will simultaneously disclose transmission planning information where appropriate in order to alleviate concerns regarding the disclosure of information with respect to the FERC Standards of Conduct.

(g) Western UGPR will consider customer demand response resources in Western's UGPR Local Planning Process on a comparable basis with generation resources in developing transmission plans provided that

1. such resources are capable of providing measurable transmission system support needed to correct transmission system problems assessed in the Western's UGPR Local Planning Process,
2. such resources can be relied upon on a long-term basis,
3. such resources meet NERC Reliability Standards and applicable laws, rules, and regulations, and
4. the inclusion of such resources in corrective action plans are permitted by the NERC Reliability Standards.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.6, Information Exchange, 2.0.0, A

Record Narrative Name: 13.6 Information Exchange. Certain information exchanges associated with the open planning process and the local study group process are described in Sections 13.3 and 13.4 in this Attachment P. In addition, information exchange for base regional

Tariff Record ID: 4313
Tariff Record Collation Value: 897000 Tariff Record Parent Identifier: 4377
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Record Content Type: 1
Associated Filing Identifier:

13.6 Information Exchange. Certain information exchanges associated with the open planning process and the local study group process are described in Sections 13.3 and 13.4 in this Attachment P. In addition, information exchange for base regional model development will take place as follows:

(a) Western participates in the annual development of the regional base case power flow and stability models currently for the PSSE computer application. These regional models provide the basis for studies of transmission service requests, generator interconnection requests, local planning studies and regional planning studies. To assist in the development of accurate base case regional models and thereby develop appropriate local transmission plans for the Western UGPR system, Western will request at a minimum the following data of its Transmission Customers:

1. Network Customers and other Load Serving Entities (LSE) within the Western UGPR Control Area will be requested annually to submit existing loads and future loads for the horizon of the regional base case models (typically 10 years) for each of its load points. Information for firm loads will be separated from information for interruptible loads.
2. Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to provide a list of all existing and proposed new demand response resources including behind the meter generation or load curtailment; the MW impact on peak load; the historical and expected future operating practice of the demand response resources such as the conditions under which the customer intends to initiate each resource, and whether each resource is available for use in providing measurable transmission system support to correct problems assessed in Western's UGPR Local Planning Process, as well as, other information required to consider such resources as provided in Section 13.5 (g). Network Customers and other LSEs will be requested to provide updates of this information when substantive changes occur.
3. Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to provide a list of existing and proposed new generation resources and historical and expected future dispatch practices such as the load level at which the customer plans to start each generating unit and plant, and whether each generation resource is available for use in providing measurable transmission system support to correct problems assessed in Western's UGPR Local Planning Process, as well as, other information required to consider such resources as provided in Section 13.5 (g). Network Customers and other LSEs will be requested to provide updates of this information when substantive changes occur.
4. Registered point-to-point customers including Western UGPR's marketing and energy affiliates, as appropriate, will be requested annually to submit projections of their quantifiable transmission service needs over the planning horizon, including applicable receipt and delivery points and the transmission service reservations anticipated to be scheduled.

5. Network Customers and other LSEs within the Western UGPR Control Area will be requested annually to submit existing and expected future generation for the horizon of the regional base case models (typically 10 years).

6. Additional modeling data will be requested as necessary to conform to the requirements of the NERC MOD standards.

(b) The data submitted by Transmission Customers will be included to the extent appropriate in the base case model.

(c) The Western UGPR data request will be sent annually in coordination with the regional data request. Western UGRP will send a data request to its Transmission Customers typically prior to expected transmittal of the regional data request. Transmission Customers will be expected to respond to the Western UGPR data request in a timely fashion.

(d) Responses to the data request will be accepted in forms such as PSS™ raw data format or in spreadsheet format with appropriately labeled headings.

(e) Each Transmission Customer and LSE within the Western UGPR control area will be responsible for providing Western with an email address of its data modeling contact. Western will send the annual data request to these contacts via email.

(f) The Western data response will be made available subject to CEII, cyber security and Standards of Conduct restrictions upon request to registered stakeholders.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

13.7, Western's UGPR Local Economic Planning Studies, 2.0.0, A

Record Narrative Name: 13.7 Westerns UGPR Local Economic Planning Studies. Local economic planning studies are performed to identify significant and recurring congestion on the transmission system and/or address the integration of new resources and loads. Such

Tariff Record ID: 4314

Tariff Record Collation Value: 898000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

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Record Content Type: 1

Associated Filing Identifier:

13.7 Western's UGPR Local Economic Planning Studies. Local economic planning studies are performed to identify significant and recurring congestion on the transmission system and/or address the integration of new resources and loads. Such studies may analyze any, or all, of the following: (i) the location and magnitude of the congestion, (ii) possible remedies for the elimination of the congestion, in whole or in part, including transmission solutions, generation solutions and solutions utilizing demand response resources, (iii) the associated costs of congestion (iv) the costs associated with relieving congestion through system enhancements (or other means), and, as appropriate, (v) the economic impacts of integrating new resources and loads. All local economic planning studies will be performed through Western UGRP's participation in the regional economic planning studies as described in this Attachment P.

(a) Any Transmission Customers, Affected Generators, or other relevant stakeholders

("Requester") may submit a study request for an economic planning study directly to Western, the MAPP TPSC, or the WECC TEPPC. All requests must be electronically submitted to Western's Regional Office Contact e-mail Address as posted on the Transmission Providers OASIS. Western will not perform local economic planning studies but will coordinate the performance of such studies with the MAPP TPSC or the WECC TEPPC. The economic planning study cycle will be that of the MAPP TPSC or WECC TEPPC process as outlined in this Attachment P.

(b) Western shall ensure that any economic planning study requests submitted to Western are properly handled by forwarding the Requestor to MAPP TPSC or WECC TEPPC for inclusion in the regional economic planning studies as outlined in this Attachment P.

(c) If the MAPP TPSC or WECC TEPPC determines, after reviewing through an open stakeholder process, that the requested economic planning study as forwarded by Western is not a high priority study, the Requester may perform the economic planning analysis at the Requester's expense. Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.

(d) Western cannot fund any high priority and other local economic planning studies due to its spending authorization being contingent upon Congressional Appropriations. In the event that Western is requested to perform a local economic planning study, Western will, at the Requester's expense, provide its assistance in having a third party perform the local economic planning study. Western will support the Requester in ensuring that the study is coordinated as necessary through local, subregional or regional planning groups.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.0, Introduction to the WECC Regional Planning Process ..., 2.0.0, A

Record Narrative Name: 14.0 Introduction to the WECC Regional Planning Process for Westerns UGPRWestern UGPR will coordinate its Western Interconnection LTP through the WECC SPGs. The WECC SPGs will coordinate their subregional plans with the other subregional plans

Tariff Record ID: 4315

Tariff Record Collation Value: 899000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

14.0 Introduction to the WECC Regional Planning Process for Western's UGPR

Western UGPR will coordinate its Western Interconnection LTP through the WECC SPGs. The WECC SPGs will coordinate their subregional plans with the other subregional plans in the Western Interconnection and at the TEPPC level.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.1, WECC Procedures for Regional Planning Project Review, 2.0.0, A

Record Narrative Name: 14.1 WECC Procedures for Regional Planning Project Review.aWECC develops the Western Interconnection-wide coordinated base cases for transmission planning analysis such as power flow, stability and dynamic voltage stability studies. The WECC

Tariff Record ID: 4316

Tariff Record Collation Value: 900000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

14.1 WECC Procedures for Regional Planning Project Review.

- (a) WECC develops the Western Interconnection-wide coordinated base cases for transmission planning analysis such as power flow, stability and dynamic voltage stability studies. The WECC approved base cases are used for study purposes by transmission planners, subregional planning groups, and other entities that have signed confidentiality agreements with WECC.
- (b) WECC also maintains a data base for reporting the status of all planned projects throughout the Western Interconnection.
- (c) WECC provides for coordination of planned projects through its Procedures for Regional Planning Project Review.
- (d) WECC's Path Rating Process ensures that a new project will have no adverse effect on existing projects or facilities.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.2, WECC Open Stakeholder Meetings, 2.0.0, A

Record Narrative Name: 14.2 WECC Open Stakeholder Meetings. Western Interconnection-wide economic planning studies are conducted by the WECC TEPPC in an open stakeholder process that holds region-wide stakeholder meetings on a regular basis. The WECC-TEPPC

Tariff Record ID: 4317

Tariff Record Collation Value: 901000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

14.2 WECC Open Stakeholder Meetings. Western Interconnection-wide economic planning studies are conducted by the WECC TEPPC in an open stakeholder process that holds region-wide stakeholder meetings on a regular basis. The WECC-TEPPC Transmission Planning Protocol, including the TEPPC procedures for prioritizing and completing regional economic studies, is posted on the WECC website. Western participates in the region-wide planning processes, as appropriate, to ensure that data and assumptions are coordinated.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

14.3, Role of WECC TEPPC, 2.0.0, A

Record Narrative Name: 14.3 Role of WECC TEPPC. WECC TEPPC provides two main functions in relation to Western's planning process: a) Development and maintenance of the west-wide economic planning study database. TEPPC uses publicly available data to compile a

Tariff Record ID: 4318

Tariff Record Collation Value: 902000 Tariff Record Parent Identifier: 4377

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CANCEL

Record Content Type: 1

Associated Filing Identifier:

14.3 Role of WECC TEPPC. WECC TEPPC provides two main functions in relation to Western's planning process:

- (a) Development and maintenance of the west-wide economic planning study database. TEPPC uses publicly available data to compile a database that can be used by a number of economic congestion study tools. Also, TEPPC's database is publicly available for use in running economic congestion studies. For an interested transmission customer or

stakeholder to utilize WECC's Pro-Mod planning model, it must comply with WECC confidentiality requirements.

(b) TEPPC has an annual study cycle described in the WECC-TEPPC Transmission Planning Protocol, during which it will update databases, develop and approve a study plan that includes studying transmission customer high priority economic study requests as determined by the open TEPPC stakeholder process, perform the approved studies and document the results in a report.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Credit Application, , 3.0.0, A

Record Narrative Name: Credit Application

Tariff Record ID: 4441

Tariff Record Collation Value: 942000 Tariff Record Parent Identifier: 4335

Proposed Date: 2019-06-03

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

**WESTERN AREA POWER ADMINISTRATION
CREDIT APPLICATION**

Complete all sections of this form and submit by mail or email to:

Western Area Power Administration

ATTN: Accounting and Reporting, Credit Applications (A8220)

P.O. Box 281213

Lakewood, CO 80228-8213

WesternCreditApplications@wapa.gov

Date: _____

Applicant Name (Customer): _____

Address: _____

Type of Service Requested: _____

Expected Monthly Business: _____

Federal Tax ID Number: _____

DUNS Number: _____

Credit Rating (if applicable): _____

Credit Manager or Point of Contact: _____

Phone: _____ Fax: _____ Email: _____

Is your company a subsidiary or affiliate of another company? Yes ___ No ___

If Yes, please provide information on the related company:

Company Name: _____

Address: _____

Federal Tax ID Number: _____

DUNS Number: _____

Does your company plan to establish credit with a guarantee from the related company listed above? Yes ___ No ___

If Yes, all required information necessary for credit qualification is needed from the company guaranteeing credit.

Public Power Entities (not-for-profit):

Is your company a not-for-profit entity (governmental entity)? Yes ___ No ___

If your company is a not-for-profit entity, is it backed by the full faith and credit of a governmental entity (United States, state government or other government, as applicable)?

Yes ___ No ___ If Yes, state type of governmental entity and provide evidence.

If your company is a not-for-profit entity, do you have the ability to raise rates to cover outstanding obligations? Yes ___ No ___

Provide any material issues/changes that could impact the viability of the Transmission Customer and/or the credit decision including, but not limited to, litigation, investigations, arbitrations, contingencies, liabilities and affiliate relationships which have occurred within the past year.

Non-Public Power Entities:

To enable the Transmission Provider to conduct the proper analysis required to determine creditworthiness, the information below must be submitted with the Credit Application.

1. Rating agency reports (if applicable).

2. The most recent two quarters of financial statements signed by the company controller or other authorized company officer and the most recent two years of audited financial statements. Financial statements should include, but not be limited to:

- a. Annual report;
- b. Balance sheet;
- c. Income statement;
- d. Statement of cash flows;
- e. Management's discussion and analysis;
- f. Report of independent auditor and accompanying notes for the Annual report, 10K, 10Q or 8K, as applicable.

3. Material issues that could impact the viability of the Transmission Customer and/or the credit decision including, but not limited to, litigation, investigations, arbitrations, contingencies, liabilities and affiliate relationships which have occurred since the last audited financial statements.

Note: The Transmission Provider may request additional information as it determines is necessary and appropriate for the credit evaluation.

www.mapp.org.

re to be sent a meeting notice.

actions, in accordance with the MAPP Restated Agreement.

R and the Transmission Customer.

not applicable to UGPR and no response is provided.

Document Content(s)

001-OATT Transmittal Letter 4.1.19 Fnl.PDF.....	1-18
002-WAPA-OATT-Revision-18-01-OATT-Redline-for-Filing.PDF.....	19-233
003-WAPA-OATT-Revision-18-01-LGIA-Redline-for-Filing.PDF.....	234-310
004-WAPA-OATT-Revision-18-01-SGIP-Redline-for-Filing.PDF.....	311-356
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