

## RR 668 EXPEDITED RESOURCE ADEQUACY STUDY RECOMMENDATION REPORT

Date: 3/19/2025 Updated 5/15/2025

Name: Steve Purdy

Company: SPP

Email: spurdy@spp.org

Phone: 501-614-3371

### EXECUTIVE SUMMARY

---

☒ Group: RSC & Board    ☒ This item is for: discussion and vote

☒ Supporting materials included

- Presentation
- Comments zip file
- ERAS need assessment

#### Essential points & primary issues for consideration:

1. The need for a special process is driven by increasing load forecasts, increasing demand for large spot loads, generator retirements and SPP's GI queue backlog.
2. The proposed process is limited in time and scope to address Load Responsible Entities (LREs) specific resource adequacy needs in the next 5 years until the consolidated planning process is implemented.
3. Concerns expressed include doubts about the need drivers, redirection of resources from critical projects, harm to existing customers, adequate analysis and upgrade assignment, and desire for base plan funding.

#### Reason it goes to RSC and Board

The tariff process created by this revision request relates to SPP's resource adequacy policy, which is under the purview of the Regional State Committee pursuant to SPP's bylaws. Consistent with past practice, this RR is being submitted to the Board of Directors for consideration because it is related to resource adequacy.

#### Background & drivers:

The objective of this RR is to implement the policy approved by the SPP Board of Directors and the SPP Regional State Committee to create the Expedited Resource Adequacy Study ("ERAS"). The ERAS will provide load responsible entities with the needed generation capacity to comply with their resource adequacy requirements set forth in Attachment AA of the Tariff.

**Strategic implications:**

SPP remains focused on mitigating risks of not having adequate resources needed to continuously meet demand in SPP. Building on the progress made on resource adequacy initiatives in 2024, the ERAS initiative delivers a tool to address an urgent need of SPP's load responsible entities and support development of increased longer-term Planning Reserve Margins (PRMs).

**Risks:**

LREs project a deficit in resources needed to reliably serve load in the near-term. Failure to address this need in a timely manner may result in loss of large loads resulting in negative economic consequences to members and their regions. Extended deficits could lead to increased risk of energy emergency alerts and load shed events during extreme weather.

**Costs & Benefits:**

LREs will be better positioned to serve load increases and meet resource adequacy requirements to avoid reliability violations that would be created throughout the SPP system. Based on current estimated timelines, an ERAS request will receive a GIA at least 6-months sooner than those requests in the DISIS-2024 cluster. This 6-month advance is critical in assisting LREs with meeting their obligations pursuant to Attachment AA of the Tariff.

**Major stakeholder discussion points:**

## TWG:

- Concern with deferring stability to the TPL/ITP process, that analysis will not be sufficient or timely and that appropriate upgrades may not get assigned.
- Concern that stability issues get included as a limitation in the GIA.
- Concern that requiring energy analysis (ERIS) for NRIS requests is unnecessary.
- Action item to review technical issues and potential revisions to business practices to address.

## RTWG:

- Expressed a desire to permit transfers from DISIS after DP2 if there is a restudy or delay.
- Noted that requests transferring from DISIS lose queue position entirely.
- SPP recommended changes in comments were discussed and accepted as well as two typo corrections suggested in the meeting.

## REAL:

- Directed Staff to:
  - Enhance the application of the ceiling capacity limit consistent with Empire's proposal
  - Modify the attestation consistent with Evergy's and Xcel's comments.
- Action item for SPP staff to develop an enhanced process for GIA tracking and potential extensions or terminations considering supply chain challenges.

## MOPC:

- Accepted changes drafted by staff that were recommended by Evergy/Xcel and Empire District that were accepted in concept by REAL.

- Also accepted a proposal by OG&E to increase the maximum planned commercial operation date from 5 years to 7 years.
- Other discussion points mirrored those of previous working group reviews.

**Recommendation:**

For the **Regional State Committee:**

**Recommendation 1:** SPP Staff recommends that the RSC ratify the SPP Expedited Resource Adequacy Study (SPP ERAS) Needs Assessment Report as justification for RR668, the SPP ERAS process, to address the forecasted resource adequacy deficiency in SPP the footprint.

**Recommendation 2:** Consistent with the direction from the REAL Team, the CAWG recommends the RSC approve the language in RR668 - SPP ERAS specific to Section 7.1.2, "LRE Ceiling Capacity Calculation" as approved by the MOPC.

**Recommendation 3:** The CAWG recommends the RSC approve the modification to RR668 – SPP ERAS that changes the notification window in Section 4.2.1, "ERAS System Impact Study Procedures", from 45 days to 15 days.

**Recommendation 4:** The MOPC recommends the RSC approve the modification to RR668 – SPP ERAS that changes the latest proposed Commercial Operation Date in Section 8.2 "Execution of ERAS Agreement" from 5 years to 7 years after the close of the ERAS window.

For the **SPP Board of Directors:**

**(Expected) Recommendation 1:** The Regional State Committee recommends that the SPP Board of Directors approve RR668 – SPP ERAS as approved by the RSC to implement the ERAS process.

**Recommendation 2:** The MOPC recommends the SPP Board of Directors approve the modification to RR668 – SPP ERAS that changes the latest proposed Commercial Operation Date in Section 8.2 "Execution of ERAS Agreement" from 5 years to 7 years after the close of the ERAS window.

**Stakeholder process overview:**

Group	Date	Motion	Consensus	Stakeholder Discussion or Concerns
SAWG	2/26/2025	STRAW POLL: Do you support calculation as presented?	Approved 77%	Discussion was restricted to the limitation on how much each LRE can select for the ERAS study and how that calculation is to be conducted. SAWG is not in the RR approval path, but reviewed the calculation with respect to alignment with general resource adequacy policy and clarity of the language. The straw poll is non-binding, but indicative of the group's

Group	Date	Motion	Consensus	Stakeholder Discussion or Concerns
				comfort with the proposed language. (No votes were: Advanced Power Alliance, NRDC, and NextEra)
CAWG	3/11/2025	The CAWG recommends the RSC approve RR668 – Expedited Resource Adequacy Study, subject to no substantive changes.	Approved 100%	Main discussion was around the LRE Selection Form and the attestation that there are no other suitable resources available to the LRE. Members found the language acceptable. CAWG is not in the RR approval path, but makes a recommendation to RSC, who will consider the RR under its resource adequacy authority.
TWG	3/19/2025	TWG approves RR668 as presented.	Approved 86%	Concern with deferring stability analysis to ITP. Concern with conducting unnecessary energy analysis for NRIS generators.
RTWG	3/20/2025	RTWG approves RR668 as presented with changes made in SPP comments and as modified in the meeting.	Approved 100%	Expressed a desire to permit transfers from DISIS after DP2 if there is a restudy or delay. Noted that requests transferring from DISIS lose queue position entirely. SPP recommended changes in comments were discussed and accepted as well as two typo corrections suggested in the meeting.
REAL	4/02/2025	REAL approves expedited treatment of RR668 and recommends that MOPC and RSC approve RR668 as approved by RTWG and consistent with the policy recommendations of EDE, Evergy and Xcel/SPS.	Approved 93%	Voting rationale included in posted RR comments. (No vote was: Advanced Power Alliance)
CAWG	4/08/2025	CAWG recommends RSC approve RR668 as recommended by REAL with Staff's proposed language changes implementing recommendations of EDE and Evergy/Xcel.	Approved 92%	Reviewed and accepted RTWG changes. Discussed EDE recommendation and staff-drafted redline. Accepted staff redline with additional clarification. No vote was: Minnesota

Group	Date	Motion	Consensus	Stakeholder Discussion or Concerns
MOPC	4/15/2025	Approve RR668 Expedited Resource Adequacy Study (ERAS) as recommended by the Resource and Energy Adequacy Leadership (REAL) Team and included in Agenda Item 3b & 3c as modified by staff to address Empire's comments. Additionally, change the revision in section 8.2 from 5 years to 7 years.	Approved  81%	Major discussion items, if any
MOPC vote by sector:	Alternative Power 0% Cooperative 100% Federal agencies 100% Independent power producer 0% Independent transmission company 50% Investor-owned 100% Large retail 0% Marketer 100% Municipal 100% Public interest 25% State agency 100%			

## RR DETAILS

### Comprehensive Roadmap

SIR#: 745

Prioritization Needed? ☒ No ☐ Yes

Impact Analysis? ☒ No ☐ Yes

If yes, provide the following information:

**Primary working group and priority rank:** Click or tap here to enter text.

**Estimated vendor cost:** Choose an item.

**Estimated implementation complexity:** Click or tap here to enter text.

**Estimated implementation staff hours:** Click or tap here to enter text.

**Estimated implementation time:** Click or tap here to enter text.

Impacted SPP Documents

- ☒ **Tariff**Section: NEW Attachment AW
- ☐ **Market Protocols**Section:Version:
- ☐ **Operating Criteria**Section:
- ☐ **Planning Criteria**Section:
- ☐ **Business Practice**Number:
- ☐ **Integrated Transmission Planning (ITP) Manual**Section:
- ☐ **Minimum Transmission Design Standards for Competitive Upgrades**Section:
- ☐ **Reliability Coordinator and Balancing Authority Data Specifications**Section:
- ☐ **SPP Communications Protocols**Section:
- ☐ **Revision Request Process**Section:

STAKEHOLDER PROCESS

Primary: Resource and Energy Adequacy Leadership Team	
Date	4/02/2025
Motion	REAL approves expedited treatment of RR668 and recommends that MOPC and RSC approve RR668 as approved by RTWG and consistent with the policy recommendations of EDE, Evergy and Xcel/SPS.
Action	Approved
Abstained	none
Opposed	(1) APA
Reason for each abstention/opposition (if provided): <i>Refer to APA comments submitted for RR668.</i>	

Secondary: Transmission Working Group

Date	3/19/2025
Motion	TWG approves RR668 as presented.
Planning-related concerns	Concern with deferring stability to the TPL/ITP process, that analysis will not be sufficient or timely and that appropriate upgrades may not get assigned. Concern that stability issues get included as a limitation in the GIA. Concern that requiring energy analysis (ERIS) for NRIS requests is unnecessary.
Action	Approved 86%
Abstained	(4) NPPD, WFEC, ITC, OMPA
Opposed	(3) GridLiance, EDF Renewables, Invenergy/GrainBelt
Reason for each abstention/opposition (if provided): <i>"Invenergy (Grain Belt) voted no as the ERAS process is being rushed and there are still questions that need to be explored and resolved. Impacts to DISIS, questions remain on why studying ERIS and the stability studies being pushed to the ITP and how those upgrades will be handled. Overall, Grain Belt is not supportive of ERAS but this vote was specific to the TWG scope and therefore the preceding comments are specific to the TWG scope."</i>	

### Secondary: Regional Tariff Working Group

Date	3/20/2025
Motion	RTWG approves RR668 as presented with changes made in SPP comments and as modified in the meeting.
Tariff-related concerns	None
Action	Approved
Abstained	None
Opposed	None
Reason for each abstention/opposition (if provided):	

### Choose an item.: Economic Studies Working Group

Date	
Motion	
Economic planning-related concerns	
Action	Choose an item.
Abstained	
Opposed	
Reason for each abstention/opposition (if provided):	

Choose an item.: Operating Reliability Working Group	
Date	
Motion	
Reliability-related concerns	
Action	Choose an item.
Abstained	
Opposed	
Reason for each abstention/opposition (if provided):	

Choose an item.: Regional State Committee	
Date	5/05/2025
Motion	RSC approves RR668 - SPP ERAS, including (1) the language in RR668 - SPP ERAS specific to Section 7.1.2, "LRE Ceiling Capacity Calculation" as approved by the MOPC and recommended by CAWG, and (2) the modification to RR668 - SPP ERAS that changes the notification window in Section 4.2.1, "ERAS



	System Impact Study Procedures", from 45 days to 30 days as recommended by the REAL Team.
Project Cost-related concerns	
Action	Approved 100%
Abstained	None
Opposed	None
Reason for each abstention/opposition (if provided):	

### Markets and Operations Policy Committee

Date	4/15/2025
Motion	Approve RR668 Expedited Resource Adequacy Study (ERAS) as recommended by the Resource and Energy Adequacy Leadership (REAL) Team and included in Agenda Item 3b & 3c as modified by staff to address Empire's comments. Additionally, change the revision in section 8.2 from 5 years to 7 years.
Action	Approved 81%
Abstained	(5): Clearway Power Marketing, LLC; Oklahoma Office of the Attorney General; Southern Power; Sun2o Partners, LLC; Tenaska Power Services Co.
Opposed	(23): Advanced Energy United; Advanced Power Alliance; American Clean Power Association; EDF Renewables; EDP Renewables North America; Enel Green Power North America; Engie North America; Eolian, LP; Flat Ridge 2 Wind Energy (BP Wind Energy); Grain Belt Express Clean Line; GridLiance High Plains; Leeward Renewables Energy, LLC; Natural Resources Defense Council, Inc.; NextEra Energy Resources; NextEra Energy Transmission; NextEra Energy Transmission Southwest; NextEra Plains and Eastern Clean Line; Pine Gate Renewables; Savion LLC; Sierra Club; Spearmint Renewable Development Company, LLC; Viridon Southwest LLC
Reason for each abstention/opposition (if provided):	

### Board of Directors/Members Committee

Date	5/6/2025
Motion	The Board of Directors approve RR668 - SPP ERAS as approved by the RSC to implement the ERAS process.

Action	Approved by Members Committee 17-5-1 (77%)
Abstained	(1) – Tenaska Power Service
Opposed	(5) - Advanced Power Alliance, National Resources Defense Council, Pine Gate Renewables, EDP Renewables, Google Energy
Reason for each abstention/opposition (if provided):	

## SUMMARY OF COMMENTS

1. **Date:** 3/10/2025

**Submitter:** Advanced Energy United, Earthjustice, Natural Resources Defense Council, Renew Missouri, Sierra Club and the Sustainable FERC Project (collectively, Clean Energy Parties or CEPs)

**Summary of comments:** The ERAS proposal stands in direct contradiction to longstanding FERC open access principles, fails to establish strict criteria for participation, and opens the door for the imposition of unnecessary financial burdens onto ratepayers. Despite receiving thorough feedback, SPP has largely ignored the concerns raised by CEPs and made very few meaningful changes to the proposal to address them. As a result, the current proposal remains unjust and unreasonable, and unlikely to secure FERC approval.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

2. **Date:** 3/11/2025

**Submitter:** Advanced Power Alliance

**Summary of comments:** The ERAS construct as written can do little, if anything, to bring on additional capacity sooner than the existing DISIS process. In exchange for this minor benefit, ERAS poses significant risk to the projects in the current SPP queue; bleeds critical resources away from processing that backlogged queue; adds significant risk to the completion of the more important Consolidated Planning Process; creates additional uncertainties in the state of interconnection requests and decisions on investment; violates principles of FERC precedent; and is likely to lead to protracted litigation. The long-lasting adverse impacts to markets and investments is not justified by this minor benefit.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

3. **Date:** 3/18/2025

**Submitter:** NextEra Energy Resources

**Summary of comments:** NextEra has previously expressed concerns regarding the ERAS proposal during discussions with the working groups, the Regional State Committee (RSC), and

SPP Board. NextEra continues to urge SPP to focus on leveraging its existing processes to bring resources online faster and transitioning to the Consolidated Planning Process (CPP) instead of pursuing the ERAS proposal. If SPP nonetheless elects to continue with ERAS, NextEra urges SPP to make changes to the proposal that respond to stakeholder concerns, including by addressing the unduly discriminatory elements of the proposal.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

4. **Date:** 3/17/2025

**Submitter:** Omaha Public Power District

**Summary of comments:** OPD is supportive of the approach SPP has recommended in this special one-time study process to expedite the interconnection of new resources to meet resource adequacy needs for Load Responsible Entities (LREs). With that being said, OPD would like SPP to consider a couple of components to ensure this one-time study process can maximize the benefits to LREs in the pursuit of ensuring timely generation interconnection occurs.

- OPD recommends that SPP consider this process for ERIS instead of only NRIS
- OPD believes the benefit of a one-time study process should allow for inclusion beyond decision point 2 of the DISIS, if there is a delay or restudy called that would slow the progression of interconnection of resources. This would demonstrate to LREs of SPPs dedication to ensuring the timeliness of generation interconnection required for expanding and new loads into the SPP footprint.
- Seems logical for ERAS to flow through the AG Study, allowing for highway/byway cost allocation due to identified upgrades required for serving expanded/new load.
- OPD would recommend additional clarity on the requirements of transferring of applications from an existing DISIS cluster to ERAS.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

5. **Date:** 3/17/2025

**Submitter:** SPP Market Monitoring Unit

**Summary of comments:** While ERAS is intended as a one-time process to support Bulk Electric System (BES) reliability, the MMU does have concerns with the proposal to create potential distortionary effects to the existing process. We encourage SPP and stakeholders to minimize the efficiency costs associated with departing from open-access principles. SPP's proposal does include an LRE Selection Form that requires the LRE to attest that no other viable capacity options currently exist. However, a potentially significant financial incentive to self-build may necessitate additional guardrails to confirm the absence of alternative options. There should be mechanisms to identify potential surplus Generation Interconnection Queue (GIQ) customer costs

and re-allocate them to the appropriate set of ERAS customers.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

6. **Date:** 3/14/2025

**Submitter:** Solar Energy Industries Association

**Summary of comments:** SPP has not provided any study showing that ERAS is needed and that LRES cannot meet their Resource Adequacy targets for Summer 2030 and Winter 2030-2031 by procuring capacity bilaterally that is currently in DISIS. There is no evidence that a separate ERAS process will bring generation online faster than interconnection requests submitted through the GI queue. The ERAS proposal is inherently discriminatory, establishes transmission access inequality, and promotes anti-competitive generation development in SPP. Applying class averages over individual resource accreditation percentages will result in SPP understating the capacity value of certain resources, leading to a greater Projected LRE Deficiency since it is using averages rather than individual resource accreditation percentages.

**Result of Primary Working Group review:** Did not accept.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

7. **Date:** 3/18/2025

**Submitter:** SPP RTO Staff

**Summary of comments:**

- SPP proposes to add words “one plus” in Section 7.1.1 to correct the unintentional omission of this term from the original equation used to calculate the Projected LRE Resource Adequacy Requirement.
- SPP proposes adding subsection (5) to Section 7.4.1 shown below to clarify that requests that transfer from the DISIS queue to ERAS will not count against the LRE’s capacity ceiling.
- SPP proposes changes to Section 7.4.2 and 13.2 to correct typographical errors.
- SPP proposes to modify subsection (iii) of Section 8.4.1 of Attachment V to clarify how ERAS requests should be considered for future DISIS clusters.

**Result of Primary Working Group review:** Accepted proposed changes as accepted by RTWG.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

8. **Date:** 3/24/2025

**Submitter:** Evergy and Xcel/SPS

**Summary of comments:** The commenters suggest wording changes to the LRE Selection Form to address concerns with the language.

2. ~~The LRE requires additional system resources~~~~The output from the resource associated with this Interconnection Request is needed~~ to enable the LRE to meet its resource adequacy obligations under the SPP Tariff and applicable laws.
3. The LRE has determined that the Interconnection Request to which this form is attached is needed because of a resource adequacy need and the LRE reasonably believes such need cannot be cost-effectively addressed by a resource available and known~~there are no other suitable generating resources available~~ to the LRE, that is either in Commercial Operation, under construction, or has an~~with~~ Interconnection Request~~s~~ pending in the DISIS Queue that would meet~~enable~~ the LRE~~'s to meet its~~ resource adequacy obligations under the SPP Tariff and applicable laws.
4. If the Interconnection Request to which this form is attached culminates in an effective GIA, the LRE will, to the extent consistent with the SPP Tariff and applicable laws, use commercially reasonable efforts to complete or cause to be completed all arrangements necessary to enable the output of the resource associated with this Interconnection Request to be accredited toward the LRE's resource adequacy obligations under the SPP Tariff, including, but not limited to, acquisition of necessary transmission service.

**Result of Primary Working Group review:** Accepted proposal, but directed staff to develop language revisions to be provided for MOPC and RSC.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

9. **Date:** 3/27/2025

**Submitter:** Empire District Electric Company

**Summary of comments:**

The 125% cap on additional capacity beyond the 2030 reserve margin and load forecast may result in inefficient capacity additions and/or unduly burden smaller entities with higher costs in acquiring capacity via larger units deployed by larger entities seeing application within the ERAS construct. The Empire District Electric Company proposes a flexible approach, allowing utilities below the 125% threshold to add a single resource of any size and type, even if it surpasses the cap. If a LRE is still below the threshold, additional resources may be submitted to the ERAS process. However, once a utility exceeds the 125% limit—including prior queued ERAS submissions—it cannot add further resources through the ERAS framework. This approach would prevent generation size limitations for the ERAS proposals while maintaining the guardrails established to not overburden the process with excess generation. Rather than LREs attempting to land generation additions on a to-not-exceed postage stamp, this would treat the ceiling as a starting line for generation additions to qualify for the ERAS process. Consideration of this request would allow more consistency with LRE planning processes that often optimize over a 20-30 time horizon and may preclude entities in need of additional capacity from having to choose between a less optimal resource addition to qualify for the ERAS process.

The proposal currently assumes that the ERAS candidate resources would be evaluated based on their queue position (order submitted), but a firmer restriction could be placed by stacking candidate resources from largest size to smallest and once the 125% is breached, subsequent candidate resources would be precluded from ERAS consideration. EDE does not oppose this modification if it were to be considered.

**Result of Primary Working Group review:** Accepted proposal, but directed staff to develop language revisions to be provided for MOPC and RSC.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

10. **Date:** 4/7/2025

**Submitter:** American Clean Power Association

**Summary of comments:** The ERAS construct, as currently proposed, lacks sufficient justification to demonstrate that this process—which conflicts with open access principles—is necessary to prevent a documented emergency. ACP urges SPP to reassess whether the underlying need justifying ERAS can be addressed through other existing mechanisms before proceeding with this revision request. Departing from standardized open-access policies jeopardizes competition in the wholesale market and risks discriminatory treatment that could raise overall system costs for ratepayers.

**Result of Primary Working Group review:** Submitted after primary working group review.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

11. **Date:** 4/8/2025

**Submitter:** Google LLC

**Summary of comments:** First, Google believes the language as-written does not maximize the list of potential resources that could provide RA to the system and is harmful to large retail loads seeking to self-supply a component of their load obligations. Second, ERAs should not impede the development of broader, permanent solution(s) or unintentionally set a precedent.

**Result of Primary Working Group review:** Submitted after primary working group review.

*(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):*

12. **Date:** 4/10/2025

**Submitter:** OG&E

**Summary of comments:** OG&E is supportive of ERAS as a way for LREs to meet the changing Planning Reserve Margin in 2030. OG&E has been a proponent of this idea and worked with SPP staff and other stakeholders to develop the revision request.

However, OG&E proposes to reject the revision in Section 8.2 that changed 7 years to 5 years. This revision request changes back the Commercial Operation Date (COD) of the new Generating

Facility or increase in capacity of the Existing Generating Facility to no later than seven (7) years from the closing date of the ERAS Window.

**Result of Primary Working Group review:** Submitted after primary working group review. (e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

13. **Date:** 4/10/2025

**Submitter:** Eolian, LP

**Summary of comments:** The current draft of RR668 has provisions that contradict the stated near-term resource adequacy objective of ERAS. PJM's Reliability Resource Initiative, which was approved by FERC, demonstrated a clear standard by which FERC will rule on this Revision Request to the Tariff. SPP's ERAS does not meet those standards and falls short of provisions provided in MISO's ERAS. Specifically, ERAS lacks safeguards to ensure proposed Generating Facilities are viable, meet a verified need, and are approved by state public utility commissions or power review boards as applicable. Financial incentives may drive some Load Resource Entities (LREs) to build new capacity at higher cost to ratepayers, rather than purchase lower cost new and existing generation capacity through bilateral contracts from the over 47 gigawatts (GWs) of Generating Facilities currently in the DISIS-2017 through DISIS-2021 GI queue that have executed GIAs or completed Phase 2 DISIS results. Without appropriate consumer protection safeguards through participation by state public utility commissions and power review boards and verification by SPP, the ERAS process could result in unnecessary speculative generation capacity being added at ratepayer expense. Any rejection or delay in approval by FERC would risk eliminating the six-month advantage ERAS should create and compromise the reliability objectives of ERAS.

**Result of Primary Working Group review:** Submitted after primary working group review. (e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

## DOCUMENT REVISIONS

---

*In the appropriate sections below, provide the current language approved by Stakeholders, with all proposed revisions included in redlined/editable format.*

### SPP OPEN ACCESS TRANSMISSION TARIFF

NOTE: All of Attachment AW is new tariff language. The redline reflects differences from Attachment V on which Attachment AW is based. **This language is the version approved by RSC and the Board of Directors**, including the change to the LRE Ceiling Capacity calculation in Section 7.1.2 and the change in the notification window from 45 days to 30 days in Section 4.2.1 of Attachment AW.

### ATTACHMENT AW EXPEDITED RESOURCE ADEQUACY STUDY PROCEDURES





## Section 1. Definitions

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

**Affected System** shall mean an electric system other than the Transmission 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 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.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.

**Breaching Party** shall mean a Party that is in Breach of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.

**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 Studies.~~

**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 Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.

**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.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing. Contingent Facilities are identified in Appendix A of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.

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

**Decision Point One (DP1)** shall have the meaning of Attachment V of the Tariff.~~mean the period of time following the posting of the results of DISIS Phase One.~~

**Decision Point Two (DP2)** shall have the meaning of Attachment V of the Tariff.~~mean the period of time following the posting of the results of DISIS Phase Two.~~

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable.

**Definitive Interconnection System Impact (DISIS)** shall have the meaning of Attachment V of the Tariff.

**Deliverable Capacity** shall have the meaning as defined in Attachment AA of the Tariff.

**Expedited Resource Adequacy Study (ERAS)** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of 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, or that may be caused by the withdrawal or addition of an Interconnection Request, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in ~~the Generator Interconnection Procedures~~this Attachment AW. ~~The Definitive Interconnection System Impact Study is conducted in two phases.~~

~~**Definitive Interconnection System Impact Study Phase One (DISIS Phase One)** shall mean an initial phase of the Definitive Interconnection System Impact Study.~~

~~Definitive Interconnection System Impact Study Phase Two (DISIS Phase Two)~~ shall mean the second phase of the ~~Definitive Interconnection System Impact Study~~.

~~Definitive Interconnection System Impact Study Queue~~ shall mean a Transmission Provider separately maintained queue for valid Interconnection Requests for a ~~Definitive Interconnection System Impact Study~~.

~~Definitive Interconnection System Impact Study Queue Cluster~~Expedited Resource Adequacy Study Window (DISIS Queue Cluster ERAS Window) shall mean the period during which the Transmission Provider shall accept Interconnection Requests for ~~Definitive Interconnection System Impact~~Expedited Resource Adequacy Studies~~Study~~.

~~Definitive Interconnection System Impact~~Expedited Resource Adequacy Study Review Period (DISIS-ERAS Review Period) shall mean the period following the close of the ~~Definitive Interconnection System Impact Study Queue Cluster~~ERAS Window to resolve any deficiencies in the Interconnection Requests received during the ~~Definitive Interconnection System Impact Study Queue Cluster~~ERAS Window.

***Deliverability Area** shall mean a portion of the Transmission System in which a generator can reliably deliver all or a portion of its output capability.*

**Dispute Resolution** shall mean the procedure in Section 13.5 of ~~the Generator Interconnection Procedures~~this Attachment AW 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 Owner's facilities and equipment that are not included in the Transmission System. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the 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 Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electromagnetic Transient Study or EMT Study** shall mean an analysis to determine the electromagnetic transient response of the electric power system due to system disturbances.

**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 the Transmission System, or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Owner's Interconnection Facilities; or (4) 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 Generator Interconnection Agreement to possess black start capability.

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

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Owner 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.

**Environmental Review** shall mean a study conducted by Western-UGP, as the Transmission Owner, that contains a review of the proposed interconnection to Western-UGP's transmission facilities, pursuant to 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 review of the interconnection.

**Existing Generating Facility** shall mean a Generating Facility that is currently interconnected to the Transmission System of the Transmission Provider.

**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.

**Financial Security** shall mean the security deposits required of the Interconnection Customer to enter ~~Definitive Interconnection System Impact Study Phase One, Definitive Interconnection System Impact Study Phase Two, and Interconnection Facilities Study~~ the ERAS.

**Firm Capacity** shall have the meaning as defined in Attachment AA of the Tariff.

**Firm Power** shall have the meaning as defined in Attachment AA of the Tariff.

**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 and/or storage for later injection of electricity identified in the Interconnection Request, but shall

not include the Interconnection Customer's Interconnection Facilities and shall not include a Storage as Transmission Only Asset as defined in Section 1 of the Tariff. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**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.

**Generating Facility Modification** shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.

~~**Generating Facility Replacement** shall mean the process of replacing one or more generating units and/or storage devices at an Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as those being decommissioned and electrically disconnected.~~

**ERAS Generator Interconnection Agreement (Generator Interconnection Agreement or GIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Generating Facility that is included in Appendix 6 to ~~these Generator Interconnection Procedures~~ this Attachment AW or in Appendix 13 when Western-UGP is a Party, as the Transmission Owner, to the ERAS GIA.

**Generator Interconnection Procedures (GIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility that are included in the Transmission Provider's Tariff.

~~**Generator Interconnection Expedited Resource Adequacy Study Agreement (ERAS Agreement)** shall mean the study agreement for the Definitive Interconnection System Impact Expedited Resource Adequacy Study and the Interconnection Facilities Study in Appendix 3 Appendix 1 of the Generator Interconnection Procedures to this Attachment AW.~~

**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, Transmission Owner 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 Queue Position** shall have the meaning as defined in Attachment V of the Tariff.~~mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests. The Initial Queue Position is established based upon the date and time of receipt of the valid Interconnection Requests by Transmission Provider.~~

**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 Owner's Interconnection Facilities to obtain back feed power.

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

**Expedited Resource Adequacy Study Customer (ERAS Customer, ERASC)** shall mean an Interconnection Customer that proposes to interconnect its Generating Facility with the Transmission System pursuant to the Expedited Resource Adequacy Study.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, 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 System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Owner'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 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 Owner's Interconnection Facilities and Network Upgrades as identified in the Definitive Interconnection System Impact Study~~ERAS report~~), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System. The



scope of the study is defined in Section 8 of Attachment A~~the Generator Interconnection Procedures.~~

~~**Interconnection Facilities Study Queue** shall mean a Transmission Provider separately maintained queue for valid Interconnection Requests for an Interconnection Facilities Study.~~

~~**Interconnection Queue Position** shall mean the order of a valid Interconnection Request within the Interconnection Facilities Study Queue, relative to all other pending valid Interconnection Requests within the Interconnection Facilities Study Queue, which is established based upon the requirements in Section 4.1.3.~~

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 3 to the Generator Interconnection Procedures or Appendix 1 to the Expedited Resource Adequacy Study Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, ~~to interconnect a Replacement 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 System.

**Expedited Resource Adequacy Study Request (ERAS Request)** shall mean an Interconnection Request submitted pursuant to the Expedited Resource Adequacy Study Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of an Existing Generating Facility that is interconnected with the 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 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 Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Replacement Impact Study, the Reliability Assessment Study, the Definitive Interconnection System Impact Study, the Interim Availability Interconnection System Impact Study, and the Interconnection Facilities Study described in the Generator Interconnection Procedures.

**Interconnection Study Agreement** shall mean any of the following agreements described in the Generator Interconnection Procedures: the Generator Interconnection Study Agreement or the Interim Availability Interconnection System Impact Study Agreement.

**Interim Availability Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, an Affected System for the purpose of providing Interim Interconnection Service. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications on an interim basis.

**Interim Availability Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Generator Interconnection Procedures for conducting the Interim Availability Interconnection System Impact Study.

**Interim Generator Interconnection Agreement (Interim GIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Generating Facility to allow interconnection to the Transmission System prior to the completion of the Interconnection Study process.

**Interim 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 Interim Generator Interconnection Agreement and, if applicable, the Tariff.

**IRS** shall mean the Internal Revenue Service.

**Joint Operating Agreement between the Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc. ("MISO-SPP JOA")**: shall have the meaning as defined in Section 1 of the Tariff.

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

**Joint Targeted Interconnection Queue ("JTIQ")** shall have the meaning as defined in Section 1 of the Tariff.

**JTIQ Upgrade** shall have the meaning as defined in Section 1 of the Tariff.

**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 another Party's performance, or non-performance of its obligations under the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party. The term "Loss" as used in this Section 1 shall apply only to the use of the term in Section 9.1.2 of the Generator Interconnection Study Agreement and Section 10.1.2 of the Interim Availability Interconnection System Impact Study Agreement.

**Load Responsible Entity (LRE)** shall have the meaning as defined in Attachment AA of the Tariff.

**LRE Ceiling Capacity** shall be the calculated maximum amount an LRE may select for the Expedited Resource Adequacy Study.

~~**Material Modification** shall mean (1) modification to an Interconnection Request in the queue that has a material adverse impact on the cost or timing of any other Interconnection Request with a later Queue priority date; or (2) planned modification to an Existing Generating Facility that is undergoing evaluation for a Generating Facility Modification or Generating Facility Replacement, and has a material adverse impact on the Transmission System with respect to: i) steady-state thermal or voltage limits, ii) dynamic system stability and response, or iii) short-circuit~~



~~capability limit; compared to the impacts of the Existing Generating Facility prior to the modification or replacement.~~

**Maximum Injection Capability** shall mean the maximum amount of real power that may be injected by a Generating Facility at the Point of Interconnection.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, 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.

**MISO** shall have the meaning as defined in Section 1 of the Tariff.

**Nameplate Capacity** shall mean the maximum real power rating listed on the nameplate of the Generating Facility measured in alternating current megawatts (AC MW), or the sum of all such ratings of a Generating Facility where it includes multiple energy production devices.

**NERC** shall mean the North American Electric Reliability Corporation or its successor organization.

**Net Peak Demand** shall have the meaning as defined in Attachment AA of the Tariff.

**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 Deliverability** shall mean the amount of real power that can be delivered to the aggregate of Network Load within a Deliverability Area by a Generating Facility, as measured at the Point of Interconnection. Network Resource Deliverability in and of itself does not convey transmission service.

**Network Resource Interconnection Service (NRIS)** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission System to accommodate the interconnection of the Generating Facility to the Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, or its performance.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Load Responsible Entity, Interconnection Customer or any combination of the above.

**Peak Demand** shall have the meaning as defined in Attachment AA of the Tariff.

**Permissible Technological Advancement** shall mean an advancement to turbines, inverters, plant supervisory controls or other technological advancements that do not increase the Interconnection Customer's requested Interconnection Service or cause any reliability concerns. A Permissible Technological Advancement does not degrade the electrical characteristics of the generating equipment (e.g., the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady-state and dynamic conditions), nor does it include changes in generation technology type or fuel type.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, where the Interconnection Facilities connect to the Transmission System.

**Queue** shall mean the Definitive Interconnection System Impact Study Queue or the Interconnection Facilities Study Queue, as applicable.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, 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.

**Resource Adequacy Requirement** shall have the meaning as defined in Attachment AA of the Tariff.

**Resource Adequacy Workbook** shall have the same meaning of "Workbook" as defined in Attachment AA of the Tariff.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer, Transmission Owner 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.

**Shared Network Upgrade** shall mean a Network Upgrade listed in Appendix A of the Generator Interconnection Agreement that is needed for the interconnection of multiple Interconnection Customers' Generating Facilities where such Interconnection Customers share the cost.

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size for the purpose of constructing the Generating Facility or Generating Facility's tie line; (2) an option to purchase or acquire a leasehold site of sufficient size 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 of sufficient size for such purpose.

~~Small Generating Facility shall mean the Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request that meets the requirements of Section 14, but shall not include the Interconnection Customer's Interconnection Facilities.~~

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected Systems that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. The Transmission Provider, Transmission Owner and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable. If the Transmission Provider, Transmission Owner and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Owner must provide the Interconnection Customer a written technical explanation outlining why the Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within fifteen (15) days of its determination.

Summer Season shall have the meaning as defined in Attachment AA of the Tariff.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the 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 System or on other delivery systems or other generating systems to which the Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the 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 Owner's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Generator Interconnection Agreement or Interim Generator Interconnection Agreement, as applicable, including any modifications, additions or upgrades to such facilities and equipment. Transmission Owner'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.

**Western Area Power Administration-Upper Great Plains Region (“Western-UGP”)** shall mean a division of the Western Area Power Administration, a Federal Power Marketing Agency, and Transmission Owner, that markets and transmits Federal power over Federal transmission facilities that have been transferred to the functional control of the Transmission Provider.

Winter Season shall have the meaning as defined in Attachment AA of the Tariff.

## Section 2. Scope and Application

### 2.1 Application of ~~Generator Interconnection~~ ERAS Procedures.

These ~~Generator Interconnection~~ Procedures apply, as specified in this Section 2, to a one-time-only Expedited Resource Adequacy Study for the processing of Interconnection Requests for interconnections to the Transmission System that are subject to FERC jurisdiction.

### 2.2 Relationship to Generator Interconnection Procedures

The ERAS is a means of ensuring that Load Responsible Entities are able to meet the Resource Adequacy Requirement as outlined in Attachment AA of the Tariff resource adequacy in the near-term. Although the provision of interconnection service is a necessary consequence of the ERAS, the ERAS is not and shall not be considered a process for making routine interconnection service requests, but shall apply only to requests Interconnection Requests that meet all the requirements of this Attachment AW, including those of Section 7. Unless explicitly indicated, Interconnection Requests processed through the ERAS shall not be subject to the provisions of Attachment V of the Tariff ("Generator Interconnection Procedures or GIP"). Likewise, Interconnection Requests processed through Attachment V of the Tariff shall not be subject to the provisions of the ERAS set forth herein.

### 2.3 Comparability.

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this ~~GIP~~ Attachment AW. Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Transmission Provider, its subsidiaries or Affiliates or others.

### 2.4 ~~Base Case Data~~ Sunset Clause.

The ERAS process will terminate following the completion of one ERAS. The provisions of this Attachment AW will remain in force only to the extent necessary to complete the provisions herein, including but not limited to completion of restudies, collection of invoiced amounts, and distribution of refunds. Transmission Provider shall maintain current base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on either its OASIS site or a password-protected website, subject to confidentiality provisions in Section 13.1 of the GIP, that the Transmission Provider is using to perform Definitive Interconnection System Impact Studies. In addition, Transmission Provider shall maintain network models and underlying assumptions on either its OASIS site or a password-protected website. Such network models and underlying

~~assumptions should reasonably represent those used during the most recent interconnection study and be representative of current system conditions. If Transmission Provider posts this information on a password-protected website, a link to the information must be provided on Transmission Provider's OASIS site. Transmission Provider is permitted to require that Interconnection Customer, OASIS site users and password-protected website users sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (1) generation projects and (2) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.~~

## **2.5 No Applicability to Transmission Service.**

Nothing in this ~~GP~~Attachment AW shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

## **2.6 Participation by the United States Subject to Federal Laws and Regulations**

In the event that Western-UGP is the Transmission Owner under any of the provisions or agreements in this ~~GP~~Attachment AW, then in such case Section 39.3 of this Tariff is incorporated as if it were a part hereof.

## Section 3. ~~Interconnection~~ ERAS Requests

### 3.1 General.

An Interconnection Customer ~~seeking to participate in the ERAS~~ shall submit to Transmission Provider during ~~a DISIS Queue Cluster~~ the ERAS Window an Interconnection Request ~~or a Generating Facility Replacement request~~ by providing an executed ~~Generator Interconnection Study~~ ERAS Agreement in the form of ~~Appendix 3~~ Appendix 1 to this ~~GIP Attachment AW~~, ~~an application fee, a study deposit,~~ and all other items set forth in Section 8.2 of this ~~GIP Attachment AW~~. To be included in the ERAS, an Interconnection Request must be selected by a SPP Load Responsible Entity pursuant to Section 8.2(h) of this Attachment AW. All Interconnection Requests for the ERAS shall be submitted, electronically, in the manner specified in Section 1 of the “Generator Interconnection Business Guide and Practice” manual posted on the Transmission Provider’s Generator Interconnection Study posting page on OASIS. Transmission Provider shall apply the study deposit toward the cost of the ~~applicable Interconnection Study~~ ERAS. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. ~~An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.~~

~~At Interconnection Customer's option, Transmission Provider and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the end of the DISIS Review Period.~~

Interconnection Customers may request a level of Interconnection Service below the Generating Facility Capacity. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities, and Network Upgrades, and associated costs, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer. If after the additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (1) specify which additional Network Upgrade costs are based on which studies; and (2) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrade costs required for safety and reliability also would be borne by the Interconnection Customer. Interconnection Customers may be subject to additional control technologies as well as testing and validation of those technologies consistent with



Article 6 of the GIA ~~or Interim GIA, as applicable~~. The necessary control technologies and protection systems shall be established in Appendix C of the executed, or requested to be filed unexecuted, GIA ~~or Interim GIA, as applicable~~.

### **3.1.1 LRE Ceiling Capacity**

The Transmission Provider shall calculate the LRE Ceiling Capacity for each Load Responsible Entity, pursuant to Section 7 of this Attachment AW, and that LRE Ceiling Capacity will limit the maximum amount of capacity each Load Responsible Entity may select for inclusion in the ERAS. The LRE Ceiling Capacity ceiling for each Load Responsible Entity shall be provided to the LRE no later than the Transmission Provider's notice on SPP's OASIS of the opening and closing dates notification of the opening date of the ERAS Window. AW If the sum of all capacity of all Interconnection Requests selected by an Load Responsible Entity(s) selected requests exceeds the LRE Ceiling Capacity of that Load Responsible Entity, the Transmission Provider shall notify the Interconnection Customer(s) and Load Responsible Entity(ies) of this exceedance. The Interconnection Customer(s) and LRE(ies) shall have ten (10) Calendar Days from the date of receipt of notice to modify its their selected Interconnection Requests so such that the sum no longer exceeds the LRE Ceiling Capacity. If after ten (10) Calendar Days the Interconnection Customer(s) and LRE(ies) have not responded or have not provided modifications that cure the ceiling exceedance, the Load Responsible Entity's selected Interconnection Requests shall be withdrawn in reverse order of submission to the extent required to comply with the ceiling.

### **3.1.2 Joint ERAS Interconnection Requests**

Multiple Load Responsible Entities may select one or more Interconnection Requests to satisfy their combined resource adequacy requirements. Each Interconnection Request must include a signed Selection Form from each LRE selecting the request for inclusion in the ERAS and each LRE shall indicate how much of the Interconnection Request's capacity applies to its LRE Ceiling Capacity.

### **3.1.3 Transfer from DISIS**

An Interconnection Customer may transfer a request currently pending in an ongoing DISIS to the ERAS. The request to transfer must be received by the Transmission Provider before the end of Decision Point Two of the DISIS cluster from which the request would transfer. To initiate a transfer, the Interconnection Customer must submit its transfer request to the Transmission Provider in writing or by electronic mail. The request must indicate the Initial Queue Position of the request being transferred. Once the ERAS request has been determined to be valid pursuant to Section 3.4 of this Attachment AW, the transferring DISIS request will be considered



withdrawn from the DISIS queue, its DISIS Initial Queue Position will be forfeited, and the request will be listed as withdrawn on the Transmission Provider's OASIS. A new listing will be entered pursuant to Section 3.5 of this Attachment AW and a new identifier will be assigned pursuant to Section 4.1.1 of this Attachment AW. The Interconnection Customer must satisfy all of the requirements for a new ERAS request prior to the close of the ERAS Window. Any unused study deposit from the DISIS may be credited toward the ERAS study deposit. Any existing site control evidence or deposits in lieu of site control may be credited toward satisfying the ERAS site control requirements, unless otherwise forfeited pursuant to Section 8.14 of Attachment V of the Tariff. An ERIS-only transferring request must change to NRIS with Network Resource Deliverability equal to Maximum Injection Capability. Maximum Injection Capability (and Network Resource Deliverability) may be reduced as needed to comply with the ceiling calculated pursuant to Section 7 of this Attachment AW, but may not be increased.

### 3.2 Identification of Types of Interconnection Services-

At the time the Interconnection Request is submitted, Interconnection Customer must request ~~either Energy Resource Interconnection Service or~~ Network Resource Interconnection Service, as described in Attachment V of the Tariff; all requests will be concurrently studied for Energy Resource Interconnection Service, ~~up to the end of DP1. Interconnection Customer may then elect to proceed with Network Resource Interconnection Service or to proceed under a lower level of interconnection service to the extent that only certain upgrades will be completed.~~ A description of the modeling details used when studying a project as ERIS or NRIS can be found in Section 6 of this Attachment AW, Section 4 and Section 6 of the document "Guidelines for the SPP GIP Process and Business Practices" posted on the Transmission Provider's Generator Interconnection Study posting page on OASIS and in SPP Business Practice 7250.

#### ~~3.2.1—Energy Resource Interconnection Service.~~

~~**3.2.1.1 The Product.** Energy Resource Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission System and be eligible to deliver the Generating Facility's Maximum Injection Capability using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. Energy Resource Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or Point of Delivery.~~

~~**3.2.1.2 The Study.** The study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection~~

~~Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Generating Facility's *Maximum Injection Capability* and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Generating Facility without requiring additional Network Upgrades.~~

### ~~3.2.2 Network Resource Interconnection Service.~~

~~**3.2.2.1 The Product.** Transmission Provider must conduct the necessary studies and the Transmission Owner construct the Network Upgrades needed to integrate the Generating Facility in *the same manner as all other Network Resources*. Network Resource Interconnection Service allows Interconnection Customer's Generating Facility to be designated as a Network Resource, up to the Generating Facility's full *Network Resource Deliverability*, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur.~~

~~**3.2.2.2 The Study.** The Interconnection Study for Network Resource Interconnection Service shall assure that Interconnection Customer's Generating Facility meets the requirements for Network Resource Interconnection Service and as a general matter, that such Generating Facility's interconnection is also studied with Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Generating Facility at full *Network Resource Deliverability*, the aggregate of generation in the local area can be delivered to the aggregate of load *within the same Deliverability Area of the Transmission System as the generator*, consistent with Applicable Reliability Standards. This approach assumes that some portion of existing Network Resources are displaced by the output of Interconnection Customer's Generating Facility. Network Resource Interconnection Service in and of itself does not convey any right to deliver electricity to any specific customer or Point of Delivery. The Transmission Provider may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.~~

### 3.3 ~~Utilization of Surplus Interconnection Service~~Reserved.

### 3.4 Valid Interconnection Request.

### 3.4.1 Initiating an Interconnection Request.

To initiate an Interconnection Request, Interconnection Customer must satisfy the requirements in Section 8.2 of ~~the GIP~~this Attachment AW.

### 3.4.2 Acknowledgment of Interconnection Request.

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request.

### 3.4.3 Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until all items in Section 8.2 of ~~the GIP~~this Attachment AW have been received by Transmission Provider.

### 3.4.4 Scoping Meeting.

After the receipt of a valid Interconnection Request, ~~either the Interconnection Customer, Transmission Owner or the Transmission Provider may request to hold~~ a Scoping Meeting, ~~and such meeting~~ shall be held on a date mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider, Transmission Owner and Interconnection Customer shall provide such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Transmission Provider, Transmission Owner and Interconnection Customer will also make available personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 8.2 of ~~the GIP~~this Attachment AW, ~~-no later than the end of the ERAS Review Period. Changes in the POI~~Point of Interconnection will not be permitted after the end of the ERAS Review Period. The duration of the meeting shall be sufficient to accomplish its purpose.

#### 3.4.4.1 Duplicate Requests Prohibited

If an Interconnection Customer submits an Interconnection Request for ERAS at the same POI Point of Interconnection as a pending Interconnection Request by the same Interconnection Customer or an Affiliate, the Interconnection Customer or Affiliate must withdraw the pending Interconnection Request before the close of the ERAS window, otherwise the ERAS request will be rejected withdrawn by Transmission Provider.

#### **3.4.4.2 Point of Interconnection POI Protections**

If, at the time of the submission of an ERAS Interconnection Request there exists an active and pending Interconnection Request at the same Point of Interconnection POI by a different Interconnection Customer and not an Affiliate of the Interconnection Customer, then the Transmission Provider shall determine whether the provision of Interconnection Service to both Interconnection Requests would result in additional Substation Network Upgrade costs being assigned to the pending Interconnection Request: greater than it they would otherwise be assigned. Any the additional costs shall be re-assigned to the ERAS Interconnection Customer causing the additional cost increase, either during the course of the ERAS or afterward.

~~OR>>> An Interconnection Request pending in the DISIS Queue shall not incur additional Substation Network Upgrade costs as a result of an ERAS Interconnection Request choosing to interconnect at the same POI substation.~~

#### **3.4.5 Environmental Review.**

In the event the Interconnection Request will result in an interconnection to, or modification to, the transmission facilities of Western-UGP, the Interconnection Request shall be subject to an Environmental Review as described in Section 8.6.1 of ~~the GIP~~ this Attachment AW. The Interconnection Customer may request that the Environment Review begin any time after the Interconnection Request is accepted.

### **3.5 OASIS Posting.**

- 3.5.1** ERAS Interconnection Requests shall be listed on the Transmission Provider's OASIS along with all other Interconnection Requests in accordance with Section 3.5.1 of Attachment V of the Tariff. Transmission Provider will maintain on its OASIS a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In Service Date; (v) the

~~status of the Interconnection Request, including Initial Queue Position, and Interconnection Queue Position, as applicable; (vi) the type of Interconnection Service being requested; (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed; and (xi) for a Generating Facility Replacement, the planned date of cessation of operation for the Existing Generating Facility or actual date if the Existing Generating Facility already has ceased commercial operations, the expected Commercial Operation Date of the replacement facility and requested Interconnection Service. For requests submitted after the effective date of this GIP, the list will also identify the proposed Nameplate Capacity, the requested Maximum Injection Capability, and the requested Network Resource Deliverability. The list will not disclose the identity of Interconnection Customer until Interconnection Customer executes a GIA or requests that Transmission Provider file an unexecuted GIA with FERC. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Re-Study reports shall be posted to Transmission Provider's OASIS site subsequent to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Generating Facility's In-Service Date.~~

### **3.5.2—Requirement to Post Interconnection Study Metrics**

## **3.6 Coordination with Affected Systems.**

Except for the JTIQ Upgrade process described in Sections 3.6.4 of the ~~GIP~~[this Attachment AW](#), Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its ~~applicable Interconnection Study~~[ERAS report](#) within the time frame specified in this ~~GIP~~[Attachment AW](#). Transmission Provider will include such Affected System Operators in all meetings held with Interconnection Customer as required by this ~~GIP~~[Attachment AW](#). Interconnection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Transmission Provider which may be an Affected System shall cooperate with Transmission Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.6.1 Reserved for Future Use.**

### 3.6.2 Reserved for Future Use.

### 3.6.3 Reserved for Future Use.

### 3.6.4 JTIQ Provisions

#### A. Impacts to JTIQ Upgrades

Transmission Provider will use the criteria described in Section 9.4.2 (d)(ii) of the MISO-SPP JOA to determine whether an SPP ~~ERAS Interconnection~~ Request has an impact on one or more of the JTIQ Upgrades.

- 1) SPP ~~ERAS Interconnection~~ Requests that are determined to have an impact on one or more of the JTIQ Upgrades will be allocated a portion of the cost of a portfolio of JTIQ Upgrades pursuant to Section IV of Attachment AV of this Tariff based on the amount of Interconnection Service requested. Transmission Provider will identify the impacting Interconnection Requests and associated cost allocated to each Interconnection Request in the applicable ~~Interconnection Study~~ ~~ERAS~~ reports. Impacts to MISO facilities other than the JTIQ Upgrades will be determined pursuant to the provisions of Section 3.6.4(B) of this ~~GP~~ Attachment AW.
- 2) SPP ~~ERAS Interconnection~~ Requests that are determined not to have an impact on one or more of the JTIQ Upgrades will not be allocated any portion of the cost of a portfolio of JTIQ Upgrades, and will be subject to the following provisions:
  - a) Such SPP ~~ERAS Interconnection~~ Requests with POIs located in DISIS group 4 or 5, as defined in SPP Business Practice 7250, will be evaluated pursuant to the provisions of Section 3.6 to determine their impact to MISO facilities other than the JTIQ Upgrades.
  - b) Such SPP ~~ERAS Interconnection~~ Requests with POIs located in a group other than DISIS group 4 or 5, as defined in SPP Business Practice 7250, will be evaluated pursuant to the provisions of Section 3.6.4(B) of this ~~GP~~ Attachment AW to determine their impact to MISO facilities other than the JTIQ Upgrades.
- 3) When the Transmission Provider, in coordination with MISO and pursuant to the provisions of Section 9.4.2(e)(iii) of the MISO-SPP JOA, determines that the JTIQ Upgrades

are likely to exceed the Target MW Value as defined in Attachment AV of this Tariff upon completion of the current study cycle, a supplemental affected system study shall be conducted pursuant to the provisions of Section 9.4.3 of the MISO-SPP JOA in lieu of the procedure described in Subsection (B) of this Section 3.6.4. The costs of upgrades identified through the supplemental affected system study will be assigned to the impacting Interconnection Request(s) pursuant to the cost allocation provision of the MISO Tariff. The Transmission Provider, in coordination with MISO, shall establish a cost criterion in dollars per megawatt (\$/MW) pursuant to Section 9.4.2(e)(iii)(a)ii.b and 9.4.2(e)(iii)(a)ii.c of the MISO-SPP JOA. Where the costs assigned to an Interconnection Request for upgrades identified through the supplemental affected system study that are located outside the local facilities of MISO as defined in Subsection (B) of this Section 3.6.4 exceed the cost criterion, the Interconnection Request shall be exempt from charges for the JTIQ Upgrades. Otherwise, the Interconnection Request shall be obligated to pay a portion of the JTIQ Upgrade cost as provided in Subsection (1) of this Section 3.6.4.

**B. Impacts to MISO Facilities Other than JTIQ Upgrades**

This Section 3.6.4(B) applies only to those SPP ~~ERAS~~ ~~Interconnection~~ Requests described in Section 3.6.4(A)(1), Section 3.6.4(A)(2)(b), and Section 3.6.4(A)(3) of this ~~GP~~ ~~Attachment~~ ~~AW~~. During the course of the ~~DISIS~~ ~~ERAS~~, Transmission Provider will monitor the local facilities of MISO, comprised of those facilities that are both (i) near the MISO-SPP border as determined by the table below, and (ii) affected by one or more Interconnection Requests being evaluated in the ~~DISIS~~ ~~ERAS~~ having a distribution factor of at least ten percent (10%) on the MISO facilities near the MISO-SPP border described in (i).

Nominal Operating Voltage of MISO Facilities	MISO Facilities to be Monitored
Less than 200 kV	Facilities within five (5) substations of an SPP substation
Between 200 kV and 300 kV, inclusive	Facilities within two (2) substations of an SPP substation
Greater than 300 kV	Facilities within one (1) substation of an SPP substation

Transmission Provider, in coordination with MISO and its transmission owners, will formulate a mitigation plan to alleviate constraints on the local facilities of MISO that are identified during the respective ~~DISIS~~ ~~ERAS~~



processes. Mitigations may include new Affected System upgrades. The cost of new Affected System upgrades identified by Transmission Provider and MISO through the process in this subsection (B) will be assigned to the SPP Interconnection Request(s) pursuant to the cost allocation process in Section 4.2.2 of this Attachment ~~V~~AW.

### 3.7 Withdrawal.

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this ~~GIP~~Attachment AW, except as provided in Section 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

~~Withdrawal shall result in the loss of Interconnection Customer's Initial Queue Position or Interconnection Queue Position, as applicable, and may result in the forfeiture of Financial Security deposits provided in Sections 8.2, 8.5.1, and 8.5.2 of the GIP, as applicable, subject to the Financial Security provisions in Section 8.14 of the GIP.~~this Attachment AW. If an Interconnection Customer disputes the withdrawal and loss of its Initial Queue Position or Interconnection Queue Position, then during Dispute Resolution, Interconnection Customer's Interconnection Request is eliminated from the applicable Queue until such time that the outcome of Dispute Resolution would restore its Initial Queue Position or Interconnection Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to Transmission Provider all costs that Transmission Provider prudently incurs with respect to that Interconnection Request prior to Transmission Provider's receipt of notice described above. Interconnection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

Transmission Provider shall (i) update the OASIS list of Interconnection Requests and (ii) refund to Interconnection Customer any portion of Interconnection Customer's deposit or study payments ~~that exceeds the costs that Transmission Provider has incurred pursuant to the Financial Security provisions in Section 8.14 of this Attachment AW~~, including interest earned in the interest-bearing account in which Transmission Provider shall have deposited such amount. In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Section 13.1 of ~~the GIP~~this Attachment AW, shall provide, at Interconnection Customer's request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.



### 3.8 Identification of Contingent Facilities.

Contingent Facilities, which may include JTIQ Upgrades, shall be identified at the conclusion of the ~~Definitive Interconnection System Impact Study~~ERAS and again ~~at the conclusion of the Interconnection Facilities Study~~ and included in Interconnection Customer's GIA ~~or Interim GIA, as applicable~~. Transmission Provider shall also provide, upon request of the Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and not commercially sensitive.

Prior to assigning cost allocation for new upgrades pursuant to Section 4.2.2 of ~~the GIP~~this Attachment AW, the Transmission Provider will first mitigate constraints seen in the study process with Network Upgrades that are part of the current SPP Transmission Expansion Plan, ~~as well as with~~ Network Upgrades that are not yet approved, but are currently assigned to active prior-queued Interconnection Requests will not be considered.

For each Network Upgrade identified, the average incremental power flow impact of each Interconnection Request in the Cluster Study, as defined in Section 4.2.2 of ~~the GIP~~this Attachment AW, shall be determined using each seasonal model available for the Cluster Study period during which the generating facility associated with the Interconnection Request is most likely to be generating at nameplate capacity, after the Date Upgrade Needed, as defined in Section 4.2.2 of ~~the GIP~~this Attachment AW, of such upgraded facility. Each impact amount shall be determined by first establishing a set of initial seasonal Base Case power flow models that excludes flows associated with all requests included in the Cluster Study. Then each request will be added to the models and the change in flow across such Network Upgrades shall be determined for each request included in the Cluster Study. Dependence on a Network Upgrade shall be assigned to each request having a positive incremental impact on such Network Upgrade with a distribution factor that is greater than or equal to the amounts set forth in Sections 3.8.1 and 3.8.2 below. Dependence on each Network Upgrade shall be allocated to requests independently. Incremental flows having a negative impact (counter flow) on a Network Upgrade shall be ignored.

**3.8.1** ~~The distribution factor for requests seeking ERIS shall be 20% for all outage-based thermal constraints and 3% for all other constraints.~~

**3.8.2** ~~The distribution factor for requests seeking NRIS shall be 3% for all constraints.~~

## Section 4. ~~Interconnection-ERAS~~ Request Evaluation Process

### 4.1 ~~Queue-Position~~Priority.

4.1.1 The Transmission Provider shall assign an ~~Initial Queue Position~~ unique identification number to each Interconnection Request ~~based on the date and time of receipt of the valid Interconnection Requests; provided that if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer provides such information in accordance with Section 3.4.3 of the GIP, then Transmission Provider shall assign Interconnection Customer an Initial Queue Position~~ based on the date the application form was originally submitted to the Transmission Provider. The ~~Initial Queue Position~~ unique identification number of each Interconnection Request will be used solely as an identifier for the Interconnection Request.

All Interconnection Requests submitted within the same ~~DISIS-Queue Cluster~~ ERAS Window shall have equal priority. Interconnection Requests that are not part of the ERAS and have not attained an effective GIA by the close of the ERAS Window of a subsequent DISIS-Queue Cluster that have been previously studied or actively being restudied shall be considered lower-queued in priority.

~~4.1.2 The Transmission Provider shall assign an Interconnection Queue Position for Interconnection Requests within the Interconnection Facilities Study Queue based upon the date and time the Interconnection Customer satisfies all of the requirements of Section 8.9 of the GIP to enter an Interconnection Facilities Study. The priority of the Interconnection Queue Position of each Interconnection Request as determined in Section 4.1.3 of the GIP will be used to determine the order of performing the Interconnection Facilities Studies and determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request.~~

~~4.1.3 Once an Interconnection Customer has met all requirements for an Interconnection Facilities Study, its Interconnection Queue Position shall be deemed higher than those in the DISIS Queue. A higher queued Interconnection Request in the Interconnection Facilities Study Queue is one that has been placed "earlier" in the Interconnection Facilities Study Queue in relation to another Interconnection Request. Interconnection Requests in the Interconnection Facilities Study Queue shall be considered to be placed in the Interconnection Facilities Study Queue at the same time if the Interconnection Requests were studied in the same Definitive Interconnection System Impact Study and each meets the requirements of Section 8.9 of the GIP following the completion of that study. Moving a Point of Interconnection shall result in a lowering of Interconnection Queue~~

~~Position if it is deemed a Material Modification under Section 4.4.3 of the GIP.~~

## 4.2 General Study Process.

### 4.2.1 ~~DISIS Queue~~ ERAS System Impact Study Procedures.

The Transmission Provider shall accept Interconnection Requests for ~~Definitive Interconnection System Impact Studies~~ ERAS during the ~~DISIS Queue Cluster~~ ERAS Window. ~~Following the transition period described in Section 5.1.3 of the GIP, each DISIS Queue Cluster~~ The ERAS Window opening and closing dates will be eleven (11) calendar months in duration posted on SPP's OASIS at least thirty (30) calendar days in advance of the opening date. The ERAS Window will have a duration of thirty (30) calendar days. ~~Following the close of the DISIS Queue Cluster~~ ERAS Window, there shall be a ~~one fifteen (+15) calendar month~~ day ~~DISIS-ERAS~~ Review Period to resolve any deficiencies in the Interconnection Requests received during the ~~DISIS Queue Cluster~~ ERAS Window. ~~Each subsequent DISIS Queue Cluster Window will begin on the first day of the next calendar month after the end of the previous DISIS Review Period.~~ Following the DISIS-ERAS Review Period, the Transmission Provider shall complete the study of valid Interconnection Requests within the ~~DISIS Queue~~ ERAS in accordance with the timeline specified in Section 8.5 of ~~the GIP~~ this Attachment A. The Transmission Provider shall simultaneously study two or more valid Interconnection Requests within the ~~DISIS Queue~~ ERAS on the basis of geographic location and proposed electrical interconnection as specified in the Interconnection Requests in a non-discriminatory manner without regard to the nature of the underlying Interconnection Service, ~~whether Energy Resource Interconnection Service or Network Resource Interconnection Service~~ ("Cluster Study").

The Transmission Provider may study an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Generating Facility. The Transmission Provider shall study individual Interconnection Requests within the ~~DISIS Queue~~ ERAS not included within a Cluster Study ~~based upon Initial Queue Position~~ without regard to the nature of the underlying Interconnection Service, ~~whether Energy Resource Interconnection Service or Network Resource Interconnection Service.~~

Cluster Studies performed within the ~~Definitive Interconnection System Impact Study~~ ERAS phase shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System's capabilities at the time of each study.

#### 4.2.2 Study Cost and Network Upgrade Cost Allocation.

The Transmission Provider shall determine each Interconnection Customer's share of ~~each phase of the~~ Definitive Interconnection System Impact Study ~~ERAS~~ cost by allocating 50% of the applicable study costs to Interconnection Customers pro-rata based on number of Interconnection Requests included in the ~~applicable study phase~~ and by allocating 50% of the applicable study costs to Interconnection Customers pro-rata based on requested *Maximum Injection Capability (MW)* included in the ~~applicable study phase~~. The full study costs for ~~DISIS Phase 1 and DISIS Phase 2~~ ERAS will be shared by all Interconnection Requests which entered ~~each respective~~ the study ~~phase~~. If Interconnection Customer withdraws its Interconnection Request before or during ~~DP1 or DP2~~ the ERAS Review Period, Interconnection Customer will not be responsible for study costs for subsequent study phases except that any remaining non-refundable portions of the study deposit will be applied in accordance with Section 13.3 of this GIP Attachment A.W.

For Network Upgrades identified in Cluster Studies, the Transmission Provider shall calculate each Interconnection Customer's share of Network Upgrade costs in the following manner:

- a. All Network Upgrades that are required to provide Interconnection Service for all Interconnection Requests included in a Cluster Study shall be included in a cluster cost allocation assessment group ("CCAAG"). The cost of each Network Upgrade component will be allocated to each Interconnection Customer in the CCAAG on a pro-rata impact basis as provided for in paragraph b below. With regard to the cost allocation, the Transmission Provider shall review all Network Upgrades and determine the earliest date that each upgrade is required to be in-service in order to provide the requested Interconnection Service ("Date Upgrade Needed").
- b. An allocation of the cost of each Network Upgrade to each Interconnection Customer shall be determined on a pro-rata basis for the positive incremental power flow impacts of the requested service on such Network Upgrade in proportion to the total of all positive incremental power flow impacts on such Network Upgrade. For each Network Upgrade identified, the average incremental power flow impact of each Interconnection Request in the Cluster Study shall be determined using each seasonal model available for the Cluster Study period during which the generating facility associated with the Interconnection Request is most likely to be generating at *Maximum Injection Capability*, after the Date Upgrade Needed of such upgraded facility. Each impact amount shall be determined by first establishing a set of initial seasonal base cases that excludes flows associated with all requests included in the

Cluster Study. Then each request will be added to the models and the change in flow across such Network Upgrades shall be determined for each request included in the Cluster Study. The cost of a Network Upgrade allocated to each request shall be proportional to the average positive incremental impact of each request on such Network Upgrade divided by the total average positive incremental impact of all requests included in the Cluster Study on such Network Upgrade. The cost of each Network Upgrade shall be allocated to requests independently. Incremental flows having a negative impact (counter flow) on a Network Upgrade shall be ignored.

#### 4.3 Transferability of ~~Queue Position~~Interconnection Request.

An Interconnection Customer may transfer its Interconnection ~~Queue Position or Initial Queue Position Request~~ to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

#### ~~4.4~~ Modifications.

~~Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer shall retain its Interconnection Queue Position if the modifications are in accordance with Sections 4.4.1, 4.4.2 or 4.4.5 of the GIP, or are determined not to be Material Modifications pursuant to Section 4.4.3 of the GIP.~~

~~Notwithstanding the above, during the course of the Interconnection Studies, either Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 8.8 of the GIP and Section 8.13 of the GIP as applicable and Interconnection Customer shall retain its Interconnection Queue Position or Initial Queue Position.~~

~~4.4.1 During DP1, modifications to the Interconnection Request permitted under this section shall include specifically:~~

- ~~(a) a decrease of *Maximum Injection Capability* and/or *Network Resource Deliverability* (MW) of the proposed project of up to fifty percent (50%) of original requested *Maximum Injection Capability*, through either~~

- (1) ~~— a decrease in *Nameplate Capacity* or~~
- (2) ~~— a decrease in *Maximum Injection Capability* or *Network Resource Deliverability* (consistent with the process described in Section 3.1 of the GIP) accomplished by applying Transmission Provider approved injection-limiting equipment;~~
- (b) ~~— modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics;~~
- (c) ~~— modifying the interconnection configuration; and~~
- (d) ~~— a change from Network Resource Interconnection Service to Energy Resource Interconnection Service (*effectively reducing Network Resource Deliverability to zero*);~~
- (e) ~~— a Permissible Technological Advancement for the Generating Facility after the submission of the Interconnection Request. Section 4.4.5 of the GIP specifies a separate technological change procedure including the requisite information and process that will be followed to assess whether the Interconnection Customer's proposed technological advancement under Section 4.4.1(e) of the GIP is a Material Modification.~~

~~During DP2, modifications to the Interconnection Request permitted under this section shall include specifically a decrease of *Maximum Injection Capability* and/or *Network Resource Deliverability* (MW) of up to ten percent (10%) of the original requested *Maximum Injection Capability* or *Network Resource Deliverability*. For increases in *Nameplate Capacity*, *Maximum Injection Capability*, or *Network Resource Deliverability*, the incremental increase in *any of these quantities* will go to the end of the queue for the purposes of cost allocation and study analysis.~~

~~**4.4.2** Prior to making any modification other than those specifically permitted by Sections 4.4.1, and 4.4.4 of the GIP, Interconnection Customer may first request that Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1 and 8.2 of the GIP or so allowed elsewhere, shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.~~



~~4.4.3~~ Upon receipt of Interconnection Customer's request for modification permitted under this Section 4.4 of the GIP, the Transmission Provider will notify the Interconnection Customer if a study is necessary to determine whether the change is considered a Material Modification. The Interconnection Customer will provide a study deposit of \$60,000 within five (5) Business Days after notification that additional studies are required. Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost. Transmission Provider shall describe for the Interconnection Customer any costs incurred to conduct any necessary additional studies, provide its costs to the Interconnection Customer, and either refund any overage or charge for any shortage for costs that exceed the deposit amount. The Transmission Provider will determine whether a request is a Material Modification by conducting steady state, reactive power, short-circuit/fault duty, and stability analyses. The Transmission Provider may waive any of these analyses if it determines that one or more is not necessary based on the nature of the requested change. The request shall be deemed a Material Modification if the results of the analyses meet the definition of Material Modification as defined in Section 1 of this GIP.

~~4.4.4~~ Prior to the Effective Date of the GIA, ~~e~~Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing. For purposes of this section, the Commercial Operation Date reflected in the initial Interconnection Request shall be used to calculate the permissible extension prior to Interconnection Customer executing a GIA or requesting that the GIA be filed unexecuted. After a GIA is executed or requested to be filed unexecuted, the Commercial Operation Date reflected in the GIA shall be used to calculate the permissible extension. Such cumulative extensions may not exceed three years including both extensions requested after execution of the GIA by Interconnection Customer or the filing of an unexecuted GIA by Transmission Provider and those requested prior to execution of the GIA by Interconnection Customer or the filing of an unexecuted GIA by Transmission Provider. Extensions of more than three (3) cumulative years of the Commercial Operation Date of the Generating Facility are deemed to be a Material Modification. Extensions of Commercial Operation Date due to circumstances in Section 8.7 of the GIP are applicable to this Section 4.4.4.

#### ~~4.4.5~~ Technological Change Procedure:

If an Interconnection Customer seeks to incorporate a technological advancement into its Generating Facility, it should submit a technological

~~advancement request to the Transmission Provider in writing prior to the end of DP2.~~

~~The technological advancement request must include a description of the proposed advancement and provide details necessary to evaluate whether the proposed advancement is material, including but not limited to, listing the specific parameters in Attachments A and B to Appendix 3 of the GIP that would change as a result of the proposed advancement.~~

~~If the proposed technological advancement is a Permissible Technological Advancement or would not change any of the parameters in Attachments A or B to Appendix 3 of the GIP, no study will be necessary and the proposed advancement will not be considered a Material Modification.~~

~~The Transmission Provider will evaluate the request pursuant to Section 4.4.3 of this GIP. Studies conducted for purposes of this Section 4.4.5 of the GIP will be completed in thirty (30) Calendar Days after the Interconnection Customer submits a formal technological advancement request to the transmission provider, provided that the Interconnection Customer has provided the required information and study deposit.~~



**Section 5. ~~Procedures for Interconnection Requests Submitted Prior to Revision Date of Generator Interconnection Procedures~~Reserved.**

**5.1 ~~Transition Procedures.~~**

**5.1.1** ~~Any Interconnection Request for which the Transmission Provider has not started DISIS Phase One as of January 15, 2022 (“Revision Date”) shall be subject to this GIP and shall meet the requirements of Section 8.2 of this GIP within twenty (20) Business Days of receipt of notice from Transmission Provider. This notice shall be provided to each Interconnection Customer no later than twenty (20) Business Days following the start of DISIS Phase One of the Cluster Study immediately higher in queue priority than its Interconnection Request, with the exception of the first Cluster Study to enter the DISIS following the Revision Date. Transmission Provider shall provide notice to the first Cluster Study entering the DISIS following the Revision Date within five (5) Business Days of the Revision Date. Study and security deposits required by Section 8.2 of the GIP will be reduced by any amounts previously provided by Interconnection Customer. Any Interconnection Customer that fails to meet these transition requirements shall have its Interconnection Request deemed withdrawn pursuant to Section 3.7 of this GIP.~~

**5.1.2** ~~Any Interconnection Request for which either a GIA has been executed or a GIA has been filed unexecuted with FERC, as of the Revision Date, shall not be subject to this revised GIP. Any Interconnection Request for which the Transmission Provider has started DISIS Phase One as of the Revision Date shall proceed under the GIP in effect prior to the Revision Date.~~

**5.1.3 ~~Transition Period.~~**

~~On the Revision Date, the then open DISIS Queue Cluster Window will remain open until Transmission Provider completes DISIS Phase One for the most recently closed DISIS Queue Cluster Window or until the Transmission Provider determines that the DISIS Queue Cluster window should close due to the size (in megawatts) of Interconnection Requests submitted during the DISIS Queue Cluster Window (the “Open Season”). Transmission Provider may choose to extend subsequent DISIS Queue Cluster Windows and create additional Open Seasons until such time as it completes DISIS Phase One of the immediately preceding Cluster Study. The Transmission Provider shall provide at least ten (10) Business Days notice prior to the close of the Open Season. The period between the Revision Date and the date the last Open Season closes shall be known as the Backlog Mitigation Period. Each subsequent DISIS Queue Cluster Window will be eleven (11) calendar months in duration followed by a one (1) calendar month DISIS Review Period. The DISIS Queue Cluster~~

~~Window that is open at that time and each subsequent DISIS Queue Cluster Window shall have the duration specified in Section 4.2.1 of the GIP.~~

~~During the Backlog Mitigation Period, Transmission Provider will process DISIS Cluster Studies in parallel by (i) starting DISIS Phase One of each subsequent Cluster Study after the end of DP1 of the immediately preceding Cluster Study and (ii) starting DISIS Phase Two of each subsequent Cluster Study after the end of DP2 of the immediately preceding Cluster Study. Accordingly, for each DISIS Cluster Study processed during the Backlog Mitigation Period, Transmission Provider will calculate the DISIS Phase Two processing time set forth in Section 3.5.2.2 of this GIP from the end of DP2 of the immediately preceding Cluster Study.~~

~~Notwithstanding Section 4.1.1 of this GIP, Transmission Provider will process all Interconnection Requests submitted during DISIS Queue Cluster Windows 2018-002 and 2019-001 as one Cluster Study. All Interconnection Requests included in this combined Cluster Study will have equal queue priority.~~

## **5.2 — New Transmission Provider.**

~~If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this GIP shall be paid by or refunded to the Interconnection Customer, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If Transmission Provider has tendered a draft GIA to Interconnection Customer but Interconnection Customer has not either executed the GIA or requested the filing of an unexecuted GIA with FERC, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.~~

~~For a generating facility on the original Transmission Provider's Transmission System with an effective generator interconnection agreement that requires an operating guide to implement operating restrictions, and if such operating guide has not been completed at the time the original Transmission Provider transfers control of its Transmission System to the successor Transmission Provider, the successor Transmission Provider shall perform a study to determine the operating restrictions of the generating facility.~~

## **5.3 — Transitional Notice Requirements for Generating Facility Replacement.**

~~All requests for Generating Facility Replacement that are submitted to the Transmission Provider within 365 Calendar Days after July 1, 2020 shall have a date of cessation of operation for the Existing Generating Facility that is not earlier than two years after July 1, 2020.~~

#### **~~5.4 Transition to JTIQ Process~~**

~~Interconnection Requests for which the Transmission Provider has not started DISIS Phase One as of the effective date of this Section 5.4 shall be subject to the provisions specific to the JTIQ provisions included in this Attachment V and this Tariff.~~

## **Section 6. ~~Reserved~~ Modeling and Analysis Procedures**

### **6.1 General**

System impact analysis shall follow the procedures described in Sections 4, 5, and 6 of SPP Business Practice 7250 “Generator Interconnection Study Process” (“BP7250”) except as modified in this Section 6.

In applying the provisions of BP7250 to the ERAS, the Transmission Provider shall assume the following:

- a. “Current-Queued Requests” shall be construed to include only **Interconnection** Requests that have met the requirements for inclusion in the ERAS.
- b. “Prior-Queue Requests” shall be construed to include **Interconnection** Requests that are not already represented in the ITP base reliability models and are associated with a Generator Interconnection Agreement or Interim Generator Interconnection Agreement effective on-or-before the close of the ERAS Window.

### **6.2 Steady-State Model Analysis**

The Transmission Provider will use as the starting point for the ERAS steady-state model development the base reliability powerflow model set that, on the effective date of this Attachment **AW**, was developed for the most-recently approved Integrated Transmission Planning portfolio.

Steady-state model development, dispatch, contingency analysis and solution development will follow the procedures for steady-state analysis of Section 4 of BP7250 using the definitions of Current-Queued Request and Prior-Queue Request above.

### **6.3 Stability and Short-Circuit Study**

Stability analysis shall not be conducted as part of the ERAS, but shall be incorporated into the next ITP stability analysis. Any stability constraints found during the ITP shall be mitigated and cost-allocated pursuant to the ITP process.

Short-Circuit analysis shall be conducted during the ERAS following the procedures for short-circuit analysis of Section 4 of BP7250.

**Section 7. Capacity Ceiling for ERAS Requests**

**7.1 LRE Ceiling Capacity**

**7.1.1 LRE Ceiling Capacity Calculation Variables**

The variables used in determining the LRE Ceiling Capacity shall be as follows:

**a. Projected Accredited Capacity Planning Reserve Margin**

The projected accredited capacity Planning Reserve Margin (“Projected ACAP PRM”) shall be determined by the Transmission Provider. The Projected ACAP PRM shall use the following:

- 1) The approved base Planning Reserve Marging (“PRM”) for 2029;
- 2) The summation of calculated demand equivalent forced outage rate (“EFORd”) and equivalent forced outage factor (“EFOF”) impact applied to thermal fuel type resources, pump storage hydroelectric resources, and hydroelectric resources with reservoir storage capability not subject to hourly river flow limitations similar to run-of-river hydro, using the resource plans modeled in the 2024 LOLE Study for planning year 2029; and
- 3) The summation of all LREs’ 2030 Peak Demand as provided in the 2025 Resource Adequacy Workbook submissions.

The Projected ACAP PRM shall be applied in the determination of the Projected LRE Resource Adequacy Requirement.

**b. Projected LRE Capacity**

The sum of the projected Deliverable Capacity and projected Firm Capacity for the applicable season based on the information provided by the LRE pursuant to Section 7.2 of this Attachment AW.

**c. Projected LRE Resource Adequacy Requirement**

The projected LRE Net Peak Demand multiplied by one plus the Projected ACAP PRM for the 2030 Summer Season and the 2030-2031 Winter Season based on the information provided by the LRE pursuant to Section 7.2 of this Attachment AW.

**d. Projected LRE Deficiency**

The projected LRE Resource Adequacy Requirement less the Projected LRE Capacity, or zero if the projected LRE Capacity is greater than or equal to the Projected LRE Resource Adequacy Requirement for the applicable season.

**e. Ceiling Multiplier**

The Ceiling Multiplier shall be 1.25 (125%).

**7.1.2 LRE Ceiling Capacity Calculation**

The LRE Ceiling Capacity shall be calculated for both the 2030 Summer Season and 2030-2031 Winter Season. In the event a Load Responsible Entity's Projected LRE Deficiency greater than zero, the LRE Ceiling Capacity for such Load Responsible Entity shall be the greater of the following:

- 1) the Projected LRE Deficiency multiplied by the Ceiling Multiplier; or
- 2) the Projected LRE Deficiency plus the lesser of (a) 419 MW or (b) 50% of the projected LRE's highest Summer Season or Winter Season Net Peak Demand.

A Load Responsible Entity's LRE Ceiling Capacity shall be zero if the Load Responsible Entity's Projected LRE Deficiency for the Summer Season and Winter Season is zero.

**7.2 Data Source and Updates**

The LRE Ceiling Capacity shall be determined using the information provided in the LRE's 2025 Resource Adequacy Workbook submission and the supplemental 2025 LOLE Study data request responses provided by LREs.

In the event an LRE would like to update the Peak Demand provided by the LRE and used to initially determine the LRE Ceiling Capacity, the LRE must notify via email and provide the updated information, along with a detailed list of the updates and reasons for the updates, to the Transmission Provider no later than seven (7) Calendar Days after the opening of the ERAS Window. The Transmission Provider shall re-calculate and provide the updated LRE Ceiling Capacity to the LRE no later than fourteen (14) Calendar Days after the opening of the ERAS Window.

**7.3 LRE Ceiling Capacity Posting**

The Transmission Provider shall perform the LRE Ceiling Capacity calculation on LREs identified in the 2025 Resource Adequacy Workbook submissions. Each LRE shall be notified of their LRE Capacity Ceiling pursuant to Section 3.1.1 of

this Attachment AW. The information provided to each LRE shall contain, but is not limited to, the following for each season:

- 1) Projected LRE Capacity;
- 2) Projected LRE Resource Adequacy Requirement;
- 3) LRE Ceiling Capacity; and
- 4) List of LRE identified future resources currently in an Interconnection Study, Surplus Interconnection Service Impact Study or Expedited Resource Adequacy Study and their accredited capacity applied to the LRE Ceiling Capacity calculation.

## **7.4 Calculation Assumptions**

### **7.4.1 Projected LRE Capacity Resource Considerations**

The Projected LRE Capacity shall consider the following:

- 1) Existing resources, purchases, and sales that shall be available during the 2030 Summer Season and the 2030-2031 Winter Season less projected resource retirements provided by the LRE;
- 2) Any plans for power purchase agreement renewal(s) as provided by the LRE;
- 3) Future resources projected to be in Commercial Operation by the 2030 Summer Season and the 2030-2031 Winter Season that are currently in an Interconnection Study, Surplus Interconnection Service Impact Study, or Expedited Resource Adequacy Study as identified by the LRE; and
- 4) Future resources projected to be in Commercial Operation by the 2030 Summer Season and the 2030-2031 Winter Season that are not anticipated to go through an Interconnection Study, Surplus Interconnection Service Impact Study, or Expedited Resource Adequacy Study as identified by the LRE.
- 5) In the event a resource initially included in an LRE's Projected LRE Capacity for determining the LRE Ceiling Capacity is subsequently withdrawn from an Interconnection Study or Surplus Interconnection Service Impact Study in accordance with Section 3 of this Attachment AW, the resource will no longer be considered in the Projected LRE Capacity for determining the LRE Ceiling Capacity. The resource that was removed from the Interconnection Study or Surplus Interconnection Service Impact Study in accordance with Section 3 of this Attachment AW can be submitted

into the Expedited Resource Adequacy Study if there is adequate LRE Ceiling Capacity for the applicable LRE after the adjustment of the LRE's Projected LRE Capacity.

#### **7.4.2 Accredited Capacity Considerations**

The Transmission Provider shall apply the projected system level class average accreditation percentages based on technology type, fuel type, and season, to resources and contracts identified for the Projected LRE Capacity, and not the individual resource accreditation percentages.

The system level accreditation percentages applied to wind, solar, and energy storage resources, excluding pumped storage hydroelectric resources, shall be based on the accreditation percentages used in the determination of the 2029 base PRM outlined in the 2024 LOLE Study report.

The system level accreditation percentages applied to thermal fuel type resources (i.e natural gas, petroleum, coal, nuclear, biomass, geothermal, waste heat), pump storage hydroelectric resources, and hydroelectric resources with reservoir storage capability not subject to hourly river flow limitations similar to run-of-river hydro, shall be based on the most recent class average EFORD and EFOF, after considering the EFOF adjustment, on the SPP website.

The accreditation assumptions applied to power purchase agreement(s) for the 2030 Summer Season and the 2030-2031 Winter Season shall consider, but is not limited to, the following:

- 1) The projected contract amount of fleet Firm Capacity purchases and sales shall be the amount used when calculating the Projected LRE Capacity;
- 2) Resource or plant specific purchases and sales shall have the projected system level class average accreditation percentages based on technology type, fuel type, and season applied to the projected contract amount;
- 3) External Firm Power purchases and sales shall have the Projected ACAP PRM added to the projected contract amount. The combined contract amount and added Projected ACAP PRM portion shall be the amount of used when calculating the Projected LRE Capacity; and
- 4) Projected amounts form internal Firm Power purchases and sales shall be considered when determining the Projected LRE Resource Adequacy Requirement; thus, internal Firm Power purchases and



Southwest Power Pool - Open Access Transmission Tariff, Sixth Revised Volume No. 1 - Attachment V Attachment V Generator  
Interconnection Procedures (GIP) ... - Attachment V Section 7 Attachment V Section 7

sales shall not be considered in the determination of the Projected  
LRE Capacity.

## Section 8. Definitive Planning Phase

### 8.1 ~~Generator Interconnection Study~~ ERAS Agreement.

The ~~Generator Interconnection Study~~ ERAS Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of ~~each phase of the Definitive Interconnection System Impact Study~~ ERAS.

### 8.2 Execution of ~~Generator Interconnection Study~~ ERAS Agreement.

Interconnection Customer shall execute and deliver the ~~Generator Interconnection Study~~ ERAS Agreement to the Transmission Provider prior to close of the ~~DISIS Queue Cluster~~ ERAS Window, along with each of the following:

#### a. Demonstration of Site Control;

##### 1. Site Control for the Generating Facility:

Specifications for acceptable site size for the purpose of demonstrating Site Control for the Generating Facility are contained in the “Guidelines for the SPP GIP Process and Business Practices” posted on the Transmission Provider’s Generator Interconnection Study posting page on OASIS; Interconnection Customer may propose an alternative site size for Transmission Provider approval. Transmission Provider shall approve a demonstration of Site Control for the Generating Facility with an alternative site size when the Interconnection Customer submits to Transmission Provider a final layout drawing of the Generating Facility that includes at a minimum: (i) the spacing and number of turbines; (ii) the cable requirements to interconnect the individual turbines to the collector substation and the cable requirements from the collector substation to the interconnection substation; (iii) the resistance and impedance measurements of the interconnecting cable and (iv) acknowledgment by Interconnection Customer that the layout drawing is intended to be final and not subsequently substantially changed. ~~Interconnection Customer may modify the layout drawing of a project until it submits an Interconnection Request into the Definitive Interconnection System Impact Study Queue (“DISIS Queue”).~~ Once an Interconnection Request has been submitted in the ~~DISIS Queue~~ ERAS, and Transmission Provider has approved the final layout drawing and demonstration of Site Control, any subsequent change to the design of the Generating Facility as depicted in the layout drawing will be subject to a modification analysis after GIA execution. Section 4.4 of the GIP and will be evaluated to determine whether the change constitutes a Material Modification under Section 4.4 of the GIP.

##### 2. Site Control for the Generating Facility’s Tie Line:

Reasonable evidence of Site Control for ~~at least fifty-seventy-five~~ percent (~~5075~~%) of the mileage of the Generating Facility's high voltage tie line to the Point of Interconnection, or in lieu of Site Control for the Generating Facility's high voltage tie line, additional financial security in the amount of \$80,000 per line mile of right-of-way.

If Interconnection Customer elects to provide additional financial security in lieu of evidence of Site Control for the Generating Facility's high voltage tie line, the additional financial security will be considered at risk and subject to the provisions set forth in Section 8.14(b)-(c) of this Attachment AW~~this GIP~~. If the Interconnection Customer subsequently satisfies the applicable Site Control requirement for the Generating Facility's high voltage tie line, the amount of additional in lieu of financial security will be refunded to the Interconnection Customer.

### 3. POI Substation:

Reasonable evidence of Site Control of one-hundred percent (100%) of any new substations identified as required at the Point of Interconnection;

- b. Study deposit in the amount of, ~~which shall be one of the following, based on the requested Maximum Injection Capability:~~

- ~~1. \$35,000 plus \$1,000 per MW for Interconnection Requests < 80 MW; or~~
- ~~2. \$150,000 for Interconnection Requests ≥ 80 MW < 200 MW; or~~
- ~~3. \$250,000 for Interconnection Requests ≥ 200 MW.~~

~~An Interconnection Request for a Replacement Generating Facility shall be accompanied by a study deposit in the amount of \$120,000.~~

Study deposits provided pursuant to this section shall be applied toward any ~~Interconnection S~~studies applicable to the Interconnection Request. ~~Twenty percent (20%) of the study deposit shall be non-refundable at the start of DISIS Phase One~~the ERAS.

- c. Definitive Point of Interconnection;
- d. *Nameplate Capacity, Maximum Injection Capability, and Network Resource Deliverability (MW) pursuant to* ~~Appendix 3~~Appendix 1, Attachment 2 of this Attachment AW~~the GIP~~. The Network Resource Deliverability must equal the Maximum Injection Capability;

- e. Technical information required in Appendix 7 of ~~the GIP~~this Attachment AW, if applicable; ~~and~~
- f. Security deposit equal to \$48,000/MW of the requested *Maximum Injection Capability* (“Financial Security One”);
- g. Application fee, ~~initially set at~~ of \$10,000, not subject to refund, ~~to be adjusted in accordance with the inflation calculator located at the U.S. Bureau of Labor Statistics website. The inflation adjustment shall be calculated from the original application fee amount of \$10,000, January 2024, to the most up-to-date data available at the time the inflation calculation takes place, where such amount will be rounded to the nearest \$100 and posted on the Transmission Provider’s website. The Transmission Provider shall post an application fee once every three years, with the first posting on or after January 1, 2027. The application fee amount calculated pursuant to this paragraph shall be applicable to all Interconnection Requests submitted sixty (60) or more Calendar Days after the date that the Transmission Provider posts such amount and will remain effective until Transmission Provider posts a revised calculation pursuant to this paragraph;~~
- h. Selection Form, in the form of Appendix 2 of this Attachment AW, signed by an authorized representative(s) of one or more Load Responsible Entities (LREs) registered in SPP. Applications that do not include a Selection Form from at least one SPP LRE will be rejected.~~and by the Relevant Electric Retail Regulatory Authority (RERRA) with jurisdiction over the LRE.~~
- i. Reasonable evidence of having satisfied at least one of the following development milestones:
  - (i) the execution of a contract for the supply or transportation of fuel to the Generating Facility;
  - (ii) the execution of a contract for the supply of cooling water to the Generating Facility;
  - (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility;
  - (iv) execution of a contract (or comparable evidence) for the sale of electric energy or capacity from the Generating Facility;
  - (v) statement signed by an officer or authorized agent of the Interconnection Customer attesting the Generating Facility is included in an applicable state resource plan;

- (vi) other information that the Transmission Provider deems to be reasonable evidence that the Generating Facility will qualify as a Designated Resource;
- (vii) application for an air, water, or land use permit;
- (viii) Pre-Confirmed or Confirmed Long-Term Transmission Service Request ("TSR") from the source Generating Facility in the Interconnection Request;
- (ix) effective Interim Generator Interconnection Agreement associated with the same Interconnection Request; or
- (x) final detailed Generating Facility Design, and for Inverter-Based Resources, submission of Electromagnetic Transient (EMT) model.

If the ~~Definitive Interconnection System Impact Study~~ERAS uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by Transmission Provider may be substituted for the designated Point of Interconnection specified above ~~without loss of Initial Queue Position~~, and restudies shall be completed pursuant to Section 8.8 of ~~the GIP~~this Attachment AW as applicable.

The ~~expected proposed Commercial Operation Date~~In-Service Date of the new Generating Facility or increase in capacity of the Existing Generating Facility shall be no later than ~~the end of the process window for the regional expansion planning period not to exceed seven~~fivetwo (52) years from the ~~closing date of the Interconnection Request is received by Transmission Provider~~ERAS Window; unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Generating Facility or increase in capacity of the Existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten years, or longer where Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

The ~~expected Commercial Operation Date~~ of a Replacement Generating Facility shall be no more than three (3) years from the date of cessation of operation of the Existing Generating Facility or four (4) years from the date a unit is determined to be in forced outage. If the requested period of time between the cessation of operation of the Existing Generating Facility and ~~expected Commercial Operation Date~~ of the Replacement Generating Facility is more than three (3) years, the request shall be treated as Interconnection request for a new Generating Facility.

### 8.3 ~~DISIS-ERAS~~ Review Period

During the ~~DISIS-ERAS~~ Review Period, the Transmission Provider will validate Interconnection Requests. The Transmission Provider shall notify the

Interconnection Customer of any deficiencies that would warrant removal from the ~~DISIS Queue~~ERAS. Interconnection Customer shall have fifteen (15) Business Days from the date of the notice to cure any deficiencies, which may extend beyond the ~~DISIS-ERAS~~ Review Period. If the Interconnection Customer does not cure the deficiencies within such time period, the Interconnection Request shall be deemed withdrawn. Transmission Provider may conduct additional Scoping Meetings during the ~~DISIS-ERAS~~ Review Period.

#### 8.4 Scope of ~~Definitive Interconnection~~ERAS System Impact Study.

8.4.1 The ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study will consider the Base Case, ~~as well as all Interconnection Requests in the Definitive Interconnection System Impact Study Queue~~ and all generating facilities ~~(and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection)~~ that, on the date the ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study is commenced:

- (i) are directly interconnected to the Transmission System;
- (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request;
- (iii) ~~have a pending higher queued Interconnection Request to interconnect to the Transmission System; and~~
- ~~(iv) have no Interconnection Queue Position but have~~ executed a GIA or requested that an unexecuted GIA be filed with FERC.

8.4.2 The ~~Definitive Interconnection System Impact Study will be conducted in two phases. DISIS Phase One~~ ERAS System Impact Study will consist of a power flow analysis, ~~and calculation of the short-circuit ratio, DISIS Phase Two will consist of~~ a Short Circuit Ratio and Critical Clearing Time (“SCRCCT”) screening, ~~and short circuit analysis and a stability analysis, taking into account the impact on the power flow analysis of any requests withdrawn after the DISIS Phase One.~~ When the SCRCCT screening indicates possible inverter instability due to an Interconnection Request, an EMT Study will be performed commencing not less than fifteen (15) months prior to the inverter-based resource Commercial Operation Date. ~~For NRIS requests, DISIS Phase Two~~The ERAS System Impact Study will identify a set of Creditable Upgrades that might be impacted by a subsequent request to designate the resource as a Network Resource pursuant to Section 30.2.2 of this Tariff and an estimate of the revenue credits that might be due pursuant to Attachment Z2 of this Tariff if the

*resource were to be designated and is not deemed to be guaranteed. ~~Each phase of the Definitive Interconnection System Impact Study~~The ERAS System Impact Study report will state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. –For purposes of determining necessary Interconnection Facilities and Network Upgrades, the ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns. ~~Each phase of the Definitive Interconnection System Impact Study~~The ERAS System Impact Study report will provide a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility (+/-30% accuracy) and a non-binding good faith estimated time to construct. The ~~DISIS Phase One and DISIS Phase Two~~ERAS System Impact Study reports will also indicate whether the Interconnection Request is responsible for a portion of the cost of a portfolio of JTIQ Upgrades, and if so, will also indicate (i) the estimated portion of cost assigned to the Interconnection Request for the JTIQ Upgrades, and (ii) whether the service will be delayed or limited prior to completion of one or more JTIQ Upgrades.*

#### **8.4.2.1 Stability Analysis.**

Stability analysis for ERAS Interconnection Requests will be conducted in the next Integrated Transmission Planning process to commence following the end of the ERAS Window. Network Upgrades required to mitigate instability identified in the ITP process shall be allocated pursuant to the provisions of Section VI of Attachment O of this SPP Tariff.

#### **8.4.3 Availability of Limited Operation.**

If the ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study determines that the full amount of interconnection capacity requested by the Interconnection Customer is not available by its requested Commercial Operation Date due to transmission constraints that may be remedied by an upgrade(s), including a Contingent Facility, with an in-service date beyond the Commercial Operation Date proposed by the Interconnection Customer, the Transmission Provider shall quantify the amount of interconnection capacity available to the Interconnection Customer prior to the in-service date of such upgrade(s) (“Limited Operation”). The Interconnection Customer shall be notified of the amount of interconnection capacity available under the Limited Operation



condition. The Interconnection Customer may choose to proceed with Limited Operation. The Interconnection Customer may also be subject to conditions in Section 8.7 of ~~the GIP~~this Attachment AW.

#### 8.4.4 Facilities Analysis.

During the ~~DISIS Phase One~~ERAS System Impact Study, the Transmission Provider shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed for transmission facilities at the Point of Interconnection to physically and electrically connect the Generating Facility to the Transmission System ("Facilities Analysis"). The Facilities Analysis shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The results of the Facilities Analysis shall be utilized as part of the Interconnection Facilities Study.

~~During DISIS Phase Two, the Transmission Provider shall work with the Transmission Owner to refine the estimates for cost and time required to construct the Transmission Owner's Interconnection Facilities and Network Upgrades at the Point of Interconnection which shall be determined with the same level of accuracy as the Transmission Owner's Interconnection Facilities Study described in Section 8.11(a) of this GIP. The results of the Facilities Analysis will be posted with the study results of DISIS Phase Two.~~

#### 8.5 ~~Definitive Interconnection System Impact Study~~ERAS Procedures.

- a. ~~The Transmission Provider shall coordinate the Definitive Interconnection System Impact Study~~ERAS System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Section 3.6 of ~~the GIP~~this Attachment AW above. The Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. The Transmission Provider shall use Reasonable Efforts to complete ~~DISIS Phase One~~the ERAS System Impact Study no later than ~~sixty-ninety (6090)~~ Calendar Days after the close of the ~~DISIS-ERAS~~ Review Period.

~~The Transmission Provider shall use Reasonable Efforts to complete DISIS Phase Two no later than one hundred twenty (120) Calendar Days after the end of DPI described in Section 8.5.1 of the GIP.~~

- b. ~~At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Definitive Interconnection System Impact Study,~~



~~Transmission Provider shall notify Interconnection Customer as to the schedule status of the Definitive Interconnection System Impact Study. If Transmission Provider is unable to complete the Definitive Interconnection System Impact Study within the time period, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Definitive Interconnection System Impact Study, subject to confidentiality arrangements consistent with Section 13.1 of the GIP.~~

#### **8.5.1—Decision Point One**

~~DP1 will commence the next Business Day after the Transmission Provider posts the results of DISIS Phase One and shall be fifteen (15) Business Days in duration. During DP1, the Interconnection Customer shall have the opportunity to review the results of the DISIS Phase One analysis, ask questions, receive responses, decide whether to proceed to DISIS Phase Two and respond to the Transmission Provider. If the allocated costs reported in DISIS Phase One, including any cost of upgrades required to mitigate impacts to Affected Systems, are updated by the Transmission Provider at any point during DP1, DP1 will be extended by ten (10) Business Days.~~

~~During DP1, the Interconnection Customer may make modifications to the Interconnection Request in accordance with Section 4.4.1 of the GIP. All new technical data that is required as a result of the changes requested during DP1 including but not limited to generator impedances, dynamic response files, ratings, and performance information, must be supplied by the Interconnection Customer within ten (10) Business Days after the end of DP1.~~

~~Prior to the end of DP1, the Interconnection Customer shall provide all of the following to the Transmission Provider: (1) a written indication of their intent either to withdraw the request or to proceed to DISIS Phase Two; (2) a written indication of all changes to be made to the request as permitted under this Section 8.5.1; (3) reasonable evidence of continued Site Control of the Generating Facility; (4) reasonable evidence of continued Site Control of fifty percent (50%) of the Generating Facility's high voltage tie line to the Point of Interconnection, unless additional financial security in lieu of Site Control was provided by Interconnection Customer with its Interconnection Request; and (5) an additional Financial Security deposit ("Financial Security Two") equal to the greater of:~~

- a. ~~Ten percent (10%) of the Financial Security Two Cost Factor, less the amount of Financial Security One that was provided to enter DISIS Phase One, or~~
- b. ~~\$4,000 per MW of the requested *Maximum Injection Capability* advancing to DISIS Phase Two,~~

~~Where:~~

~~Financial Security Two Cost Factor is calculated by first determining the cost allocation factor pursuant to Section 4.2.2 of the GIP applicable to an Interconnection Request for an upgrade assigned to that same Interconnection Request, and multiplying the cost allocation factor by itself and then by the total estimated cost of the upgrade; then summing the resulting products for every upgrade allocated to an Interconnection Request. The cost of upgrades, including JTIQ Upgrades, required to mitigate impacts to Affected Systems is excluded from Financial Security Two.~~

~~If the Interconnection Customer does not respond with all required items prior to the end of DP1, its Interconnection Request will be deemed to have been withdrawn.~~

~~After the conclusion of DP1, fifty percent (50%) of the study deposit provided under Section 8.2(b) of this GIP shall be non-refundable for any Interconnection Request which proceeds to DISIS Phase Two.~~

### **8.5.2 Decision Point Two**

~~DP2 will commence the next Business Day after the Transmission Provider posts the results of DISIS Phase Two and shall be fifteen (15) Business Days in duration. During DP2, the Interconnection Customer shall have the opportunity to review the results of the DISIS Phase Two analysis, ask questions, receive responses, decide whether to proceed to the Interconnection Facilities Study and respond to the Transmission Provider. If the allocated costs reported in DISIS Phase Two, including any cost of upgrades required to mitigate impacts to Affected Systems, are updated by the Transmission Provider at any point during DP2, DP2 will be extended by ten (10) Business Days.~~

~~During DP2, the Interconnection Customer may make modifications to the Interconnection Request in accordance with Section 4.4.1 of the GIP. All new technical data that is required as a result of the changes requested during DP2 including but not limited to generator impedances, dynamic response files, ratings, performance information, must be supplied by the Interconnection Customer within five (5) Business Days after the end of DP2.~~

~~Prior to the end of DP2, the Interconnection Customer shall provide all of the following to the Transmission Provider: (1) a written indication of their intent either to withdraw the request or to proceed to the Interconnection Facilities Study; (2) a written indication of a reduction in the requested capacity as permitted under Section 4.4.1 of the GIP; (3) written indication that the requested Commercial Operation Date will be extended or that the Interconnection Customer seeks to proceed under Limited Operation, if necessary, pursuant to Section 8.7 of the GIP; (4) reasonable evidence of continued Site Control for the Generating Facility; (5) reasonable evidence of Site Control for at least seventy-five percent (75%) of the Generating Facility's high voltage tie line to the Point of Interconnection, unless additional financial security in lieu of Site Control was provided by Interconnection Customer with its Interconnection Request; (6) reasonable evidence of Site Control of one hundred percent (100%) of any new substations identified as required at the Point of Interconnection; (7) reasonable evidence of having satisfied at least one development milestone described in Section 11.3 of the GIP; and (8) an additional financial security deposit ("Financial Security Three") equal to:~~

~~Twenty percent (20%) of the total upgrade costs allocated to the Interconnection Request, less the amount of Financial Security One and Financial Security Two that was previously provided to enter DISIS Phase One and DISIS Phase Two.~~

~~The cost of any upgrades, including JTIQ upgrades, required to mitigate impacts to Affected Systems is excluded from Financial Security Three.~~

~~If the Interconnection Customer does not respond with all required items prior to the end of DP2, its Interconnection Request will be deemed to have been withdrawn.~~

~~After the conclusion of DP2, one hundred percent (100%) of the study deposit provided under Section 8.2(b) of this GIP shall be non-refundable for any Interconnection Request which proceeds to Interconnection Facilities Study.~~

## **~~8.6 — Meeting with Transmission Provider~~**

### **8.6 Environmental Review.**

~~During DP1 and DP2, the Interconnection Customer may request that the Transmission Provider, Transmission Owner and Interconnection Customer meet to discuss the results of the applicable phase of the Definitive Interconnection System Impact Study. Such meeting shall be held on a date mutually agreed upon by the Parties. Reasonable Efforts shall be made to hold the meeting prior to the end of DP1 or DP2, as applicable.~~

### 8.6.1 Environmental Review.

This Section 8.6.1 applies only in the event the Interconnection Request will result in an interconnection to, or modification to, the transmission facilities of Western-UGP. Unless previously requested, Western-UGP shall use Reasonable Efforts to tender to the Interconnection Customer, within fifteen (15) Calendar Days of the end of ERAS Review Period DP2, an Environmental Review agreement authorizing Western-UGP, at Interconnection Customer's expense, to perform environmental review of the proposed interconnection to Western-UGP's transmission facilities, including review under NEPA, 42 U.S.C. §4321, et seq., as amended, and setting forth Interconnection Customer's responsibilities in connection with such environmental review. The Environmental Review agreement shall contain a non-binding good faith estimate of the cost and timeframe for completing the Environmental Review. Interconnection Customer shall execute the environmental review agreement and return it, with the estimated funds set forth in the agreement based upon the level of Environmental Review required, to Western-UGP within thirty (30) Calendar Days after receipt by the Interconnection Customer. 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. Notwithstanding the provisions of Section 3.7 of the GIP this Attachment AW, 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 Western-UGP are less than the deposit submitted by Interconnection Customer, Western-UGP shall refund the difference, without interest, as soon as the necessary vouchers are prepared. In addition, if at any time prior to the issuance of Western-UGP's final NEPA decisional document the Interconnection Customer fails to comply with the terms of the Environmental Review agreement, Western-UGP shall notify the Transmission Provider of the Interconnection Customer's failure. Upon such notification, Transmission Provider may deem the Interconnection Request withdrawn.

#### 8.6.1.1 Environmental Review Procedures.

- a. After receipt of an executed Environmental Review agreement, Western-UGP shall use Reasonable Efforts to complete the study and issue a draft study report to Interconnection Customer within eighteen (18) months, or the actual time required to complete the necessary level of Environmental Review.
- b. At the request of Interconnection Customer or at any time Western-UGP determines that it will not meet the required time frame for completing the Environmental Review,

Western-UGP shall notify Interconnection Customer as to the schedule status of the Environmental Review. If Western-UGP is unable to complete the Environmental Review within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

- c. Western-UGP shall notify the Transmission Provider of the schedule status of the Environmental Review.

## 8.7 Interconnection Requests That Require Previously Approved Network Upgrades.

At the completion of ~~DISIS Phase One and DISIS Phase Two~~the ERAS System Impact Study, the ~~Definitive Interconnection System Impact Study~~ERAS System Impact Study may identify one or more Network Upgrades previously approved for construction under Section VI of Attachment O of this Tariff ("Previously Approved Network Upgrade") and required to be in-service prior to an Interconnection Customer's Commercial Operation Date. If a Previously Approved Network Upgrade will not be in-service prior to the Interconnection Customer's Commercial Operation Date, Interconnection Customer's Commercial Operation Date ~~may~~shall be extended for a maximum period of three (3) years pursuant to Section 4.4.5-4 of ~~the GIP~~this Attachment AW to accommodate the in-service date for a Previously Approved Network Upgrade. If the three (3) year extension is not sufficient for a Previously Approved Network Upgrade to be placed into service prior to the Interconnection Customer's Commercial Operation Date, the Interconnection Customer may either (1) withdraw the Interconnection Request, or (2) ~~request a reduction in the amount of interconnection capacity in Interconnection Customer's Interconnection Request in accordance with Section 8.5.1 or 8.5.2 of the GIP, as applicable, or~~ (3) agree to the following conditions ~~for moving into the Interconnection Facilities Study~~in the Generator Interconnection Agreement:

- a. The Generating Facility will be allowed to operate under Limited Operation in accordance with Section 8.4.3 of ~~the GIP~~this Attachment AW before a Previously Approved Network Upgrade is placed into service;
- b. The Interconnection Customer will meet all requirements of ~~the GIP~~this Attachment AW; and
- c. The Interconnection Customer will provide financial security and authorize engineering, procurement, and construction of its cost assigned Network Upgrades and interconnection facilities no later than thirty (30) days after the effective date of the GIA.

## 8.8 **Re-Study of ERAS System Impact Study.**

If ~~Res-Study~~ of the ~~ERAS Definitive Interconnection~~ System Impact Study is required due to ~~withdrawal of an Interconnection Request from the ERAS, such Re-~~  
~~sStudy will be conducted pursuant to the provisions of Section 8.13 of this~~  
~~Attachment AW, a higher queued or equal priority queued project dropping out of~~  
~~the queue, or a modification of a higher queued project subject to Section 4.4 of the~~  
~~GIP, or re-designation of the Point of Interconnection pursuant to Section 8.2 of the~~  
~~GIP, the Transmission Provider shall notify Interconnection Customer in writing.~~  
~~Such Re-Study shall take no longer than sixty (60) Calendar Days from the date of~~  
~~notice. Any cost of Re-Study, as reduced by deposit amounts retained for other~~  
~~Interconnection Customer(s) under Section 13.3 of the GIP, shall be borne by the~~  
~~Interconnection Customer(s) being re-studied.~~

~~After the completion of the Restudy, an Interconnection Customer that is being~~  
~~restudied may elect to remain in the Interconnection Facilities Study Queue,~~  
~~or withdraw its Interconnection Request and receive a refund of its security~~  
~~deposit in accordance with Sections 8.14 and 13.3 of the GIP.~~

## 8.9 **~~Entry into~~ Interconnection Facilities Study.**

~~To enter the Interconnection Facilities Study, the Interconnection Customer shall~~  
~~satisfy the requirements of Section 8.5.2 of the GIP, together with Financial~~  
~~Security Three, no later than the end of DP2. The Generator Interconnection~~  
~~StudyERAS Agreement shall provide that Interconnection Customer shall~~  
~~compensate Transmission Provider for the actual cost of the Interconnection~~  
~~Facilities Study.~~

## 8.10 **Scope of ERAS Interconnection Facilities Study.**

The ERAS Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the ERAS System Impact Study Definitive Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the Transmission System. The ERAS Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The ERAS Interconnection Facilities Study report will also indicate whether the Interconnection Request is responsible for a portion of the cost of a portfolio of JTIQ Upgrades, and if so, will also indicate the estimated portion of cost assigned to the Interconnection Request for the JTIQ Upgrades. ~~DISIS Phase~~



~~One and DISIS Phase Two analysis may be refreshed, at the discretion of the Transmission Provider, to account for the impact of any requests that withdrew after the end of DP2.~~ The ERAS Interconnection Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the Generating Facility Capacity.

The ERAS Interconnection Facilities Study shall utilize results of the Facility Analysis from the ERAS System Impact Study~~Definitive Interconnection System Impact Study~~ performed in accordance with Section 8.4.4 of this Attachment AW~~the GIP~~.

#### 8.11 ERAS Interconnection Facilities Study Procedures.

- a. Transmission Provider shall coordinate the ERAS Interconnection Facilities Study with any Affected System pursuant to Section 3.6 of this Attachment AW~~the GIP~~ above and with affected SPP Transmission Owners. Transmission Provider shall utilize existing studies to the extent practicable in performing the ERAS Interconnection Facilities Study. Within forty-five (45) Calendar Days of receiving a request from SPP, Transmission Owners shall provide all information necessary to complete the Interconnection Facilities Study in the format requested by SPP and to the required degree of accuracy. Transmission Provider shall use Reasonable Efforts to complete the study and issue an draft-ERAS Interconnection Facilities Study report to Interconnection Customer no later than sixty (60) Calendar Days after the end of ~~DP2~~the ERAS System Impact Study, with a +/- 20 cost estimate contained in the report.
- b. At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the ~~Interconnection Facilities Study~~ERAS, Transmission Provider shall notify Interconnection Customer as to the schedule status of the ~~Interconnection Facilities Study~~ERAS. If Transmission Provider is unable to complete the ~~Interconnection Facilities Study~~ERAS and issue an ERAS-draft Interconnection Facilities Study report within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.
- c. ~~After the Transmission Provider posts the results of Interconnection Facilities Study, the Interconnection Customer will have ten (10) Business Days to review the results of the Interconnection Facilities Study analysis, ask questions, receive responses, decide whether to proceed to the GIA and respond to the Transmission Provider. The Transmission Provider shall issue the final Interconnection Facilities Study report within five (5) Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The Transmission Provider may reasonably extend~~

~~such five-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 StudyERAS, subject to confidentiality arrangements consistent with Section 13.1 of this Attachment AWthe GIP.~~

#### **8.12 Meeting with Transmission Provider.**

~~During the ten (10) Business Day review period provided in Section 8.11(e) of this GIP, the Interconnection Customer or Load Responsible Entity may request that the Transmission Provider, Transmission Owner and Interconnection Customer meet to discuss the results of the Interconnection Facilities StudyERAS. Such meeting shall be held on a date mutually agreed upon by the Parties. Reasonable Efforts shall be made to hold the meeting prior to the end of the review period.~~

#### **8.13 Re-Study.**

~~If Re-Study of the ERAS System Impact Study or Interconnection Facilities Study is required due to a higher or equal priority queued withdrawal of an Interconnection Request from the ERASproject dropping out of the queue or a modification of a higher queued project pursuant to Section 4.4 of the GIP, Transmission Provider shall so notify Interconnection Customer in writing. Such Re-Study shall take no longer than sixty (60) Calendar Days from the later of (1) the date of notice or (2) the date that all ERAS Requests have reached a final state, either by withdrawal, execution of a GIA or filing of a GIA unexecuted. Any cost of Re-Study, as reduced by deposit amounts retained under Section 13.3 of this Attachment AWthe GIP, shall be borne by the Interconnection Customer(s) being re-studied.~~

~~After the completion of the Restudy, an Interconnection Customer that is being restudied may elect to modify its GIA as required by the results of the Re-Study, or withdraw its Interconnection Request and receive a refund of its security deposit in accordance with Sections 8.14 and 13.3 of this Attachment AW.~~

#### **8.14 Financial Security Refund Eligibility.**

- a. ~~For the purposes of this Section 8.14, allocated costs includes the costs of Network Upgrades, Shared Network Upgrades, Transmission Owner Interconnection Facilities, JTIQ Upgrades, and any cost of upgrades required to mitigate impacts to Affected Systems that have been assigned to the Interconnection Request.~~



- b. — If an Interconnection Request is withdrawn after the beginning of ~~DISIS Phase One~~ ERAS system impact study ~~the ERAS System Impact Study~~, but prior to the end of ~~DP1~~ the Decision Point, including any extension of ~~DP1~~ the Decision Point per Section 8.5.1 of the GIP, ~~twenty-five~~ one-hundred percent (~~25~~ 100%) of Financial Security One and ~~twenty-five~~ one-hundred percent (~~25~~ 100%) of Financial Security provided in lieu of Site Control for the Generating Facility's tie line will be forfeited to the extent that ~~equally-queued~~ Interconnection Requests in the ERAS are subjected to increased total of Network Upgrades and Transmission Owner Interconnection Facilities upgrade costs as a result of the withdrawal. If the Transmission Provider determines that no equally-queued Interconnection Requests in the ERAS are subjected to increased total of Network Upgrades and Transmission Owner Interconnection Facilities upgrade costs as a result of the withdrawal, Financial Security One will be refunded with accrued interest, if any.
- c. — ~~If an Interconnection Request is withdrawn after the end of DP1, but prior to the end of DP2, including any extension of DP2 per Section 8.5.2 of the GIP, one-hundred percent (100%) of Financial Security One, one-hundred percent (100%) of Financial Security provided in lieu of Site Control for the Generating Facility's tie line, and twenty-five percent (25%) of Financial Security Two will be forfeited to the extent that equally- or lower-queued Interconnection Requests within the actively studied clusters are subjected to increased total of Network Upgrades and Transmission Owner Interconnection Facilities upgrade costs as a result of the withdrawal, unless both of the following conditions exist: 1) the total allocated costs for the withdrawn Interconnection Request, including those costs for upgrades to mitigate impacts to Affected Systems if known, increased by twenty-five percent (25%) or more from the end of DP1 to DISIS Phase Two, and 2) the allocated cost per MW of requested capacity, including costs for Affected Systems if known, increased by \$10,000/MW or more from the end of DP1 to DISIS Phase Two. If the Transmission Provider determines that no equally- or lower-queued Interconnection Requests within the actively studied clusters are subjected to increased total of Network Upgrades and Transmission Owner Interconnection Facilities upgrade costs as a result of the withdrawal, Financial Security One will be refunded with accrued interest, if any.~~
- d. — ~~If an Interconnection Request is withdrawn after the end of DP2~~ the Decision Point, Financial Security One, Financial Security Two, Financial Security Three, and Financial Security provided in lieu of Site Control for the Generating Facility's tie line will be forfeited to the extent that ~~equally- or lower-queued Interconnection Requests within the actively studied clusters are subjected to increased total of Network Upgrades and Transmission Owner Interconnection Facilities upgrade costs as a result of the~~

~~withdrawal, unless both of the following conditions exist: 1) the total allocated costs for the withdrawn Interconnection Request, including those costs for upgrades to mitigate impacts to Affected Systems if known, increased by thirty-five percent (35%) or more from final study results posted at the end of DP2 to the Interconnection Facilities Study, and 2) the allocated cost per MW of requested capacity, including costs for Affected Systems if known, increased by \$15,000/MW or more from the end of DP2 to the Interconnection Facilities Study. If the Transmission Provider determines that no equally or lower queued Interconnection Requests within the actively studied clusters are subjected to increased upgrade costs as a result of the withdrawal, Financial Security One, Financial Security Two, Financial Security Three, and Financial Security provided in lieu of Site Control for the Generating Facility's tie line will be refunded with accrued interest, if any.~~

- e. ~~If the Definitive Interconnection System Impact Study~~ERAS system impact study ~~is restudied in accordance with Section 8.8 of the GIP or otherwise revised, or the Interconnection Facilities Study is restudied in accordance with Section 8.13 of the GIP or otherwise revised, or a new or revised Affected System study is received resulting in a total allocated cost that meets the exception to forfeiture afforded under Section 8.14(d), the Interconnection Customer may withdraw the Interconnection Request within the next fifteen (15) Business Days after the posting of the revised study and receive a full refund of Financial Security One, Financial Security Two, Financial Security Three, and Financial Security provided in lieu of Site Control for the Generating Facility's tie line. An Interconnection Request that meets the exception to forfeiture afforded under Section 8.14(d) that does not exercise the option to withdraw within fifteen (15) Business Days after posting of the revised study will be considered to have accepted the total costs of the revised study and will remain an active Interconnection Request subject to the applicable withdrawal provisions set forth herein. The option to withdraw and receive a full refund without regard to the impact to equally or lower queued Interconnection Requests within the actively studied clusters will expire fifteen (15) Business Days after the posting of the revised study. The total allocated costs based on results of any revised studies will be compared against the total allocated costs of the final Definitive Interconnection System Impact Study~~ERAS system impact study at the end of DP2 the Decision Point unless the Interconnection Customer previously accepted the total allocated costs of the revised study, in which case the total allocated costs will be compared against the total allocated costs of the latest posted revised study in which the Interconnection Customer did not previously exercise the option to withdraw within fifteen (15) Business Days of the posting of the revised study.

- fb. If any portion of Financial Security One, ~~Financial Security Two, Financial Security Three,~~ or Financial Security provided in lieu of Site Control for the Generating Facility's tie line is retained by Transmission Provider due to harm caused to withdrawal of an ~~equally or lower queued~~ Interconnection Request ~~within the actively studied clusters~~ ERAS, it the retained portion shall be applied toward the increased cost of designing, procuring, and constructing any Network Upgrades assigned to an other Interconnection Customer in the ERAS as a result of the withdrawal. Any remaining funds shall be refunded to the withdrawing Interconnection Customer with accrued interest calculated from the date of the receipt of the Financial Security One, ~~Financial Security Two, Financial Security Three,~~ and Financial Security provided in lieu of Site Control for the Generating Facility's tie line to the date of the refund, if any. The refund will be made after the completion of any necessary Interconnection Studies needed to determine the adverse impact to other Interconnection Requests.
- gc. Following the execution of a GIA or the filing of an unexecuted GIA at the Commission, Financial Security One, ~~Financial Security Two, Financial Security Three,~~ and Financial Security provided in lieu of Site Control for the Generating Facility's tie line shall be applied in accordance with Article 11.6 of the GIA. Any remaining funds shall be refunded to the Interconnection Customer in accordance with the terms of the GIA.

**Section 9. Engineering & Procurement ('E&P') Agreement**

Prior to executing a GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Owner shall offer the Interconnection Customer, an E&P Agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Owner shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the GIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Interconnection ~~Queue~~ Position Request or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs. An E&P Agreement executed by Western-UGP, as the Transmission Owner, requires advance payments.

Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Owner may elect: (i) to take title to the equipment, in which event Transmission Owner shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

**Section 10. Reserved**

## Section 11. Generator Interconnection Agreement (GIA)

### 11.1 Tender.

The Transmission Provider shall tender to the Interconnection Customer a draft GIA together with draft appendices ~~within fifteen (15) Calendar Days of Transmission Provider's request to the Transmission Owner to begin the simultaneous with the posting of the Interconnection Facilities Study~~ERAS report. The draft GIA shall be in the form of the ~~Transmission Provider's FERC approved standard form GIA, in this Attachment A W, which is in,~~ Appendix 63, or Appendix 13-4 when Western-UGP is a Party, as the Transmission Owner, to the GIA. If the Transmission Provider identifies that Interconnection Facilities or Network Upgrades are required on the Western-UGP Transmission System, the GIA shall be subject to completion of the appropriate NEPA level of Environmental Review. Until the required NEPA decision document is issued, no construction activities relating to the transmission facilities of Western-UGP shall commence and may impact the Commercial Operation Date for the Interconnection Request. Such NEPA related restrictions, if applicable, shall be set forth in the GIA.

### 11.2 Negotiation.

Transmission Provider, Transmission Owner and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than sixty (60) Calendar Days after tender of the ~~final Interconnection Facilities Study report~~draft GIA, unless another time period is agreed upon by all Parties. If Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA pursuant to Section 11.1 and request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to Section 13.5. If Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted GIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of draft GIA appendices, it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to Interconnection Customer a final GIA within ten (10) Business Days after the completion of the negotiation process.

### 11.3 Execution and Filing.

Within ten (10) Business Days after receipt of the final GIA, Interconnection Customer shall provide Transmission Provider (A) reasonable evidence of continued Site Control or (B) posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, Interconnection Customer also shall provide reasonable evidence that one or more

of the following milestones in the development of the Generating Facility, at Interconnection Customer election, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (iv) execution of a contract (or comparable evidence) for the sale of electric energy or capacity from the Generating Facility; (v) statement signed by an officer or authorized agent of the Interconnection Customer attesting the Generating Facility is included in an applicable state resource plan; (vi) other information that the Transmission Provider deems to be reasonable evidence that the Generating Facility will qualify as a Designated Resource; (vii) application for an air, water, or land use permit; (viii) Pre-Confirmed or Confirmed Long-Term Transmission Service Request ("TSR") from the source Generating Facility in the Interconnection Request; (ix) effective Interim Generator Interconnection Agreement associated with the same Interconnection Request; or (x) final detailed Generating Facility Design, and for Inverter-Based Resources, submission of Electromagnetic Transient (EMT) model. The Transmission Provider will not execute the final Generator Interconnection Agreement unless the Interconnection Customer provides the information described in this paragraph.

Within ten (10) Business Days after receipt of the final GIA, the Interconnection Customer shall either: (i) execute the tendered GIA and return to the Transmission Owner and Transmission Provider; or (ii) request in writing that Transmission Provider file with FERC a GIA in unexecuted form. Within ten (10) Business Days of receipt of the tendered GIA the Transmission Owner shall execute and send a copy of the executed GIA to Interconnection Customer and Transmission Provider. As soon as practicable, but not later than thirty (30) Calendar Days after receiving either the executed version of the tendered GIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or ten (10) Business Days after receiving the request to file an unexecuted GIA, Transmission Provider shall file the GIA with FERC, together with its explanation of any matters as to which Interconnection Customer, Transmission Owner and Transmission Provider disagree and support for the costs that Transmission Provider and/or the Transmission Owner propose to charge to Interconnection Customer under the GIA. An unexecuted GIA should contain terms and conditions deemed appropriate by Transmission Provider and the Transmission Owner for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted GIA, they may proceed pending FERC action.

#### **11.4 Commencement of Interconnection Activities.**

If Interconnection Customer executes the final GIA, Transmission Provider, the Transmission Owner and Interconnection Customer shall perform their respective obligations in accordance with the terms of the GIA, subject to modification by FERC. Upon submission of an unexecuted GIA, Interconnection Customer,



Transmission Owner and Transmission Provider shall promptly comply with the unexecuted GIA, subject to modification by FERC.

## **~~Section 11A. Interim Generator Interconnection Agreement (Interim GIA)~~**

### **~~11A.1 Availability.~~**

~~Prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities, Interconnection Customers with pending Interconnection Requests may request Interim Interconnection Service, execute an Interim Generator Interconnection Agreement (Interim GIA) and receive Interim Interconnection Service pursuant to the terms and conditions of this Section 11A and the Interim GIA. Execution of an Interim GIA and receipt of Interim Interconnection Service is an optional procedure and will not alter the Interconnection Customer's Interconnection Queue Position. Interim Interconnection Service may be terminated at any point that a Generating Facility with an Interconnection Request that has a higher Interconnection Queue Position goes into Commercial Operation and Transmission Provider determines that Interim Interconnection Service and Interconnection Service cannot be provided to more than one Interconnection Customer simultaneously.~~

### **~~11A.2 Eligibility.~~**

~~Interconnection Customers shall be eligible for Interim Interconnection Service under the following conditions:~~

~~**11A.2.1** Interconnection Customer has provided Transmission Provider: (i) reasonable evidence of continued Site Control or posting of \$250,000, non refundable additional security, which shall be applied toward future construction costs; and (ii) reasonable evidence that one or more of the following milestones in the development of the Generating Facility, at Interconnection Customer election, has been achieved: (a) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (b) the execution of a contract for the supply of cooling water to the Generating Facility; (c) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (d) execution of a contract (or comparable evidence) for the sale of electric energy or capacity from the Generating Facility; (e) statement signed by an officer or authorized agent of the Interconnection Customer attesting the Generating Facility is included in an applicable state resource plan; (f) other information that the Transmission Provider deems to be reasonable evidence that the Generating Facility will qualify as a Designated Resource; or (g) application for an air, water, or land use permit. The Transmission Provider will not execute the Interim Generator Interconnection Agreement unless the Interconnection Customer provides the information described in this paragraph.~~

~~11A.2.2~~ — Interconnection Customer has met the terms and conditions to be included in Transmission Provider's Definitive Interconnection System Impact Study Queue pursuant to Section 8.2;

~~11A.2.3~~ — Interconnection Customer has submitted in writing to Transmission Provider a request for Interim Interconnection Service;

~~11A.2.4~~ — Interconnection Customer has entered into a study agreement pursuant to which it has agreed to pay all costs, including deposits for any additional studies deemed necessary by Transmission Provider to evaluate the feasibility of the Interconnection Customer's requested Interim Interconnection Service;

~~11A.2.4.1~~ The Interim Availability Interconnection System Impact Study will maintain the scope and procedures of the Definitive Interconnection System Impact Study with the exception that certain previous queued Interconnection Requests may not be included in the study. Such exceptions and reasons for those exceptions will be noted in the study. The Interim Availability Interconnection System Impact Study will also include a Short Circuit Ratio and Critical Clearing Time ("SCRCCT") screening. When the SCRCCT screening indicates possible inverter instability, the Transmission Provider will commence an EMT Study as far in advance of the requested Commercial Operation Date as practicable.

~~11A.2.4.2~~ The cost of the Interim Availability Interconnection System Impact Study will be subtracted from the Customer's study deposit submitted for the Definitive Interconnection System Impact Study.

~~11A.2.5~~ — Transmission Provider has determined based upon the results of the additional studies, taking into account the Interconnection Customer's In-Service Date and the Transmission System topology upon such date that there will be sufficient stability and reliability margin to accommodate Interim Interconnection Service to the Interconnection Customer's Generating Facility;

~~11A.2.6~~ — Interconnection Customer has executed an Interim GIA in accordance with Section 11A.3; and

~~11A.2.7~~ — Interconnection Customer has provided security in accordance with Article 11.7 of the Interim GIA.

### ~~11A.3 Tender, Negotiation, Execution and Filing of Interim GIA.~~

~~11A.3.1~~ — Upon completion of Transmission Provider's analysis referenced in Section 11A.2.5, Transmission Provider shall notify Interconnection Customer in writing whether Interim Interconnection Service is

feasible. In the event that Interconnection Customer's requested Interim Interconnection Service is feasible, Transmission Provider shall tender to the Interconnection Customer a draft Interim GIA together with appendices. The draft Interim GIA shall be in the form of the Transmission Provider's FERC approved standard form Interim GIA, which is in Appendix 8, or in Appendix 14 when Western UGP is a Party, as the Transmission Owner, to the Interim GIA. If the Transmission Provider identifies that Interconnection Facilities or Network Upgrades are required on the Western UGP Transmission System, the Interim GIA shall be subject to completion of the appropriate NEPA level of Environmental Review. Until the required NEPA decision document is issued, no construction activities relating to the transmission facilities of Western UGP shall commence and may impact the Commercial Operation Date for the Interconnection Request. Such NEPA-related restrictions, if applicable, shall be set forth in the Interim GIA.

**11A.3.2** — Transmission Provider, Transmission Owner and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft Interim GIA for not more than thirty (30) Calendar Days after tender of the draft Interim GIA, unless another time period is agreed upon by the Parties. At the conclusion of the negotiation period or sooner if the Parties have reached agreement, Transmission Provider shall tender a final Interim GIA and within ten (10) Calendar Days the Interconnection Customer shall either: (i) execute the tendered Interim GIA and return to the Transmission Owner and Transmission Provider; or (ii) request in writing that Transmission Provider file with FERC an Interim GIA in unexecuted form. The Transmission Owner shall also execute the tendered Interim GIA and send a copy of the executed Interim GIA to Interconnection Customer and Transmission Provider. As soon as practicable, but not later than thirty (30) Calendar Days after receiving either the executed version of the tendered Interim GIA (if it does not conform with a FERC approved standard form of interim interconnection agreement) or ten (10) Business Days after receiving the request to file an unexecuted Interim GIA, Transmission Provider shall file the Interim GIA with FERC, together with its explanation of any matters as to which Interconnection Customer, Transmission Owner and Transmission Provider disagree and support for the costs that Transmission Provider and/or the Transmission Owner propose to charge to Interconnection Customer under the Interim GIA. An unexecuted Interim GIA should contain terms and conditions deemed appropriate by Transmission Provider and the Transmission Owner for the Interconnection Request. Prior to FERC action, the Parties

may agree to proceed with design, procurement, and construction of facilities and upgrades under the terms of the unexecuted Interim GIA.

#### **~~11A.4 Commencement of Interim Interconnection Activities.~~**

~~If Interconnection Customer executes the Interim GIA, Transmission Provider, the Transmission Owner and Interconnection Customer shall perform their respective obligations in accordance with the terms of the Interim GIA, subject to modification by FERC. Upon submission of an unexecuted Interim GIA, Interconnection Customer, Transmission Owner and Transmission Provider shall promptly comply with the unexecuted Interim GIA, subject to modification by FERC.~~

#### **~~11A.5 Interconnection Service upon Termination of Interim GIA.~~**

~~Terminating events for an Interim GIA are given in Article 2.3.1 of the Interim GIA. Upon termination of the Interim GIA for any reason, the Interim Interconnection Service shall cease. Interconnection Service, if any, associated with the Generating Facility shall be provided to Interconnection Customer by Transmission Provider pursuant to the terms and conditions of a final GIA.~~

#### **~~11A.6 Maintenance Review.~~**

~~The Transmission Provider will annually perform a re-study of each effective Interim GIA and will determine whether the Interim Interconnection Service determined pursuant to Section 11A.2 continues to be available in the amount specified in the Interim GIA. The Transmission Provider will increase or decrease the amount of service in the Interim GIA based on the results of the annual re-study and subject to Article 4.2.3 of the Interim GIA. The Transmission Provider shall utilize existing studies to the extent practicable when it performs the re-study. The cost of each annual re-study shall be deducted from the study deposit made pursuant to Section 11A.2.4 and the Interconnection Customer shall be responsible for any cost in excess of the study deposit. A determination by the Transmission Provider that Interim Interconnection Service must be reduced pursuant to Article 4.2.2 of the Interim GIA will take precedence over the results of the most recent annual re-study.~~

## **Section 12. Construction of Interconnection Facilities and Network Upgrades**

### **12.1 Schedule.**

Transmission Provider, the Transmission Owner and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of Transmission Owner's Interconnection Facilities and the Network Upgrades.

### **12.2 Construction Sequencing of Transmission Owner's Interconnection Facilities, Network Upgrades and Distribution Upgrades.**

#### **12.2.1 General.**

In general, the In-Service Date of an Interconnection Customer seeking interconnection to the Transmission System will determine the sequence of construction of Interconnection Facilities, Network Upgrades and Distribution Upgrades.

#### **12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than Interconnection Customer.**

An Interconnection Customer with a GIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner: (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

Transmission Provider will refund to Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the GIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that Transmission Provider has not refunded to Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. Transmission Provider shall forward to Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to Interconnection Customer. Transmission Provider then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the GIA.

**12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion Plan of the Transmission Provider.**

An Interconnection Customer with a GIA, in order to maintain its In-Service Date, may request that Transmission Owner advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an expansion plan of Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner any associated expediting costs.

**12.2.4 Amended ~~Definitive Interconnection System Impact Study~~ ERAS System Impact Study.**

An ~~ERAS Definitive Interconnection System Impact Study~~ will be amended to determine the facilities necessary to support the requested In-Service Date. This amended study will include those transmission and Generating Facilities that are expected to be in service on or before the requested In-Service Date.

**12.3 Upgrades which will not be constructed by Transmission Owner.**

For all interconnection agreements that identify Network Upgrades and Distribution Upgrades as listed in Appendix A of the GIA which are required to be built by an entity other than the Transmission Owner (as defined in this Attachment V), such upgrades shall be constructed in accordance with the process defined under Section VI of Attachment O to the SPP Tariff.



## **Section 13. Miscellaneous**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of a GIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the GIA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the GIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

Neither Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of

Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

#### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **13.1.4 No Warranties.**

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these procedures or its regulatory requirements.

#### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of the GIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

**13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 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 the GIP, 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 prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Party to the GIA 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. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable Federal and state laws, rules and regulations.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably

withheld; or (iv) necessary to fulfill its obligations under this GIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** Transmission Provider shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under this Attachment AAW~~this GIP~~. Transmission Provider shall remain primarily liable to Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this Attachment AAW~~this GIP~~. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **13.3 Obligation for Study Costs.**

Except as provided below, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies~~ERAS and any required re-studies~~. Any difference between the study deposit and the actual cost of the applicable Interconnection Study~~ERAS~~ shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer. Any invoices for Interconnection Studies~~ERAS~~ shall include a detailed and itemized accounting of the cost of each Interconnection Study~~the ERAS~~. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith. Study deposits collected in accordance with Section 8.2 of this Attachment AAW~~the GIP~~ may also be used to pay the study costs for any restudies in accordance with Section 8.13 of this Attachment AAW~~the GIP that affect lower-queued Interconnection Customers~~.

Study deposit funds retained by Transmission Provider as a result of withdrawals will first be used to reduce the ~~DISIS-ERAS~~ costs for Interconnection Requests that reach Commercial Operation and are in the same ~~DISIS Cluster Study~~ERAS as the Interconnection Request(s) from which Transmission Provider retained the study deposit funds. Transmission Provider will allocate the retained study deposit funds to active Interconnection Requests after the final ~~Interconnection-Facilities Study~~ERAS report is posted, and the allocated funds will be released when an active Interconnection Request reaches Commercial Operation. Any remaining study deposit funds will be used to reduce fees associated with Transmission Provider's Tariff Administration Services found in Schedule 1-A of its Open Access Transmission Tariff. Study deposit funds allocated to Interconnection Requests that withdraw after the ~~Interconnection-Facilities Study~~ERAS report is posted, but prior to reaching Commercial Operation will be used to fund any restudies caused by the withdrawn Interconnection Request. If Transmission Provider determines the withdrawal does not necessitate a restudy or if there are remaining study deposit funds, then the funds will be used to reduce fees associated with Transmission Provider's Tariff Administration Services found in Schedule 1-A of its Open Access Transmission Tariff.

#### 13.4 Third Parties Conducting Studies.

~~If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer receives notice pursuant to Section 8.5 of the GIP that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer receives neither the Interconnection Study nor a notice under Section 8.5 of the GIP within the applicable timeframe for such Interconnection Study, then Interconnection Customer may require Transmission Provider to utilize a third party consultant reasonably acceptable to Interconnection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a third party consultant to perform such Interconnection StudyERAS, either in response to a general request of Interconnection Customer, or on its own volition.~~

~~In all cases, u~~Use of a third party consultant shall be in accord with Article 26 of the GIA (Subcontractors) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with Transmission Provider's progress on Interconnection Studies for other pending Interconnection Requests. ~~In cases where Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, Interconnection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline.~~ Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as practicable

upon Interconnection Customer's request subject to the confidentiality provision in Section 13.1. ~~In any case, such third party contract may be entered into with either Interconnection Customer or Transmission Provider at Transmission Provider's discretion. In the case of (iii) Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study.~~ Such third party consultant shall be required to comply with this GIP, Article 26 of the GIA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study ERAS in the shortest reasonable time.

### 13.5 Disputes.

**13.5.1** In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with this Attachment A ~~Wthe GIP~~, or their performance, the Parties agree to resolve such dispute using the dispute resolution procedures in Section 12 of the Tariff.

#### 13.5.2 Non-binding dispute resolution procedures.

If a Party has submitted a notice of dispute pursuant to Section 13.5.1 of this Attachment A ~~Wthe GIP~~, and the Parties are unable to resolve the claim or dispute informally within the thirty (30) Calendar Days provided in Section 12.1 of the Tariff, and the Parties cannot reach mutual agreement in Section 12.1 of the Tariff to pursue the arbitration process in Section 12.2 of the Tariff, any Party may request that the other Parties engage in Non-binding Dispute Resolution pursuant to this section by providing written notice to Parties ("Request for Non-binding Dispute Resolution"). Conversely, any Party may file a Request for Non-binding Dispute Resolution pursuant to this section without first seeking mutual agreement to pursue the arbitration process in Section 12.2 of the Tariff. The Non-binding Dispute Resolution process in this Section 13.5.2 of this Attachment A ~~Wthe GIP~~ shall serve as an alternative to, and not a replacement of, the arbitration process in Section 12.2 of the Tariff. Pursuant to this process, the Parties must within thirty (30) Calendar Days of receipt of the Request for Non-binding Dispute Resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with any Party. Unless otherwise agreed by the Parties, the decision-maker shall render a decision within sixty (60) Calendar Days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of this Attachment A ~~Wthe GIP, Interim GIA,~~ and GIA and shall have no power to modify or change any provision of this Attachment A ~~Wthe GIP, Interim GIA,~~ and GIA in any manner. The result reached in

this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the Non-binding Dispute Resolution process in future Dispute Resolution processes, including in arbitration pursuant to Section 12.2 of the Tariff, or in a Federal Power Act section 206 complaint. Each Party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each Party to the dispute.

### **13.6 Local Furnishing Bonds.**

#### **13.6.1 Transmission Owners That Own Facilities Financed by Local Furnishing or Other Tax-Exempt Bonds or That Are Tax Exempt Entities.**

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds") or facilities with other bonds the interest on which is excluded from gross income under Section 103 of the Internal Revenue Code ("other tax-exempt bonds"), or that are tax-exempt entities, described in Section 501(c) of the Internal Revenue Code. Notwithstanding any other provision of this ~~GIA and~~ Attachment AWGIP, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to this ~~GIA and~~ Attachment AWGIP if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) or other tax-exempt bonds used to finance a Transmission Owner's facilities that would be used in providing such Interconnection Service or would jeopardize the tax-exempt status of the tax-exempt entity.

#### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) or other tax-exempt bonds used to finance a Transmission Owner's facilities that would be used in providing such Interconnection Service or would jeopardize the tax-exempt status of the Transmission Owner, Transmission Provider shall advise the Interconnection Customer within thirty (30) Calendar ~~days~~ Days of receipt of the Interconnection Request.

Interconnection Customer thereafter may renew its request for interconnection using the process specified in Article 5.2(ii) of the Transmission Provider's Tariff.





## APPENDIX ~~3-1~~ TO ~~GIP~~ ATTACHMENT ~~AW~~

### GENERATOR INTERCONNECTION EXPEDITED RESOURCE ADEQUACY 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 Southwest Power Pool, Inc. a non-profit organization under the laws of the State of Arkansas ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

#### RECITALS

**WHEREAS**, Interconnection Customer is submitting an Interconnection Request to interconnect its Generating Facility with the Transmission System or adding generating capacity addition to an Existing Generating Facility as detailed in Attachment A to this Agreement; and

**WHEREAS**, Interconnection Customer has requested that Transmission Provider include the Interconnection Request into perform a Definitive Interconnection System Impact an Expedited Resource Adequacy Study (ERAS) to assess the impact of its Interconnection Request to the Transmission System, and of any Affected Systems; and

**WHEREAS**, Interconnection Customer has requested that Transmission Provider perform, subject to further confirmation, an Interconnection Facilities Study to specify and estimate the cost and schedule of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Definitive Interconnection System Impact Study ERAS System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

**1.0** When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Generator Interconnection Procedures ("GIP") in Attachment ~~V~~ AW of the Transmission Provider's Tariff.

**2.0** Definitive Interconnection ERAS System Impact Study

**2.1** Interconnection Customer elects and Transmission Provider shall cause to be performed an ERAS System Impact Study a Definitive Interconnection System Impact Study Phase One analysis, consistent with Section 8 of Attachment AW the GIP in accordance with the Tariff.

**2.2** If the Interconnection Customer elects, Transmission Provider shall cause to be performed a Definitive Interconnection System Impact Study Phase Two analysis, consistent with Section 8. of this GIP in accordance with the Tariff. Reserved

2.3 The scope of the ERAS System Impact Study~~Definitive Interconnection System Impact Study~~ shall be subject to the assumptions set forth in Attachment B to this Agreement.

2.4 The ERAS System Impact Study~~Definitive Interconnection System Impact Study~~ will be based upon the technical information provided by Interconnection Customer. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the ERAS System Impact Study~~Definitive Interconnection System Impact Study~~. ~~If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Definitive Interconnection System Impact Study may be extended.~~

2.5 The ERAS System Impact Study~~Definitive Interconnection System Impact Study~~ report shall provide the following information:

(i) identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;

(ii) identification of any thermal overload or voltage limit violations resulting from the interconnection;

~~(iii) identification of any instability or inadequately damped response to system disturbances resulting from the interconnection;~~

~~(iv) description and non-binding, good faith estimated cost of and schedule for facilities required to interconnect the Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues; and~~

(iv) will include a Facilities Analysis as specified in Section 8.4.4 of Attachment AW~~the GIP~~ that will provide cost estimates for Transmission Owner's Interconnection Facilities and Network Upgrades at the Point of Interconnection.

### 3.0 Interconnection Facilities Study

3.1 ~~If the Interconnection Customer elects, Simultaneous with or subsequent to the ERAS System Impact Study,~~ Transmission Provider shall cause to be performed an Interconnection Facilities Study consistent with Section 8 of ~~the GIP~~ Attachment AW.

3.2 ~~Interconnection Customer shall meet the milestone requirements specified under Section 8.5.2 of the GIP prior to the performance of the Interconnection Facilities Study~~

~~3.3~~—The scope of the Interconnection Facilities Study shall be subject to the data provided in Attachment C to this Agreement.

~~3.43~~ The Interconnection Facilities Study report shall provide a description, estimated cost of, and schedule for the following consistent with Section 8.11 of Attachment A~~W~~~~the GIP~~:

(i) required facilities to interconnect the Generating Facility to the Transmission System and

(ii) the short circuit, ~~instability~~, and power flow issues identified in the ERAS System Impact Study~~Definitive Interconnection System Impact Study~~.

**4.0** Interconnection Customer shall provide the deposit specified under Section 8.2 of Attachment A~~W~~~~the GIP~~ for the performance of the ERAS~~Definitive Interconnection System Impact Study and Interconnection Facilities Study~~.

Upon receipt of ~~each phase of the~~ ERAS ~~Definitive Interconnection System Impact Study~~ results, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of ~~each phase of the~~ ERAS~~Definitive Interconnection System Impact Study~~.

Upon issuance of the final ~~Interconnection Facilities Study~~ERAS report, Transmission Provider shall deduct associated study costs from the Interconnection Customer's study deposits provided in accordance with Section 8.2 of Attachment A~~W~~~~the GIP~~. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice. Any difference between the study deposit and Interconnection Customer's study cost obligation shall be paid by or refunded to Interconnection Customer, as appropriate per Section 13.3 of Attachment A~~W~~~~the GIP~~.

**5.0** Conditions for Limited Operation. If the Interconnection Customer agrees to proceed under Limited Operation pursuant to Section 8.7 of Attachment A~~W~~~~the GIP~~, the Interconnection Customer agrees to the following conditions:

1. The Generating Facility will be allowed to operate under Limited Operation in accordance with Section 8.4.3 of Attachment A~~W~~~~the GIP~~ before a Network Upgrades previously approved for construction under Section VI of Attachment O of this Tariff ("Previously Approved Network Upgrade") is placed into service;
2. The Interconnection Customer will meet all requirements of Attachment A~~W~~~~the GIP~~; and
3. The Interconnection Customer will provide financial security and authorize engineering, procurement, and construction of its cost assigned Network Upgrades and interconnection facilities no later

than thirty (30) Calendar Days after the effective date of the GIA in accordance with Article 11.6 of the GIA.

**6.0 Governing Law**

**6.1 Governance.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the United States of America except to the extent that the laws of the state of Arkansas may apply.

**6.2 Applicability.** This Agreement is subject to all applicable federal and state Laws and Regulations.

**6.3 Reservation of Rights.** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

**7.0 Notices.**

**7.1 General.** Unless otherwise provided in this Agreement, any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party in writing to the other shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party.

To Transmission Provider:

Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936  
Attention: Manager, GI Studies

To Interconnection Customer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_

**7.2 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.

**8.0 Force Majeure**

**8.1 Economic Hardship.** Economic hardship is not considered a Force Majeure event.

**8.2 Default.** Neither Party shall be considered to be in Default with respect to any obligation hereunder, other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state the full details 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.

## **9.0 Indemnity**

**9.1 Indemnity.** The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

**9.1.1 Indemnified Person.** If an indemnified person is entitled to indemnification under this Article 9 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 9.1 to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**9.1.2 Indemnifying Party.** If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this Article 9, 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.

**9.1.3 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 9.1 may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure

of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

- 9.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall either Party 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.

## **10.0 Assignment**

**10.1 Assignment.** This Agreement may be assigned by either Party only with the written consent of the other Party; provided that either Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of Transmission Provider for collateral security purposes to aid in providing financing for the Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the Transmission Provider of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Transmission Provider of the date and particulars of any such exercise of assignment right. Any attempted assignment that violates this Article or Applicable Laws and Regulations is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **11.0 Severability**

**11.1 Severability.** If any provision in this Agreement 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 Agreement.

## **12.0 Comparability**

**12.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **13.0 Deposits and Invoice Procedures**

**13.1 General.** The Transmission Provider and the Interconnection Customer 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 [Attachment AW](#) ~~the GIP~~, including credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**13.2 Study Deposits.** The Interconnection Customer shall provide study deposits, in accordance with [Attachment AW](#) ~~the GIP~~ to the Transmission Provider. The study deposits amounts and schedule shall be in accordance with [Attachment AW](#) ~~the GIP~~.



**13.3 Final Invoice.** Within six months after completion of the studies Transmission Provider shall provide an invoice of the final cost of the studies and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Provider shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of the studies within thirty (30) Calendar Days of the issuance of such final study invoice.

**13.4 Payment.** Invoices shall be rendered to the paying Party at the address specified Appendix A to this Agreement. 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 ~~the GIP~~this Attachment AW.

**13.5 Disputes.** In the event of a billing dispute between Transmission Provider and Interconnection Customer, Transmission Provider shall continue to provide studies for Interconnection Service under ~~the GIP~~this Attachment AW 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 15 of this Agreement. 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 together with accrued interest in accordance with Section 3.7 of this Attachment ~~V~~AW.

#### **14.0 Representations, Warranties, and Covenants**

**14.1 General.** Each Party makes the following representations, warranties and covenants:

**14.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; 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 Agreement and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this Agreement.

**14.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder. This Agreement 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).

**14.1.3 No Conflict.** The execution, delivery and performance of this Agreement 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.

**14.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this Agreement 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 Agreement, and it will provide to any Governmental Authority notice of any actions under this Agreement that are required by Applicable Laws and Regulations.

## **15.0 Breach, Cure and Default**

**15.1 General.** A breach of this Agreement ("Breach") shall occur upon the failure by a Party to perform or observe any material term or condition of this Agreement. A default of this Agreement ("Default") shall occur upon the failure of a Party in Breach of this Agreement to cure such Breach in accordance with the provisions of Article 15.3 of this Agreement.

**15.2 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
- (c) If a Party: (1) becomes insolvent; (2) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (3) makes a general assignment for the benefit of its creditors; or (4) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;

(e) Failure of any Party to provide information or data to the other Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

**15.3 Cure and Default.** Upon the occurrence of an event of Breach, the Party not in Breach (hereinafter the “Non-Breaching Party”), when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party (the “Breaching Party”) and to any other person a Party to this Agreement identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have thirty (30) days to cure such Breach. If the Breach is such that it cannot be cured within thirty (30) days, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such thirty (30) day time period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within thirty (30) days of becoming aware of the Breach, the Breaching Party will be in Default of the Agreement.

**15.4 Right to Compel Performance.** Notwithstanding the foregoing, upon the occurrence of an event of Default, the non-Defaulting Party shall be entitled to: (1) commence an action to require the Defaulting Party to remedy such Default and specifically perform its duties and obligations hereunder in accordance with the terms and conditions hereof, and (2) exercise such other rights and remedies as it may have in equity or at law.

## **16.0 Miscellaneous**

**16.1 Binding Effect.** This Agreement 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.

**16.2 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

**16.3 Rules of Interpretation.** This Agreement, 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 Agreement, 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 Agreement), 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.

**16.4 Entire Agreement.** This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

**16.5 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.

**16.6 Waiver.** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or Default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from Transmission Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

**16.7 Headings.** The descriptive headings of the various Articles of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

**16.8 Multiple Counterparts.** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**16.9 Amendment.** The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by the Parties.

**16.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all Applicable Laws and Regulations.

**16.11 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.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of Transmission Provider]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment A to ~~Appendix 3~~ Appendix 1

**INTERCONNECTION REQUEST**

1. The undersigned Interconnection Customer submits this request to interconnect its Generating Facility with the Transmission System pursuant to the Tariff.

2. This Interconnection Request is for (check one):

☐ A proposed new Generating Facility.

☐ An increase in the generating capacity ~~or a Material Modification~~ of an Existing Generating Facility.

~~☐ Replacement of Existing Generating Facility with no increase in capacity~~

3. The type of interconnection service requested ~~(check one):~~

~~☐ Energy Resource Interconnection Service~~

~~☐ shall be~~ ☐ Network Resource Interconnection Service.

4. All requests for Network Resource Interconnection Service are also studied for Energy Resource Interconnection Service.

5. The Interconnection Customer provides the following information:

a. Address or location of the proposed new Generating Facility site (to the extent known) or, in the case of an Existing Generating Facility, the name and specific location of the Existing Generating Facility:

\_\_\_\_\_  
\_\_\_\_\_

Geographic coordinates of the proposed new or Existing Generating Facility site:

Latitude: \_\_\_\_ degrees, \_\_\_\_ minutes, \_\_\_\_ seconds (North)

Longitude: \_\_\_\_ degrees, \_\_\_\_ minutes, \_\_\_\_ seconds (West);

b. *Nameplate Capacity* of the proposed new Generating Facility or the amount of increase in the *Nameplate Capacity* of an Existing Generating Facility *in alternating current megawatts*;

*Requested Maximum Injection Capability or the amount of increase in Maximum Injection Capability in megawatts (Maximum Injection Capability must be less than or equal to Nameplate Capacity);*

*Requested Network Resource Deliverability or the amount of increase in Network Resource Deliverability in megawatts (Network Resource Deliverability must be less than or equal to Maximum Injection Capability).*

	<i>Existing MW</i>	<i>Increased MW</i>	<i>Total MW</i>
<i>Nameplate Capacity</i>			
<i>Maximum Injection Capability (at POI)</i>			
<i>Network Resource Deliverability (at POI)</i>			

- c. A description of the equipment configuration (i.e. Number of generators/inverters and number of Intermediate Step-up transformers) for the entire Generating Facility.
- d. Preliminary one-line diagram of the Generating Facility that includes:
  - Breaker layout, bus configuration (if available) and number of generators
  - Zero impedance lines (if applicable)
  - Distance from the collector substation to the POI in miles and the line impedance;
- e. Collector System Feeder Spreadsheet and Layout Diagrams;
- f. PSS/E User Defined Model files (.dll, .lib, .obj), documentation (generator model, power plant controller, etc.), and stability model files (.dvr, generator model, power plant controller, etc.);
- g. Commercial Operation Date (month/day/year); \_\_\_\_/\_\_\_\_/\_\_\_\_;
- h. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person in Item 9 below;
- i. Location of the proposed Point of Interconnection including the substation name or the name of the line to be tapped (including the voltage), the estimated distance from the substation endpoints of a line tap, address, and GPS coordinates.

POI substation name: \_\_\_\_\_

If a line tap, POI line name: \_\_\_\_\_(endpoint 1) to  
\_\_\_\_\_ (endpoint 2)

POI Distance from endpoint 1: \_\_\_\_\_miles

POI Distance from endpoint2: \_\_\_\_\_miles

POI voltage: \_\_\_\_kV

Address or location of the Point of Interconnection:

---

---

Geographic coordinates of the proposed Point of Interconnection:

Latitude: \_\_\_\_degrees, \_\_\_\_minutes, \_\_\_\_seconds (North)

Longitude: \_\_\_\_degrees, \_\_\_\_minutes, \_\_\_\_seconds (West);

j. Geographical map showing the approximate location of the proposed Point of Interconnection and the location of the Generating Facility;

k. Generating Facility Data (set forth in Attachment B to this [Appendix 3Appendix 1](#));

l. *Reserved for future use;*

m. Fuel type(s) included in this project configuration:

- ☐ Battery/Storage
- ☐ Hybrid
- ☐ Hydro
- ☐ Nuclear
- ☐ Solar
- ☐ Thermal
- ☐ Wind
- ☐ Other: \_\_\_\_\_

Describe the prime mover (Combined Cycle Comb. Turbine, Combined Cycle Steam, Gas Turbine, Internal Combustion Engine, Steam Turbine, etc.):

---

n. Primary frequency response operating range for electric storage resources;

o. If Interconnection Facilities will be shared, the project number of other Existing Generating Facilities or Interconnection Requests with which Interconnection Facilities will be shared shall be listed below. If no project number is available, state the name of the Interconnection Customer and describe the applicable Generating Facilities below.

---

---

~~p. For request for Generating Facility Replacement, the planned or actual date of cessation of operation of the Existing Generating Facility: (month/day/year)~~  
~~\_\_\_\_/\_\_\_\_/\_\_\_\_.~~



6. Applicable deposit amount and application fee as specified in Section 8.2 of Attachment AW of the Tariff~~the GIP~~.

7. Evidence of Site Control as specified in Section 8.2 ~~the GIP~~ of Attachment AW of the Tariff:

\_\_\_\_\_ Site Control for the Generating Facility and one of the following:

\_\_\_\_\_ Site Control for at least ~~fifty~~ seventy-five percent (~~50~~75%) of the Generating Facility's high voltage tie line to Point of Interconnection; **OR**

\_\_\_\_\_ Additional financial security in the amount of \$80,000 per line right-of-way mile.

8. This Interconnection Request shall be submitted electronically, in the manner specified for new Interconnection Requests in Section 1 of the "Generator Interconnection Business Guide and Practice" manual posted on the Transmission Provider's Generator Interconnection Study posting page on OASIS.

8.1 The following LREs have executed the LRE Selection Form in association with this request.

9. Representative of Interconnection Customer to contact (including e-mail address):

Name of Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail address: \_\_\_\_\_

10. This Interconnection Request is submitted by:

Name of Interconnection Customer (Company): \_\_\_\_\_

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment B to ~~Appendix 3~~ Appendix 1

**ASSUMPTIONS USED IN CONDUCTING THE  
~~DEFINITIVE INTERCONNECTION~~ ERAS SYSTEM IMPACT STUDY**

The ~~ERAS Definitive Interconnection System Impact Study~~ will be based upon the information set forth in the Interconnection Requests and results of applicable prior studies, subject to any modifications in accordance with Section 4.4 of Attachment AW of the Tariff ~~the GIP~~.

**GENERATING FACILITY DATA FOR THE  
~~DEFINITIVE INTERCONNECTION~~ ERAS SYSTEM IMPACT STUDY**

**Interconnection Facilities Tie Line Information**

1. Nominal Voltage (kV)
2. Line length (miles)
3. Summer Line Rating (MVA)
4. Winter Line Rating (MVA)
5. Positive Sequence Resistance R1(in p.u.\*)
6. Positive Sequence Reactance X1(in p.u.\*)
7. Positive Sequence Susceptance B1(in p.u.\*)
8. Zero Sequence Resistance R0(in p.u.\*)
9. Zero Sequence Reactance X0(in p.u.\*)
10. Zero Sequence Susceptance B0 (in p.u.\*)
11. Positive Sequence Shunt G1 (in p.u.\*)
12. Positive Sequence Shunt B1 (in p.u.\*)
13. Zero Sequence Shunt G0 (in p.u.\*)
14. Zero Sequence Shunt B0 (in p.u.\*)

\*On 100-MVA Base

### Main Substation Transformer

(for a single generator or the step-up from collector system to POI voltage)

Number of transformers \_\_\_\_\_

RATINGS

Self-Cooled

Maximum Nameplate

Capacity (kVA)

MVA Base

\_\_\_\_\_MVA

Maximum Nameplate  
Ratings

\_\_\_\_\_/\_\_\_\_MVA

Generator Side

System Side

Tertiary

Voltage Ratio

Primary

Secondary

Nominal Voltage

Winding Connections  
(Delta or Wye)

Tapped Winding

Low Voltage

High Voltage

Tertiary Voltage

Winding Connections  
(Delta or Wye)

IMPEDANCE

Primary-Secondary

Primary-Tertiary

Secondary-Tertiary

Positive Z1 (on self-  
cooled kVA rating)

Zero Z0 (on self-  
cooled kVA rating)

Fixed Taps  
Available

Present Taps Available

## TAP SETTING

### Tap Ratio Range

### Number of Taps

No Load Loss \_\_\_\_\_ W

Exciting I: \_\_\_\_\_ p.u.

## Static Reactive Compensation Device

Voltage (kV)

Total Size (MVAR)

Step Size (MVAR)

Number of Steps

## Equivalent Collector System

### Equivalent Collector System for each modeled medium voltage feeder line

Collector system voltage = \_\_\_\_\_ kV

R = \_\_\_\_\_ per unit on 100 MVA Base and collector kV base (positive sequence)

$X =$  \_\_\_\_\_ per unit on 100 MVA Base and collector kV base (positive sequence)

B = \_\_\_\_\_ per unit on 100 MVA Base and collector kV base (positive sequence)

### Generator Step-up Transformer

Number of transformers \_\_\_\_\_

## RATINGS

Self-Cooled

### Maximum Nameplate

Capacity (kVA)

MVA Base

MVA

## Maximum Nameplate Ratings

/ MVA

## Generator Side

System Side

Tertiary

## Voltage Ratio

Primary

Secondary

Nominal Voltage

Winding Connections  
(Delta or Wye)

Tapped Winding

Low Voltage

High Voltage

Tertiary Voltage

Winding Connections  
(Delta or Wye)

Primary-Secondary

Primary-Tertiary

Secondary-  
Tertiary

IMPEDANCE

Positive Z1 (on self-  
cooled kVA rating)

Zero Z0 (on self-  
cooled kVA rating)

Fixed Taps Available

Present Taps Available

## TAP SETTING

Tap Ratio Range

Number of Taps

No Load Loss \_\_\_\_\_ W

Exciting I: \_\_\_\_\_ p.u.

## Unit Ratings

Number of generating units

Inverter manufacturer, model name, number and version

Nameplate kVA rating

Voltage

Terminal Voltage

Generator type (e.g. Type III – DFIG or Type IV – Inverter)

Fuel Type

Prime Mover Type

Power Factor (Lead/Lag)

Connection (e.g. Wye)

Max Turbine Power Output Capability (Summer MW/Winter MW)

Frequency, Hertz

Stator Amperes at Rated kVA

### COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA

Inertia Constant, H = \_\_\_\_\_ kW sec/kVA

### REACTANCE DATA (PER UNIT-RATED KVA)

Subtransient (first cycle) Positive Sequence Resistance R1*	
Subtransient (first cycle) Positive Sequence Reactance X1*	
Subtransient (first cycle) Negative Sequence Resistance R2*	
Subtransient (first cycle) Negative Sequence Reactance X2*	
Subtransient (first cycle) Zero Sequence Resistance R0*	
Subtransient (first cycle) Zero Sequence Reactance X0*	
Stationary (after 50ms) Positive Sequence Resistance R1*	
Stationary (after 50ms) Positive Sequence Reactance X1*	
Stationary (after 50ms) Negative Sequence Resistance R2*	
Stationary (after 50ms) Negative Sequence Reactance X2*	
Stationary (after 50ms) Zero Sequence Resistance R0*	
Stationary (after 50ms) Zero Sequence Reactance X0*	

Voltage Controlled Current Source (VCCS) curve	
*In p.u. nameplate kVA based	

	Direct Axis	Quadrature Axis
Synchronous – saturated	X <sub>dv</sub>	X <sub>qv</sub>
Synchronous – unsaturated	X <sub>di</sub>	X <sub>qi</sub>
Transient – saturated	X' <sub>dv</sub>	X' <sub>qv</sub>
Transient – unsaturated	X' <sub>di</sub>	X' <sub>qi</sub>
Subtransient – saturated	X'' <sub>dv</sub>	X'' <sub>qv</sub>
Subtransient – unsaturated	X'' <sub>di</sub>	X'' <sub>qi</sub>
Negative Sequence – saturated	X <sub>2v</sub>	
Negative Sequence – unsaturated	X <sub>2i</sub>	
Zero Sequence – saturated	X <sub>0v</sub>	
Zero Sequence – unsaturated	X <sub>0i</sub>	
Leakage Reactance	X <sub>lm</sub>	

#### FIELD TIME CONSTANT DATA (SEC)

Open Circuit	T' <sub>do</sub>	_____	T' <sub>qo</sub>	_____
Three-Phase Short Circuit Transient	T' <sub>d3</sub>	_____	T' <sub>q</sub>	_____
Line to Line Short Circuit Transient	T' <sub>d2</sub>	_____		
Line to Neutral Short Circuit Transient	T' <sub>d1</sub>	_____		
Short Circuit Subtransient	T'' <sub>d</sub>	_____	T'' <sub>q</sub>	_____
Open Circuit Subtransient	T'' <sub>do</sub>	_____	T'' <sub>qo</sub>	_____

#### ARMATURE WINDING RESISTANCE DATA (PER UNIT)

Positive	R <sub>1</sub>	_____
Negative	R <sub>2</sub>	_____
Zero	R <sub>0</sub>	_____



## CURVES

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

## EXCITATION SYSTEM DATA

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

## GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

## ENERGY STORAGE RESOURCES

Device manufacturer: \_\_\_\_\_  
Technology (Li-ion, Lead Acid, Flow Battery, Pumped Hydro, Flywheel, etc.) \_\_\_\_\_

Check one of the following:

\_\_\_\_\_ Stand-alone  
\_\_\_\_\_ Co-located with another Generating Facility (co-located means at the same POI)

Maximum Energy Output Rating (MWh) \_\_\_\_\_ at Maximum Power Output (MW)  
\_\_\_\_\_

Maximum Contractual Power Output (MW) \_\_\_\_\_

### Charging Parameters

Check one of the following:

\_\_\_\_\_ Yes, the energy storage resource will take energy from the Transmission System when operating in charging mode. The maximum rate of charge capability of the Generating Facility will be \_\_\_\_\_ MW. The maximum rate of charge to be utilized (requested maximum) will be \_\_\_\_\_ MW.

Charging Power Factor \_\_\_\_\_ lag \_\_\_\_\_ lead at rated output

\_\_\_\_\_ No, the energy storage resource will never take energy from the Transmission System when operating in charging mode, by either Self-Dispatch or at the direction of SPP. The monitoring and control equipment that will be used to ensure that the Generating Facility never takes energy from the Transmission System when operating in charging mode is described as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Inverter-Based Resource Data

Phase-Locked Loop (“PLL”) controller parameters for inverter-based resources:

- PLL Proportional Gain  $K_p$  \_\_\_\_\_
- PLL Integral Gain  $K_i$  \_\_\_\_\_
- PLL Frequency Limits  $\omega_l$  \_\_\_\_\_ (rad/sec) and  $\omega_h$  \_\_\_\_\_ (rad/sec)

The above data applies to a generic structure of the PLL (also commonly known as a synchronous reference frame PLL) and that the actual PLL structure within an Original Equipment Manufacturer’s (OEM) device may differ from this generic structure. Should a difference exist, the parameter values of the PLL shall be provided such that the most recent equivalently parameterized generic industry model shows the same trend as the performance shown by actual OEM equipment.

### Plant Load

Load MW \_\_\_\_\_  
Load MVAR \_\_\_\_\_  
Specify Load Bus Voltage \_\_\_\_\_ kV

### Mutual Coupling Impedance

Mutual coupling impedance and ‘B’ factors for mutually coupled transmission lines

### Electromagnetic Transient (EMT) Models:

See SPP Electromagnetic Transient (EMT) Model Requirements Document



Attachment C to ~~Appendix 3~~ Appendix 1

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER FOR THE  
INTERCONNECTION FACILITIES STUDY**

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new ring bus or existing Transmission Provider station. Number of generation connections:

On the one line diagram indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line diagram indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?

\_\_\_\_\_ Yes \_\_\_\_\_ No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_\_\_ Yes \_\_\_\_\_ No (Please indicate on one line diagram).

What type of control system or PLC will be located at Interconnection Customer's Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

\_\_\_\_\_

Bus length from generation to interconnection station:

\_\_\_\_\_

Line length from interconnection station to Transmission Provider's transmission line.

\_\_\_\_\_

Tower number observed in the field. (Painted on tower leg)\* \_\_\_\_\_

Number of third party easements required for transmission lines\*:

---

\* To be completed in coordination with Transmission Provider.

Is the Generating Facility in the Transmission Provider's service area?

\_\_\_\_\_ Yes    \_\_\_\_\_ No    Local provider: \_\_\_\_\_

Please provide proposed schedule dates:

Begin Construction                      Date: \_\_\_\_\_

Generator step-up transformer                      Date: \_\_\_\_\_

receives back feed power

Generation Testing                      Date: \_\_\_\_\_

Commercial Operation                      Date: \_\_\_\_\_

|

**APPENDIX 2 TO ATTACHMENT AW**

**LRE SELECTION FORM**

The undersigned, a duly-authorized representative of the Load Responsible Entity (LRE) indicated in the blanks provided below, attests to the following:

1. The entity listed below is an LRE as defined in Attachment AA of the SPP Tariff and selects the Interconnection Request to which this form is attached for inclusion in SPP's Expedited Resource Adequacy Study.
2. The LRE requires additional system resources to enable the LRE to meet its resource adequacy obligations under the SPP Tariff and applicable laws.
3. The LRE has determined that the Interconnection Request to which this form is attached is needed because of a resource adequacy need and the LRE reasonably believes such need cannot be cost-effectively addressed by a resource available and known to the LRE, that is either in Commercial Operation, under construction, or has an Interconnection Request pending in the DISIS Queue that would meet the LRE's resource adequacy obligations under the SPP Tariff and applicable laws.
4. If the Interconnection Request to which this form is attached culminates in an effective GIA, the LRE will, to the extent consistent with the SPP Tariff and applicable laws, use commercially reasonable efforts to complete or cause to be completed all arrangements necessary to enable the output of the resource associated with this Interconnection Request to be accredited toward the LRE's resource adequacy obligations under the SPP Tariff, including, but not limited to, acquisition of necessary transmission service.

Name of Load Responsible Entity: \_\_\_\_\_

Authorized representative's name: \_\_\_\_\_

Authorized representative's title: \_\_\_\_\_

Authorized representative's signature: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX 32 TO ATTACHMENT AW**  
**EXPEDITED RESOURCE ADEQUACY STUDY GENERATOR INTERCONNECTION**  
**AGREEMENT (GIA)**

## TABLE OF CONTENTS

### Recitals

### Article 1. Definitions

### Article 2. Effective Date, Term, and Termination

#### 2.1 Effective Date

#### 2.2 Term of Agreement

#### 2.3 Termination Procedures

##### 2.3.1 Written Notice

##### 2.3.2 Failure to Achieve Commercial Operation

##### 2.3.3 Default

##### 2.3.4 Notice to FERC

#### 2.4 Termination Costs

#### 2.5 Disconnection

#### 2.6 Survival

### Article 3. Regulatory Filings

#### 3.1 Filing

### Article 4. Scope of Service

#### 4.1 Interconnection Product Options

##### 4.1.1 Energy Resource Interconnection Service

###### 4.1.1.1 The Product

###### 4.1.1.2 Transmission Delivery Service Implications

##### 4.1.2 Network Resource Interconnection Service

###### 4.1.2.1 The Product

###### 4.1.2.2 Transmission Delivery Service Implications

#### 4.2 Provision of Service

#### 4.3 Performance Standards

#### 4.4 No Transmission Delivery Service

#### 4.5 Interconnection Customer Provided Services



Article 5. Interconnection Facilities Engineering, Procurement, and Construction

5.1 Options

5.1.1 Standard Option

5.1.2 Option to Build

5.1.3 Negotiated Option

5.2 General Conditions Applicable to Option to Build

5.3 Liquidated Damages

5.4 Power System Stabilizers

5.5 Equipment Procurement

5.6 Construction Commencement

5.7 Work Progress

5.8 Information Exchange

5.9 Limited Operation

5.10 Interconnection Customer's Interconnection Facilities ('ICIF')

5.10.1 Interconnection Customer's Interconnection Facility Specifications

5.10.2 Transmission Owner's Review

5.10.3 ICIF Construction

5.10.4 Updated Information Submission by Interconnection Customer

5.10.5 Information Supplementation

5.11 Transmission Owner's Interconnection Facilities Construction

5.12 Access Rights

5.13 Lands of Other Property Owners

5.14 Permits

5.15 Early Construction of Base Case Facilities

5.16 Suspension

5.16.1 Suspension by Interconnection Customer

5.16.2 Exemptions

5.17 Taxes

5.17.1 Interconnection Customer Payments Not Taxable

5.17.2 Representations and Covenants

5.17.3 Indemnification for the Cost Consequences of Current Tax  
Liability Imposed Upon the Transmission Owner

5.17.4 Tax Gross-Up Amount

5.17.5 Private Letter Ruling or Change or Clarification of Law

5.17.6 Subsequent Taxable Events

5.17.7 Contests

5.17.8 Refund

5.17.9 Taxes Other Than Income Taxes

5.18 Tax Status

5.19 Modification

5.19.1 General

5.19.2 Standards

5.19.3 Modification Costs

5.20 Delays

Article 6. Testing and Inspection

6.1 Pre-Commercial Operation Date Testing and Modifications

6.2 Post-Commercial Operation Date Testing and Modifications

6.3 Right to Observe Testing

6.4 Right to Inspect

Article 7. Metering

7.1 General

7.2 Check Meters

7.3 Standards

7.4 Testing of Metering Equipment

7.5 Metering Data

Article 8. Communications

8.1 Interconnection Customer Obligations

8.2 Remote Terminal Unit

8.3 No Annexation

8.4 Provision of Data from a Variable Energy Resource

8.5 Phasor Measurement Unit (PMU) Recording Equipment

Article 9. Operations

9.1 General

9.2 Control Area Notification

9.3 Transmission Provider and Transmission Owner Obligations

9.4 Interconnection Customer Obligations

9.5 Start-Up and Synchronization

9.6 Reactive Power and Primary Frequency Response

9.6.1 Power Factor Design Criteria

9.6.1.1 Synchronous Generation

9.6.1.2 Non-Synchronous Generation

9.6.2 Voltage Schedules

9.6.2.1 Voltage Regulators

9.6.3 Payment for Reactive Power

9.6.4 Primary Frequency Response

9.6.4.1 Governor or Equivalent Controls

9.6.4.2 Timely and Sustained Response

9.6.4.3 Exemptions

9.6.4.4 Electric Storage Resources

9.7 Outages and Interruptions

9.7.1 Outages

9.7.1.1 Outage Authority and Coordination

9.7.1.2 Outage Schedules

9.7.1.3 Outage Restoration

9.7.2 Interruption of Service

9.7.3 Under-Frequency and Over Frequency Conditions

9.7.3.1 Frequency Ride Through and Voltage Ride Through for a

Generating Facility no larger than 20 MW

9.7.4 System Protection and Other Control Requirements

9.7.4.1 System Protection Facilities

9.7.5 Requirements for Protection

9.7.6 Power Quality

9.8 Switching and Tagging Rules

9.9 Use of Interconnection Facilities by Third Parties

9.9.1 Purpose of Interconnection Facilities

9.9.2 Third Party Users

9.10 Disturbance Analysis Data Exchange

Article 10. Maintenance

10.1 Transmission Owner Obligations

10.2 Interconnection Customer Obligations

10.3 Coordination

10.4 Secondary Systems

10.5 Operating and Maintenance Expenses

Article 11. Performance Obligation

11.1 Interconnection Customer Interconnection Facilities

11.2 Generating Facility

11.3 Transmission Owner's Interconnection Facilities

11.4 Network Upgrades and Distribution Upgrades

11.4.1 Agreement to Fund Shared Network Upgrades

11.4.2 Contingencies Affecting Network Upgrades, System Protection Facilities  
and Distribution Upgrades

11.4.3 Agreement to Restudy

11.5 Transmission Credits

11.5.1 Credits for Amounts Advanced for Network Upgrades

11.5.2 Special Provisions for Affected Systems

11.6 Initial Payment

11.7A Provision of Security

11.7B Provision of Security for JTIQ Upgrades

11.8 Interconnection Customer Compensation

11.8.1 Interconnection Customer Compensation for Actions During  
Emergency Condition

Article 12. Invoice

12.1 General

12.2 Final Invoice

12.3 Payment

12.4 Disputes

Article 13. Emergencies

13.1 Definition

13.2 Obligations

13.3 Notice

13.4 Immediate Action

13.5 Transmission Provider and Transmission Owner Authority

13.5.1 General

13.5.2 Reduction and Disconnection

13.6 Interconnection Customer Authority

13.7 Limited Liability

Article 14. Regulatory Requirements and Governing Law

14.1 Regulatory Requirements

14.2 Governing Law

Article 15. Notices

15.1 General

15.2 Billings and Payments

15.3 Alternative Forms of Notice

15.4 Operations and Maintenance Notice

Article 16. Force Majeure

16.1 Force Majeure

Article 17. Default

17.1 Default

17.1.1 General

17.1.2 Right to Terminate

Article 18. Indemnity, Consequential Damages and Insurance

18.1 Indemnity

18.1.1 Indemnified Person

18.1.2 Indemnifying Party

18.1.3 Indemnity Procedures

18.2 Consequential Damages

18.3 Insurance

Article 19. Assignment

19.1 Assignment

Article 20. Severability

20.1 Severability

Article 21. Comparability

21.1 Comparability

Article 22. Confidentiality

22.1 Confidentiality

22.1.1 Term

22.1.2 Scope

22.1.3 Release of Confidential Information

22.1.4 Rights

22.1.5 No Warranties

22.1.6 Standard of Care

22.1.7 Order of Disclosure

22.1.8 Termination of Agreement

22.1.9 Remedies

22.1.10 Disclosure to FERC, its Staff, or a State

Article 23. Environmental Releases

Article 24. Information Requirements

24.1 Information Acquisition

24.2 Information Submission by Transmission Provider

Article 25. Information Access and Audit Rights

25.1 Information Access

25.2 Reporting of Non-Force Majeure Events

25.3 Audit Rights

25.4 Audit Rights Periods

25.4.1 Audit Rights Period for Construction-Related Accounts and Records

25.4.2 Audit Rights Period for All Other Accounts and Records

25.5 Audit Results

Article 26. Subcontractors

26.1 General

26.2 Responsibility of Principal

26.3 No Limitation by Insurance

Article 27. Disputes

27.1 Submission

Article 28. Representations, Warranties, and Covenants

28.1 General

28.1.1 Good Standing

28.1.2 Authority

28.1.3 No Conflict

28.1.4 Consent and Approval

Article 29. Joint Operating Committee

29.1 Joint Operating Committee

Article 30. Miscellaneous

30.1 Binding Effect

30.2 Conflicts

30.3 Rules of Interpretation

30.4 Entire Agreement

30.5 No Third Party Beneficiaries

30.6 Waiver

30.7 Headings

30.8 Multiple Counterparts

30.9 Amendment

30.10 Modification by the Parties

30.11 Reservation of Rights

30.12 No Partnership

Appendix A - Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B – Milestones

Appendix C – Interconnection Details

Appendix D – Security Arrangements Details

Appendix E – Commercial Operation Date

Appendix F – Addresses for Delivery of Notices and Billings

Appendix G – Requirements of Generators Relying on Newer Technologies

Appendix H – Reserved for future use

Appendix I – Cost Responsibility for Portion of Costs for a Portfolio of JTIQ Upgrades



**GENERATOR INTERCONNECTION AGREEMENT**

**THIS GENERATOR INTERCONNECTION AGREEMENT**

(“Agreement”) is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnection Customer” with a Generating Facility), Southwest Power Pool, Inc., a corporation organized and existing under the laws of the State of Arkansas (“Transmission Provider”) and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Transmission Owner”). Interconnection Customer, Transmission Provider and Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

**Recitals**

**WHEREAS**, Transmission Provider functionally controls the operation of the Transmission System; and,

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Generating Facility in Appendix C to this Agreement; and,

**WHEREAS**, Transmission Owner owns facilities to which the Generating Facility is to be interconnected and may be constructing facilities to allow the interconnection; and,

**WHEREAS**, Interconnection Customer, Transmission Provider and Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the 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 Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used or the Open Access Transmission Tariff (Tariff).

## **Article 1. Definitions**

**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 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 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.

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

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

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

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

**Commercial Operation** 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 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.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing. Contingent Facilities are identified in Appendix A of the Generator Interconnection Agreement.

**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 Generator Interconnection Agreement.

**Definitive Interconnection System Impact Study (DISIS)** shall have the meaning set forth in Attachment V of the Tariff.

**Expedited Resource Adequacy Study (ERAS)** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of 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, or that may be caused by the withdrawal or addition of an Interconnection Request, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in this Attachment AW.

**Definitive Interconnection System Impact Study Queue** shall mean a Transmission Provider separately maintained queue for valid Interconnection Requests for a Definitive Interconnection System Impact Study.

***Deliverability Area** shall mean a portion of the Transmission System in which a generator can reliably deliver all or a portion of its output capability.*

**Dispute Resolution** shall mean the procedure in Section 13.5 of Attachment AW 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 Owner's facilities and equipment that are not included in the Transmission System. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the 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 Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electromagnetic Transient Study or EMT Study** shall mean an analysis to determine the electromagnetic transient response of the electric power system due to system disturbances.

**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 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 or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Owner's Interconnection Facilities; or (4) 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 Generator Interconnection Agreement to possess black start capability.

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

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Owner 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.

**Existing Generating Facility** shall mean a Generating Facility that is currently interconnected to the Transmission System of the Transmission Provider.

**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 and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities and shall not include a Storage as Transmission Only Asset as defined in Section 1 of the Tariff. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**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.

**Generating Facility Modification** shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.

**ERAS Generator Interconnection Agreement (Generator Interconnection Agreement or GIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Generating Facility that is included in Appendix 6 to this Attachment AW or in Appendix 13 when Western-UGP is a Party, as the Transmission Owner, to the ERAS GIA.

**Generator Interconnection Procedures (GIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility that are included in the Transmission Provider's Tariff.

**Expedited Resource Adequacy Study Agreement (ERAS Agreement)** shall mean the study agreement for the Expedited Resource Adequacy Study in Appendix 1 to this Attachment AW.

**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, Transmission Owner 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 Owner's Interconnection Facilities to obtain back feed power.

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

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the 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 System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Owner'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 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 Owner's Interconnection Facilities and Network Upgrades as identified in the ERAS report), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System. The scope of the study is defined in Section 8 of Attachment AW.



**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 3 to the Generator Interconnection Procedures or Appendix 1 to the Expedited Resource Adequacy Study Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of an Existing Generating Facility that is interconnected with the 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 Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Replacement Impact Study, the Reliability Assessment Study, the Definitive Interconnection System Impact Study and the Interconnection Facilities Study described in the Generator Interconnection Procedures.

**Interconnection Study Agreement** shall mean any of the following agreements described in the Generator Interconnection Procedures: the Generator Interconnection Study Agreement.

**IRS** shall mean the Internal Revenue Service.

**Joint Operating Agreement between the Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc. ("MISO-SPP JOA")**: shall have the meaning as defined in Section 1 of the Tariff.

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

**Joint Targeted Interconnection Queue ("JTIQ")** shall have the meaning as defined in Section 1 of the Tariff.

**JTIQ Upgrade** shall have the meaning as defined in Section 1 of the Tariff.

**Material Modification** shall mean (1) modification to an Interconnection Request in the queue that has a material adverse impact on the cost or timing of any other Interconnection Request with a later Queue priority date; or (2) planned modification to an Existing Generating Facility that is undergoing evaluation for a Generating Facility Modification or Generating Facility Replacement, and has a material adverse impact on the Transmission System with respect to: i) steady-state thermal or voltage limits, ii) dynamic system stability and response, or iii) short-circuit capability limit; compared to the impacts of the Existing Generating Facility prior to the modification or replacement.

**Maximum Injection Capability** shall mean the maximum amount of real power that may be injected by a Generating Facility at the Point of Interconnection.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the 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.

**MISO** shall have the meaning as defined in Section 1 of the Tariff.

***Nameplate Capacity** shall mean the maximum real power rating listed on the nameplate of the Generating Facility measured in alternating current megawatts (AC MW), or the sum of all such ratings of a Generating Facility where it includes multiple energy production devices.*

**NERC** shall mean the North American Electric Reliability Corporation 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 Deliverability** shall mean the amount of real power that can be delivered to the aggregate of Network Load within a Deliverability Area by a Generating Facility, as measured at the Point of Interconnection. Network Resource Deliverability in and of itself does not convey transmission service.*

**Network Resource Interconnection Service (NRIS)** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Generating Facility with the Transmission System in *the same* manner as *all other* Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission System to accommodate the interconnection of the Generating Facility to the Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Generator Interconnection Agreement or its performance.

**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 Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission System.

**Queue** shall mean the Definitive Interconnection System Impact Study Queue, or the Interconnection Facilities Study Queue, as applicable.



**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the 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.

**Reliability Assessment Study** shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of Transmission System during the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility.

**Replacement Generating Facility** shall mean a Generating Facility that replaces an Existing Generating Facility, or a portion thereof, at the same electrical Point of Interconnection pursuant to Section 3.9 of this Attachment V.

**Replacement Impact Study** shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of the Transmission System.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer, Transmission Owner 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.

**Shared Network Upgrade** shall mean a Network Upgrade listed in Appendix A of the Generator Interconnection Agreement that is needed for the interconnection of multiple Interconnection Customers' Generating Facilities and which is the shared funding responsibility of such Interconnection Customers that may also benefit other Interconnection Customer(s) that are later identified as beneficiaries.

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size for the purpose of constructing the Generating Facility or Generating Facility's tie line; (2) an option to purchase or acquire a leasehold site of sufficient size 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 of sufficient size for such purpose.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected Systems that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. The Transmission Provider, Transmission Owner and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection Agreement. If the Transmission Provider, Transmission Owner and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Owner must provide the Interconnection Customer a written technical explanation outlining why the Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within fifteen (15) days of its determination.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection substation and at the same voltage level would remain the same.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the 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 System or on other delivery systems or other generating systems to which the Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the 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 Owner's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Owner'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 GIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. Transmission Provider shall promptly file this GIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this GIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as Interconnection Customer may request (Term to be specified in individual agreements) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.**

**2.3.1 Written Notice.** This GIA may be terminated by Interconnection Customer after giving Transmission Provider and Transmission Owner ninety (90) Calendar Days advance written notice, or by Transmission Provider notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Failure to Achieve Commercial Operation.** If the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date specified in Appendix B, this GIA may be terminated by the Transmission Provider after giving the Interconnection Customer ninety (90) Calendar Days advance written notice. Where a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date specified in Appendix B, the Transmission Provider shall issue a revised GIA to reflect the amount of the Generating Facility Capacity that achieved Commercial Operation. The revised GIA shall be consistent with the GIP in effect on the Effective Date of the GIA.

**2.3.3 Default.** Any Party may terminate this GIA in accordance with Article 17.

**2.3.4 Notice to FERC.** Notwithstanding Articles 2.3.1, 2.3.2 and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this GIA, which notice has been accepted for filing by FERC.

**2.4 Termination Costs.** If a Party elects to terminate this Agreement pursuant to Article 2.3 above, Interconnection Customer and Transmission Owner shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by any other Party, as of the date of such Party's receipt of such notice of termination, that are the responsibility of the Terminating Party under this GIA. In the event of termination by any Party, all Parties shall use Commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this GIA, unless otherwise ordered or approved by FERC:

**2.4.1** With respect to any portion of Transmission Owner's Interconnection Facilities that have not yet been constructed or installed, Transmission Owner 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 Owner 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 Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this GIA, 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 Owner has incurred expenses and has not been reimbursed by Interconnection Customer and the Interconnection Customer's allocated share of Network Upgrade(s) costs as calculated pursuant to Section 4.2.5 of the GIP and as listed in Appendix A of this GIA which are required for service to other Interconnection Customer(s).

**2.4.2** Transmission Owner 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 Owner 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 GIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5 Disconnection.** Upon termination of this GIA, the Parties will take all appropriate steps to disconnect the 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 GIA or such non-terminating Party otherwise is responsible for these costs under this GIA.

**2.6 Survival.** This GIA 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 GIA; to permit payments for any credits under this GIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this GIA was in effect; and to permit each Party to have access to the lands of another Party pursuant to this GIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **Article 3. Regulatory Filings**

**3.1 Filing.** Transmission Provider shall file this GIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this GIA, or any amendment thereto, Interconnection Customer shall reasonably cooperate with Transmission Provider with respect to such filing and to provide any information reasonably requested by Transmission Provider needed to comply with applicable regulatory requirements.

#### **Article 4. Scope of Service**

**4.1 Interconnection Product Options.** Interconnection Customer has selected the following (checked) type of Interconnection Service:

##### **4.1.1 Energy Resource Interconnection Service.**

**4.1.1.1 The Product.** Energy Resource Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission System and be eligible to deliver the Generating Facility's *Maximum Injection Capability* 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 Generating Facility into and deliver power across the Transmission System on an "as available" basis. The Interconnection Customer's ability to inject its Generating Facility output beyond the Point of Interconnection, therefore, will depend on the existing capacity of the Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of Firm Point-To-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

##### **4.1.2 Network Resource Interconnection Service.**

**4.1.2.1 The Product.** Transmission Provider must conduct the necessary studies and *the Transmission Owner must* construct the Network Upgrades needed to integrate the Generating Facility in *the same* manner as all *other* Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Owner shall construct the facilities identified in Appendix A to this GIA.

**4.1.2.2 Transmission Delivery Service Implications.** Network Resource Interconnection Service allows Interconnection Customer's Generating Facility to be designated by any Network Customer under the Tariff on the Transmission System as a Network Resource, up to the Generating



Facility's full *Network Resource Deliverability*, on the same basis as existing Network Resources interconnected to the 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 Generating Facility in the same manner as it accesses Network Resources. A 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 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 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 Generating Facility to any particular load on the Transmission System without incurring congestion costs. In the event of transmission constraints on the Transmission System, Interconnection Customer's 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 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 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 Generating Facility within the 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 Generating Facility be undertaken, regardless of whether or not such Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the 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 Generating Facility outside the 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 Generating Facility at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this GIA 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 GIA for its compliance therewith. If such Party is a Transmission Provider or Transmission Owner, then that Party shall amend the GIA and submit the amendment to FERC for approval.

**4.4 No Transmission Delivery Service.** The execution of this GIA 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 GIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.8.

## **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 the Option To Build as described under Article 5.1.2 or the Negotiated Option described under Article 5.1.3, and such dates and selected option, as applicable, shall be set forth in Appendix B, Milestones. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.2 below. If the dates designated by Interconnection Customer are not acceptable to Transmission Owner, Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Transmission Owner, the Interconnection Customer shall notify Transmission Owner within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build.

**5.1.1 Standard Option.** Transmission Owner shall design, procure, and construct Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event Transmission Owner reasonably expects that it will not be able to complete Transmission Owner's Interconnection Facilities, and Network Upgrades by the specified dates, Transmission Owner shall promptly provide written notice to Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Option to Build.** Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.1. Transmission Owner 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.

**5.1.3 Negotiated Option.** If the dates designated by Interconnection Customer are not acceptable to Transmission Owner, the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of all facilities other than Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.2). If the Parties are unable to reach agreement on such terms and conditions, then, pursuant to Article 5.1.1(Standard Option), Transmission Owner shall assume responsibility for the design, procurement and construction of all facilities other than Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects the Option to Build.

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

- (1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Owner'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 Owner;
- (2) Interconnection Customer's engineering, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission



Provider would be subject in the engineering, procurement or construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

- (3) Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) Prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider and Transmission Owner 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 and Transmission Owner;
- (5) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
- (6) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Owner, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (7) Interconnection Customer shall indemnify Transmission Provider and Transmission Owner for claims arising from Interconnection Customer's construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;
- (8) The Interconnection Customer shall transfer control of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;
- (9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Owner's Interconnection Facilities and Stand-Alone Network Upgrades to Transmission Owner not later than the Commercial Operation Date;
- (10) Transmission Owner shall approve and accept for operation and maintenance Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and
- (11) Interconnection Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Owner to assure that the Interconnection Facilities and Stand- Alone Network

Upgrades are built to the standards and specifications required by Transmission Provider.

- (12) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.2, Interconnection Customer shall pay Transmission Owner the agreed upon amount of [\$ PLACEHOLDER] for Transmission Owner to execute the responsibilities enumerated to Transmission Owner under Article 5.2. Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.

**5.3 Liquidated Damages.** The actual damages to Interconnection Customer, in the event Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Owner pursuant to subparagraph 5.1.3, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by Transmission Owner to Interconnection Customer in the event that Transmission Owner does not complete any portion of Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of Transmission Owner's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Owner has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of Transmission Owner's Interconnection Facilities and Network Upgrades for which Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by Transmission Owner to Interconnection Customer as just compensation for the damages caused to Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this GIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Transmission Owner's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for the Generating Facility's Trial Operation or to export power from the Generating Facility on the specified dates, unless Interconnection Customer would have been able to commence use of Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for Generating Facility's Trial Operation or to export power from the Generating Facility, but for Transmission Owner's delay; (2) Transmission Owner's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into a GIA with Transmission Owner or any cause beyond Transmission Owner's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the Applicable Reliability Council. Transmission Provider reserves the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Generating Facility. If the Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, Interconnection Customer shall immediately notify Transmission Owner's system operator, or its designated representative. The requirements of this paragraph shall not apply to non-synchronous generators.

**5.5 Equipment Procurement.** If responsibility for construction of Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by Transmission Owner, then Transmission Owner shall commence design of Transmission Owner'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 Interconnection Facilities Study pursuant to the ERAS Agreement;

**5.5.2** Transmission Owner 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 11.7 by the dates specified in Appendix B, Milestones.

**5.6 Construction Commencement.** Transmission Owner shall commence construction of Transmission Owner'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 Owner's Interconnection Facilities and Network Upgrades;

**5.6.3** Transmission Owner 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 11.7 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. Parties may, at any time, request a progress report from other Parties. If, at any time, Interconnection Customer

determines that the completion of Transmission Owner's Interconnection Facilities and Network Upgrades will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider and Transmission Owner of such later date upon which the completion of Transmission Owner's Interconnection Facilities and Network Upgrades will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the 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 Generating Facility and Interconnection Customer's Interconnection Facilities may operate prior to the completion of Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this GIA ("Limited Operation"). Transmission Owner shall permit Interconnection Customer to operate the Generating Facility and Interconnection Customer's Interconnection Facilities under Limited Operation in accordance with the results of such studies performed by Transmission Provider.

**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 Owner 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 Owner shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Transmission Owner's Review.** Transmission Owner'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 Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Transmission Owner, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with

the technical specifications, operational control, and safety requirements of Transmission Owner.

**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 Owner "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the 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 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 Generating Facility. The Interconnection Customer shall provide Transmission Owner specifications for the excitation system, automatic voltage regulator, Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

**5.10.4 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date. Interconnection Customer shall submit a completed copy of the Generating Facility data requirements contained in Attachment A to Appendix 1 to Attachment AW. It shall also include any additional information provided to Transmission Provider for the Interconnection Facilities Studies. Information in this submission shall be the most current Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the ERAS Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission System based on the actual data submitted pursuant to this Article 5.10.4. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**5.10.5 Information Supplementation.** Prior to the Commercial Operation Date, or as soon as possible thereafter, the Parties shall supplement their information submissions described above in this Article 5 with any and all "as-built" 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 Generating Facility



as required by Good Utility Practice such as an open circuit "step voltage" test on the Generating Facility to verify proper operation of the Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of 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 Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Generating Facility terminal or field voltages is provided. Generating Facility testing shall be conducted and results provided to the Transmission Provider for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide Transmission Owner and Transmission Provider any information changes due to equipment replacement, repair, or adjustment. Transmission Owner shall provide the Interconnection Customer and Transmission Provider any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information no later than thirty (30) Calendar Days after the date of the equipment replacement, repair or adjustment.

**5.11 Transmission Owner's Interconnection Facilities Construction.** Transmission Owner's Interconnection Facilities and Network Upgrades shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Transmission Owner shall deliver to Interconnection Customer the following "as-built" drawings, information and documents for Transmission Owner's Interconnection Facilities and Network Upgrades [include appropriate drawings and relay diagrams].

Transmission Owner will obtain control of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to any 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 Generating Facility with the Transmission System; (ii) operate and maintain the 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 GIA. 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 Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Owner, Transmission Owner shall at Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove Transmission 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 Owner to construct, and Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Transmission System which are included in the Base Case of the Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.**

**5.16.1 Suspension by Interconnection Customer.** Interconnection Customer, upon written notice to Transmission Provider and Transmission Owner, may suspend, for a period not to exceed 18 months, work by Transmission Owner associated with the construction and installation of Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this GIA under the following terms and conditions,

- i. Construction of Network Upgrades that are required to provide Interconnection Service to other Generating Facilities and for which Interconnection Customer shares cost responsibility cannot be suspended pursuant to this Article 5.16.
- ii. If the suspension period begins later than or extends beyond six months following the Effective Date of the GIA, the Interconnection Customer shall provide to the Transmission Provider security in the form described under Article 11.7 in an amount equal to the greater of:

- a. the Interconnection Customer's allocated share of Network Upgrade(s) as calculated pursuant to Section 4.2.2 of Attachment AW and as identified in Appendix A of this GIA unless previously provided under Section 8.9 of this Attachment AW; or
  - b. \$5,000,000 if the Generating Facility is greater than or equal to 100 MW; or
  - c. \$2,500,000 if the Generating Facility is greater than or equal to 50 MW and less than 100 MW; or
  - d. \$1,000,000 if the Generating Facility is less than 50 MW; or
  - e. \$500,000 if the Generating Facility is less than or equal to 2 MW.
- iii. In the event that this GIA is terminated under this Article 5.16, the Transmission Provider shall retain the security provided pursuant to Article 5.16.1.ii in the amount required to meet Interconnection Customer's obligations pursuant to this GIA. Any difference between the security provided and Interconnection Customer's obligations shall be settled pursuant to Article 12.
- iv. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16 and has not requested Transmission Owner to resume the work required under this GIA on or before the expiration of 18 months from the date of suspension, this GIA shall be deemed terminated unless Article 16 applies.
- v. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16 and has not complied requirements of Article 5.16.1.ii on or before the later of the expiration of 6 months following the effective date of the GIA or the date the suspension is requested, this GIA shall be deemed terminated by the Interconnection Customer.
- vi. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Owner's safety and reliability criteria. Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Owner and Transmission Provider (i) have incurred pursuant to this GIA prior to the suspension and (ii) incur 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 Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Owner shall obtain Interconnection Customer's authorization to do so. Transmission Owner and Transmission Provider shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs.



vii. In the event Interconnection Customer provides written notice to resume work for those facilities for which work has been suspended pursuant to this Article 5.16.1, the Interconnection Customer shall receive a refund, including interest, of any payments provided in accordance with Article 5.16.1.ii in excess of the sum of Interconnection Customer's allocated share of Network Upgrade(s) costs and any costs incurred under Article 5.16.1.vi within 30 days of the date of such notice.

**5.16.2 Exemptions.** The Interconnection Customer shall be exempt from the payments described under Article 5.16.1.ii.b, 5.16.1.ii.c and 5.16.1.ii.d if the following occurs or Suspension is requested for the following reasons:

- i. Construction of a Network Upgrade or the Generating Facility is prevented by order of a Governmental Authority; or
- ii. Transmission Provider determines through an Interconnection Study that the Suspension does not qualify as a modification that has an impact on the cost or timing of any Interconnection Request with an equal or later Queue priority date (Material Modification); or
- iii. Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction of a Network Upgrade.

## **5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by Interconnection Customer to Transmission Owner for the installation of Transmission Owner's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Generating Facility will pass to another party prior to the transmission of the electricity on the Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to Transmission Owner for Transmission Owner's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive

list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Owner's request, Interconnection Customer shall provide Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Owner represents and covenants that the cost of Transmission Owner's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

### **5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed**

**Upon the Transmission Owner.** Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Owner from the cost consequences of any current tax liability imposed against Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Transmission Owner under this GIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Transmission Owner.

Transmission Owner shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this GIA unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

### **5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the Parties, this means that Interconnection Customer will pay Transmission Owner, in addition to the amount paid for the Interconnection Facilities, and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Transmission Owner as a

result of payments or property transfers made by Interconnection Customer to Transmission Owner under this GIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on Transmission Owner's composite federal and state tax rates at the time the payments or property transfers are received and Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Owner's current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Transmission Owner under this GIA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Transmission Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Transmission Owner shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Owner shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Transmission Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this GIA terminates and Transmission Owner retains ownership of the

Interconnection Facilities and Network Upgrades, Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Transmission Owner, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that Transmission Owner's receipt of payments or property constitutes income that is subject to taxation, Transmission Owner shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Owner shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Owner, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Transmission Owner for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Transmission Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Owner under the terms of this GIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Owner under the terms

of this GIA is not taxable to Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Transmission Owner are not subject to federal income tax, or (d) if Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Transmission Owner pursuant to this GIA, Transmission Owner shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amount paid by Interconnection Customer to Transmission Owner for such taxes which Transmission Owner did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Transmission Owner refunds such payment to Interconnection Customer, and
- (iii) with respect to any such taxes paid by Transmission Owner, any refund or credit Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Owner may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Interconnection Customer may be required to reimburse Transmission Owner under the terms of this GIA. Interconnection Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be



deferred, no amount shall be payable by Interconnection Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner.

**5.18 Tax Status.** All Parties shall cooperate with each other to maintain their tax status. Nothing in this GIA is intended to adversely affect any Party's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

**5.19 Modification.**

**5.19.1 General.** Each Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect another Party's facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties 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 Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Generating Facility Modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Owner'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 GIA 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 Owner makes to Transmission Owner's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Owner'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.

**5.20 Delays .** If a Network Upgrade(s) identified in Appendix A is delayed during the construction process and the Commercial Operation Date for the Generating Facility identified in Appendix B is no longer feasible, the Commercial Operation Date in Appendix B may be modified to no later than six (6) months following the in-service date for the last Network Upgrade identified in Appendix A.

## **Article 6. Testing and Inspection**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, Transmission Owner shall test Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the 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 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 Generating Facility with the Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

**6.3 Right to Observe Testing.** Each Party shall notify the other Parties in advance of its performance of tests of its Interconnection Facilities. The other Parties have 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 another Parties' 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 Parties' System Protection Facilities and other protective equipment; and (iii) review another Parties' maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Any Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by another 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 any 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 GIA.

## **Article 7. Metering**

- 7.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Unless otherwise agreed by the Parties, Transmission Owner shall install Metering Equipment at the Point of Interconnection prior to any operation of the Generating Facility and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Generating Facility shall be measured at or, at Transmission Owner's option, compensated to, the Point of Interconnection. Transmission Owner shall provide metering quantities, in analog and/or digital form, to Interconnection Customer and Transmission Provider on a same-time basis using communication as provided in Article 8. 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 Owner'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 GIA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Transmission Owner 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 Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.
- 7.4 Testing of Metering Equipment.** Transmission Owner shall inspect and test all Transmission Owner-owned Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by Interconnection Customer, Transmission Owner shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than every two (2) years. Transmission Owner 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 Owner's failure to maintain, then Transmission Owner 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 Owner 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 Owner 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 Generating Facility to the Point of Interconnection.

## **Article 8. Communications**

**8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with Transmission Owner's Transmission System dispatcher or representative designated by Transmission Owner. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its 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 Owner as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Generating Facility to the location(s) specified by Transmission Owner. Any required maintenance of such communications equipment shall be performed by Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.

**8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of the 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 Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Owner 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 Owner. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Owner.

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 (i) site-specific meteorological data including:

temperature, wind speed, wind direction, relative humidity and atmospheric pressure and (ii) site specific geographic data including location (latitude and longitude) of the Variable Energy Resource and location (latitude and longitude) and height of the facility that will contain the equipment necessary to provide the meteorological data for such resource. 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, geographical and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such requirements for meteorological, geographical and forced outage data are set forth in Appendix C, Interconnection Details, of this GIA, as they may change from time to time.

**8.5 Phasor Measurement Unit (PMU) Recording Equipment.** Prior to the Initial Synchronization Date of a Generating Facility having a Generating Facility Capacity equal to or greater than 50 MW, phasor measurement recording and communications equipment shall be installed by the Transmission Owner at Interconnection Customer's expense that is capable of gathering phasor measurements as specified in the PMU Communications Handbook. To the extent similar quality equipment is being added or already exists, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment can be utilized to satisfy this requirement if the equipment is located on the Transmission Owner's side of the Point of Change of Ownership and if mutually agreed to by the Parties. The phasor measurement equipment shall be installed at the Transmission Owner's side of the Point of Change of Ownership and become part of the Transmission Owner Interconnection Facilities. Phasor measurements shall be streamed in IEEE C37.118 or equivalent format and be provided to the Transmission Provider. This data shall at least be sufficient to determine (i) positive-sequence voltage magnitude and angle, (ii) positive-sequence current magnitude and angle, (iii) frequency, and (iv) rate of change of frequency. Such data shall be transmitted over the data circuit(s) as indicated in Article 8.1.

Each Party will promptly advise the other Parties 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 applicable Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

## **Article 9. Operations**

- 9.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to the other Parties all information that may reasonably be required by the other Parties 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 and Transmission Owner in writing of the Control Area in which the Generating Facility will be located. If Interconnection Customer elects to locate the Generating Facility in a Control Area other than the Control Area in which the 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 GIA, 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 Generating Facility in the other Control Area.
- 9.3 Transmission Provider and Transmission Owner Obligations.** Transmission Provider and Transmission Owner shall cause the Transmission System and Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this GIA. Transmission Provider or Transmission Owner may provide operating instructions to Interconnection Customer consistent with this GIA and Transmission Owner's operating protocols and procedures as they may change from time to time. Transmission Provider and Transmission Owner will consider changes to its operating protocols and procedures proposed by Interconnection Customer.
- 9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA. Interconnection Customer shall operate the 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 GIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. Any Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this GIA.
- 9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of the Generating Facility to the Transmission System.
- 9.6 Reactive Power and Primary Frequency Response.**
- 9.6.1 Power Factor Design Criteria.**
- 9.6.1.1 Synchronous Generation.** Interconnection Customer shall design the 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 synchronous generators in the Control Area on a comparable basis.

**9.6.1.2 Non-Synchronous Generation.** Interconnection Customer shall design the Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all non-synchronous generators in the Control Area on a comparable basis. This power factor range standard shall be dynamic and can be met 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, or a combination of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that had not executed an interconnection facilities study agreement as of September 21, 2016.

**9.6.2 Voltage Schedules.** Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Transmission Provider and/or Transmission Owner shall require Interconnection Customer to operate the Generating Facility to produce or absorb reactive power within the design limitations of the Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). Transmission Owner's voltage schedules shall treat all sources of reactive power in the Control Area in an equitable and not unduly discriminatory manner. Transmission Owner 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 Generating Facility to maintain the specified output voltage or power factor at the Point of Interconnection within the design limitations of the 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 Transmission Owner.

**9.6.2.1 Voltage Regulators.** Whenever the Generating Facility is operated in parallel with the Transmission System and voltage regulators are capable of operation, Interconnection Customer shall operate the Generating Facility with its voltage regulators in automatic operation. If the Generating Facility's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify Transmission Owner's system operator, or its designated representative, and ensure that such Generating Facility's reactive power production or absorption (measured in Mvars) are within the design capability of the Generating Facility's generating unit(s) and steady state stability limits. Interconnection Customer shall not cause its Generating Facility to disconnect automatically or instantaneously from the Transmission System

or trip any generating unit comprising the Generating Facility for an under or over frequency condition in accordance with Good Utility Practice and Applicable Reliability Standards.

**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 Generating Facility when Transmission Owner requests Interconnection Customer to operate its Generating Facility outside the range specified in Article 9.6.1. Payments shall be pursuant to Article 11.8 or such other agreement to which the Parties have otherwise agreed; provided however, to the extent the Tariff contains a provision providing for such compensation, that Tariff provision shall control.

**9.6.4 Primary Frequency Response.** Interconnection Customer shall ensure the primary frequency response capability of its Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Interconnection Customer shall operate the Generating Facility consistent with the provisions specified in Sections 9.6.4.1 and 9.6.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Generating Facilities.



**9.6.4.1 Governor or Equivalent Controls.** Whenever the Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Generating Facility's governor or equivalent controls to a minimum whenever the Generating Facility is operated in parallel with the Transmission System.

**9.6.4.2 Timely and Sustained Response.** Interconnection Customer shall ensure that the Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

**9.6.4.3 Exemptions.** Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Sections 9.6.4,

9.6.4.1, and 9.6.4.2 of this Agreement. Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 9.6.4, but shall be otherwise exempt from the operating requirements in Sections 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

**9.6.4.4 Electric Storage Resources.** Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Appendix C of its GIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 9.6.4, 9.6.4.1, 9.6.4.2 and 9.6.4.3 of this Agreement. Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **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 all 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 Parties of such removal.

**9.7.1.2 Outage Schedules.** Transmission Provider shall post scheduled outages of its transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the 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 another 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 Parties, 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 and/or Transmission Owner may require Interconnection



Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's and/or Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

9.7.2.1 The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission System;

9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider or Transmission Owner 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 or Transmission Owner shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider or Transmission Owner 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 Owner;

9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the 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 Generating Facility as required by the Applicable Reliability Council to ensure "ride through" capability of the Transmission System. 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.

**9.7.3.1 Frequency Ride Through and Voltage Ride Through for a Generating**

**Facility no larger than 20 MW.** For Generating Facilities no larger than 20 MW, the Interconnection Customer shall ensure “frequency ride through” capability and “voltage ride through” capability of its Generating Facility. The Interconnection Customer shall enable these capabilities such that its 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 6.1 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 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 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 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 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.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Owner shall install at Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Owner’s Interconnection Facilities or the Transmission

System as a result of the interconnection of the Generating Facility and the 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 Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Owner'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 Generating Facility and the Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the 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 Generating Facility and Interconnection Customer's other equipment if conditions on the Transmission System could adversely affect the Generating Facility.

- 9.7.6 Power Quality.** No 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 Parties 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 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 Owner'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 Owner, 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 Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.
- 9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Generating Facility or the 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 Owner Obligations.** Transmission Owner shall maintain the Transmission System and Transmission Owner's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA.
- 10.2 Interconnection Customer Obligations.** Interconnection Customer shall maintain the Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA.
- 10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Generating Facility and the Interconnection Facilities.
- 10.4 Secondary Systems.** Each Party shall cooperate with the others 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 another Party. Each Party shall provide advance notice to the other Parties 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 Owner's Interconnection Facilities.

## **Article 11. Performance Obligation**

- 11.1 Interconnection Customer Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control Interconnection Customer's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at its sole expense.
- 11.2 Generating Facility.** Interconnection Customer shall install the Generating Facilities described in Appendix C no later than the Commercial Operation Date(s) specified in Appendix B.
- 11.3 Transmission Owner's Interconnection Facilities.** Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Owner's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.

**11.4 Network Upgrades and Distribution Upgrades.** All Network Upgrades and Distribution Upgrades described in Appendix A shall be constructed in accordance with the process set forth in Section VI of Attachment O. 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 that are associated with that Transmission Owner's system. The Distribution Upgrades and Network Upgrades described in Appendix A shall be solely funded by Interconnection Customer unless Transmission Owner elects to fund the capital for the Distribution Upgrades or Network Upgrades.

**11.4.1 Agreement to Fund Shared Network Upgrades.** Interconnection Customer agrees to fund Shared Network Upgrades, as determined by Transmission Provider. Where applicable, payments to fund Shared Network Upgrade(s) that are made to Transmission Provider by Interconnection Customer will be disbursed by Transmission Provider to the appropriate entities that are constructing the Shared Network Upgrades in accordance with Attachment O of the Tariff. In the event that Interconnection Customer fails to meet its obligation to fund Shared Network Upgrades, Transmission Owner and Transmission Provider shall not be responsible for the Interconnection Customer's funding obligation.

**11.4.2 Contingencies Affecting Network Upgrades, System Protection Facilities and Distribution Upgrades.** Network Upgrades, System Protection Facilities and Distribution Upgrades that are required to accommodate the Generating Facility may be modified because (a) a higher queued Interconnection Request withdrew or was deemed to have withdrawn, (b) the GIA associated with a higher queued Interconnection Request was terminated, or (c) changes occur in equipment design standards or reliability criteria giving rise to the need for restudy. The higher queued Interconnection Requests that could impact the Network Upgrades, System Protection Facilities and Distribution Upgrades required to accommodate the Generating Facility, and possible modifications that may result from the above listed events affecting the higher queued Interconnection Requests, to the extent such modifications are reasonably known and can be determined, and estimates of the costs associated with such required Network Upgrades, System Protection Facilities and Distribution Upgrades, shall be provided in Appendix A.

**11.4.3 Agreement to Restudy.** The Interconnection Customer agrees to allow the Transmission Provider to perform a restudy in accordance with Sections 8.8 and 8.13 of Attachment AW if the Transmission Provider determines a restudy is required because one or more of the contingencies in Article 11.4.2 occurred. If a restudy is required, the Transmission Provider shall provide notice to Interconnection Customer. The Parties agree to amend Appendix A to this GIA in accordance with Article 30.10 to reflect the results of the restudy.



## **11.5 Transmission Credits.**

**11.5.1 Credits for Amounts Advanced for Network Upgrades.** Interconnection Customer shall be entitled to compensation in accordance with Attachment Z2 of the Tariff for any Network Upgrades including any tax gross-up or other tax-related payments associated with Network Upgrades, and not refunded to Interconnection Customer pursuant to Article 5.17.8.

**11.5.2 Special Provisions for Affected Systems.** Unless Transmission Provider provides, under the GIA, 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.

**11.5.3** Notwithstanding any other provision of this GIA, 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 Generating Facility.

## **11.6 Initial Payment.**

Interconnection Customer shall make an initial payment ("Initial Payment") equal to the greater of a) twenty (20) percent of the total cost of Network Upgrades (excluding JTIQ Upgrade costs), Shared Network Upgrades, Transmission Owner Interconnection Facilities and/or Distribution Upgrades listed in Appendix A or b) \$4,000/MW of the size of the Generating Facility. Any financial security provided in Section 8.2 of Attachment AW will be applied to this requirement. The Initial Payment shall be provided to Transmission Owner or Transmission Provider as required in Appendix B by Interconnection Customer pursuant to this Article 11.6 within the later of a) thirty (30) days of the execution of the GIA by all Parties, or b) thirty (30) days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer, or c) thirty (30) days of the filing if the GIA is filed unexecuted and the Initial Payment is not being protested by Interconnection Customer. If this GIA is terminated, then the Initial Payment shall be refunded with accrued interest calculated from the date of the receipt of the Initial Payment to the date of the refund, if any, to the Interconnection Customer less:

- a. any costs that have been incurred for the construction of the facilities specified in Appendix A;
- b. any funds necessary for the construction of those Shared Network Upgrades, or Network Upgrades, that would be assigned to another



interconnection customer where such upgrade costs would not have been assigned but for the termination of the GIA; and

- c. any costs that have been incurred for the construction of those Shared Network Upgrades, or Network Upgrades, that are no longer required due to the termination of the GIA that were paid for by another interconnection customer.

**11.7A Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of Interconnection Facilities, Network Upgrades, or Distribution Upgrades as defined in Appendix A of this GIA, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, procuring and installing the applicable portion of Interconnection Facilities, Network Upgrades, or Distribution Upgrades as defined in Appendix A of this GIA and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider or Transmission Owner for these purposes. If Interconnection Customer requests suspension pursuant to Article 5.16, Interconnection Customer may be required to provide Transmission Provider security in the form described above for its allocated share of Network Upgrade(s) costs as calculated pursuant to Section 4.2.2 of Attachment AW and defined in Appendix A of this GIA.

In addition:

**11.7A.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.7A.2** The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.7A.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.7B Provision of Security for JTIQ Upgrades.** If the Transmission Provider determines, pursuant to Section 3.6.4(A) of Attachment AW that the Interconnection Request impacts one or more of the JTIQ Upgrades, Interconnection Customer is required to provide security in accordance with Appendix I to this GIA.

**11.8 Interconnection Customer Compensation.** If Transmission Provider or Transmission Owner 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 GIA, 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 the Tariff. Interconnection Customer shall serve Transmission Provider 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 GIA, 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.

#### **11.8.1 Interconnection Customer Compensation for Actions During Emergency**

**Condition.** Transmission Provider shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.8.

### **Article 12. Invoice**

The terms of this Article 12 apply to billing between the Parties for construction and operation and maintenance charges. All other billing will be handled according to the Tariff.

**12.1 General.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this GIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of Interconnection Facilities and the Network Upgrades, the Interconnection Customer shall receive an invoice of the final cost due under this GIA, including any applicable cost due to termination, which 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. Interconnection Customer shall receive a refund of any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by either Party will not constitute a waiver of any rights or claims either Party may have under this GIA.

**12.4 Disputes.** In the event of a billing dispute between the Parties, Transmission Owner, and Transmission Provider shall continue to provide Interconnection Service under this GIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and

(ii) pays to Transmission Owner 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 Owner may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii).

### **Article 13. Emergencies**

**13.1 Definition.** “Emergency Condition” shall mean a condition or situation: (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 the Transmission System, or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, Transmission Owner's Interconnection Facilities; or (4) 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 Generator Interconnection Agreement to possess black start capability.

**13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of NERC, the Applicable Reliability Council, Transmission Provider, Applicable Laws and Regulations, and any emergency procedures agreed to by the Joint Operating Committee.

**13.3 Notice.** Transmission Provider or Transmission Owner shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Owner's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider and Transmission Owner promptly when it becomes aware of an Emergency Condition that affects the Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Owner'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 Owner'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 Owner, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Generating Facility or Interconnection Customer's

Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or Transmission Owner or otherwise regarding the Transmission System.

### **13.5 Transmission Provider and Transmission Owner Authority.**

**13.5.1 General.** Transmission Provider and/or Transmission Owner may take whatever actions or inactions with regard to the Transmission System or Transmission Owner'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 Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider and Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider and/or Transmission Owner may, on the basis of technical considerations, require the 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 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 Generating Facility and Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's and Transmission Owner's operating instructions concerning Generating Facility real power and reactive power output within the manufacturer's design limitations of the 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 and/or Transmission Owner may reduce Interconnection Service or disconnect the 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 and/or Transmission Owner can schedule the reduction or disconnection in advance, Transmission Provider and/or Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider and/or Transmission Owner shall coordinate with Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer, Transmission Provider and/or Transmission Owner. 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 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 GIA and the GIP, Interconnection Customer may take actions or inactions with regard to the Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the 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 Owner's Interconnection Facilities. Transmission Provider and/or Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.8.1 of this GIA, no Party shall be liable to the other Parties 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 GIA 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 GIA 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 2005, or the Public Utility Regulatory Policies Act of 1978 as amended by the 2005 Energy Policy Act.

#### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this GIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This GIA 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 GIA, any notice, demand or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another shall be effective when

delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Any Party may change the notice information in this GIA 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 any Party to another 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 Parties 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** No 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 Parties in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

**Article 17. Default**

**17.1 Default.**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this



GIA or the result of an act or omission of another 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 GIA 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 GIA, 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 GIA.

## **Article 18. Indemnity, Consequential Damages and Insurance**

**18.1 Indemnity.** Each Party shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, penalties or fines imposed under Applicable Laws and Regulations, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Party's breach of any of the representations or warranties made in, or failure of the indemnifying Party or any of its subcontractors to perform any of its obligations under, this GIA, or (ii) the negligence or willful misconduct of the indemnifying Party or its contractors; provided, however, that no Party shall have any indemnification obligations under this Section 18.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Party seeking indemnity.

**18.1.1 Indemnified Person.** If an indemnified person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this Article 18, the amount owing to the indemnified person shall be the amount of such indemnified person's actual Loss, net of any insurance or other recovery.



**18.1.3 Indemnity Procedures.** Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnified Person shall cooperate with the indemnifying Party with respect to the matter for which indemnification is claimed. The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Except as otherwise provided in this Article 18 and other than Liquidated Damages heretofore described, the liability of a Party under this GIA shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this Section 18.2 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this GIA. The provisions of this Section 18.2 shall survive the termination or expiration of this GIA.

**18.3 Insurance.** Interconnection Customer and Transmission Owner shall at their own expense, maintain in force throughout the period of this GIA, and until released by all other Parties, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The minimum limits for the Employers' Liability insurance shall be One Million Dollars (\$1,000,000) each accident bodily injury by accident, One Million Dollars (\$1,000,000) each employee bodily injury by disease, and One Million Dollars (\$1,000,000) policy limit bodily injury by disease.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards (if applicable), independent contractors coverage, coverage for pollution (if exposure is present) and punitive or exemplary damages, with minimum limits of One Million Dollars (\$1,000,000) each occurrence/Two Million Dollars (\$2,000,000) general aggregate and Two Million Dollars (\$2,000,000) products and completed operations 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 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) each occurrence/Twenty Million Dollars (\$20,000,000) general aggregate.

**18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this GIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

**18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each

insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

**18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this GIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed to by all Parties.

**18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Interconnection Customer and Transmission Owner are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

**18.3.9** Within ten (10) days following execution of this GIA, 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 and Transmission Owner shall provide certification of all insurance required in this GIA, executed by each insurer or by an authorized representative of each insurer to the Other Party Group.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this GIA.

## **Article 19. Assignment**

**19.1 Assignment.** This GIA may be assigned by any Party only with the written consent of the other Parties; provided that any Party may assign this GIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this GIA; and provided further that Interconnection Customer shall have the right to assign this GIA, without the consent of Transmission Provider or Transmission Owner, for

collateral security purposes to aid in providing financing for the Generating Facility, provided that Interconnection Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner 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 11.7 and 18.3. Any attempted assignment that violates this article is void and ineffective. Any assignment under this GIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **Article 20. Severability**

**20.1 Severability.** If any provision in this GIA 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 GIA; provided that if Interconnection Customer (or any third party, but only if such third party is not acting at the direction of Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Negotiated Option (Article 5.1.3), 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 any of the Parties to another prior to the execution of this GIA.

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 any Party, a 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 GIA, and for a period of three (3) years after the expiration or termination of this GIA, 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 GIA; or (6) is required, in accordance with Article 22.1.7 of the GIA, 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 GIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No 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 GIA, 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 another Party. The disclosure by any Party to another Party of Confidential Information shall not be deemed a waiver by the disclosing 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, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another 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 another Party under this GIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a 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 Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this GIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this GIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another 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.** In the instance where Transmission Owner is a Federal Power Agency, as specified in the opening paragraph of this Agreement, then this Section 22.1.9 shall not apply to Transmission Owner. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. Section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this GIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by

FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying another Party to this GIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the GIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this GIA ("Confidential Information") shall not be disclosed by another Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this GIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**22.1.12** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **Article 23. Environmental Releases**

**23.1** Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any Governmental Authorities addressing such events.

### **Article 24. Information Requirements**

**24.1 Information Acquisition.** Transmission Provider and Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective



facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by Transmission Provider.** The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

## **Article 25. Information Access and Audit Rights**

**25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Parties to: (i) verify the costs incurred by the disclosing Party for which the other Parties are responsible under this GIA; and (ii) carry out its obligations and responsibilities under this GIA. 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 GIA.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this GIA 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 Parties receiving such notification to allege a cause for anticipatory breach of this GIA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this GIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to another Party, to audit at its own expense that other Party's accounts and records pertaining to either Party's performance or either Party's satisfaction of obligations under this GIA. Such audit rights shall include audits of the other Party's costs, calculation of invoiced amounts, Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation on the Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this GIA. 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 Owner's Interconnection Facilities, and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Owner'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 any Party's performance or satisfaction of all obligations under this GIA 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 GIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this GIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this GIA in providing such services and each Party shall remain primarily liable to the other Parties 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 GIA. The hiring Party shall be fully responsible to the other Parties 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 Owner 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 GIA. Any applicable obligation imposed by this GIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

**Article 27. Disputes**

**27.1 Submission.** In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with this GIA or its performance, the Parties agree to resolve such dispute using the dispute resolution procedures of the Generator Interconnection Procedures.

**Article 28. Representations, Warranties, and Covenants****28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the 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 GIA 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 GIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this GIA, to become a Party hereto and to perform its obligations hereunder. This GIA 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 GIA 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 GIA 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 GIA, and it will provide to any Governmental Authority notice of any actions under this GIA that are required by Applicable Laws and Regulations.

**Article 29. Joint Operating Committee**

**29.1 Joint Operating Committee.** At least six (6) months prior to the expected Initial Synchronization Date, Interconnection Customer, Transmission Owner and Transmission Provider shall each appoint one representative and one alternate to the Joint Operating Committee. Each Party shall notify the other Parties 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 any 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 GIA. All Parties 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 Owner'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 Generating Facility and other facilities that impact the normal operation of the interconnection of the 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 GIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this GIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this GIA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This GIA, 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 GIA, 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 GIA), 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 GIA or such Appendix to this GIA, or such Section to Attachment AW or such Appendix to Attachment AW, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed

references to this GIA 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 GIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this GIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, a Party's compliance with its obligations under this GIA.

**30.5 No Third Party Beneficiaries.** This GIA 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 GIA to insist, on any occasion, upon strict performance of any provision of this GIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this GIA 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 GIA. Termination or Default of this GIA 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 GIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this GIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this GIA.

**30.8 Multiple Counterparts.** This GIA may be executed in three 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 GIA by a written instrument duly executed by each of the Parties.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this GIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this GIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this GIA with respect to any rates, terms and conditions,

charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this GIA pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this GIA shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This GIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No 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, another Party.

IN WITNESS WHEREOF, the Parties have caused this GIA to be executed by their respective authorized officials, and copies delivered to each Party, to become effective as of the Effective Date.

**SOUTHWEST POWER POOL, INC.**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Transmission Owner]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**APPENDIX A TO GIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Transmission Owner's Interconnection Facilities]:**

**2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Shared Network Upgrades]:**

**(c) [insert Contingent Facilities]:**

**3. Distribution Upgrades:**

**4. *Type and Amount of* Interconnection Service:**

**(a) *Maximum Injection Capability at the POI:* \_\_\_\_\_ MW**

**(b) *Type (check only one)***

**☐ *Energy Resource Interconnection Service***

**☐ *Network Resource Interconnection Service***

***Network Resource Deliverability at the POI:* \_\_\_\_\_ MW**

***Deliverability Area associated with Network Resource Deliverability:***

**5. Construction Option Selected by Customer:**

**6. Permits, Licenses, and Authorizations:**

**7. Description of the Point of Change of Ownership:**

**8. Description of the Point of Interconnection:**

**9. Higher-Queued Interconnection Customers:**

**10. Candidate Incremental Long-Term Congestion Rights:**

**\* Source \_\_\_\_\_**

**\* Sink \_\_\_\_\_**

**\* Candidate Incremental LTCR MW \_\_\_\_\_**

\* Term (years from in-service date of Network Upgrade) \_\_\_\_\_

**11. JTIQ Upgrades**

[To be included in GIA if Interconnection Customer is responsible for a portion of a portfolio of JTIQ Upgrades] Interconnection Customer is subject to the JTIQ Generator Charge in accordance with Attachment AV of the SPP Tariff and Appendix I of this GIA.

JTIQ Security amount:

A. Transmission Provider:

B. MISO:

**APPENDIX B TO GIA**

**Milestones**

## **APPENDIX C TO GIA**

### **Interconnection Details**

#### **1. Description of Generating Facility:**

**(a) Nameplate Capacity (AC MW)**

#### **Wind Generating Facility Output Reduction**

To protect the reliability of the Transmission System, a Generating Facility that is a wind plant shall be capable of reducing its generation output in increments of no more than fifty (50) MW in five (5) minute intervals. The requirements may be met by using: (a) SCADA control of circuit breakers protecting wind farm collector distribution circuits, (b) automatic control of wind turbine power output, or (c) a combination of (a) and (b).

#### **Inverter-Based Resource EMT Study Results Mitigations**

If an Electromagnetic Transient Study is determined to be required by the Transmission Provider and the study results reveal an Adverse System Impact to the Transmission System, mitigation(s) shall be the responsibility of the Interconnection Customer and shall be implemented prior to the injection of power into the Transmission System.

## **APPENDIX D TO GIA**

### **Security Arrangements Details**

Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. FERC will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**APPENDIX E TO GIA**

**Commercial Operation Date**

**[Date]**

\_\_\_\_\_,  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

**[Transmission Owner Address]**

Re: \_\_\_\_\_ 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 Generating Facility, effective as of **[Date plus one day]**.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**APPENDIX F TO GIA**

**Addresses for Delivery of Notices And Billings**

**Notices:**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

\_\_\_\_\_  
Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Billings and Payments:** [Specify addresses for construction invoices, O&M invoices and settlement of ancillary services]

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936



Phone: \_\_\_\_\_  
Facsimile: 501-482-2022

\_\_\_\_\_  
Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Operational Communications: [Identify contacts for operations]**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936  
Phone: \_\_\_\_\_  
Facsimile: 501-482-2022

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**APPENDIX G TO GIA**  
**Requirements Of Generators Relying On Newer Technologies**

Appendix G sets forth requirements and provisions specific to a wind generating plant. All other requirements of this GIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

The following reactive power requirements apply only to a newly interconnecting wind generating plant that has executed a facilities study agreement as of September 21, 2016. A wind generating plant to which this provision applies shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

**Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or “GSU”), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static var Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the Transmission System at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

#### **Post-transition Period LVRT Standard**

All wind generating plants subject to FERC Order No. 661 and not covered by the transition period described above must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static var Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the Transmission System 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 GIA, if the Transmission Provider's System Impact Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

#### **iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

APPENDIX H TO GIA  
Reserved for future use

## APPENDIX I TO GIA

### Cost Responsibility for Portion of Costs for a Portfolio of JTIQ Upgrades

This Appendix I to this GIA is only applicable if an Interconnection Customer is assigned responsibility for a portion of costs for a portfolio of JTIQ Upgrades, as specified in Appendix A to this GIA.

#### A. Rate

The Interconnection Customer is required to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff.

#### B. Security

a. The Interconnection Customer is required to provide security in an amount equal to the portion of the total engineering and construction cost of the JTIQ Upgrades that serves as the basis for the JTIQ Generator Charge to the Interconnection Customer for those JTIQ Upgrades authorized for construction by the Transmission Provider (“JTIQ Upgrade Cost Responsibility”), as specified in Appendix A to this GIA (“JTIQ Security”). The JTIQ Security shall be provided to Transmission Provider and JTIQ Transmission Owner(s) in the MISO Region as follows:

i. The JTIQ Security portion for the JTIQ Upgrades authorized for construction by Transmission Provider shall be provided to Transmission Provider within the later of: (a) thirty (30) Calendar Days of the execution of this GIA by all Parties; (b) thirty (30) Calendar Days of acceptance of this GIA by FERC if this GIA is filed unexecuted at FERC and the JTIQ Security amount is being protested by Interconnection Customer; or (c) thirty (30) Calendar Days of the filing if the GIA is filed unexecuted and the JTIQ Security amount is not being protested by Interconnection Customer. The JTIQ Security, or any reduced amount applicable to this Interconnection Request, shall remain with Transmission Provider for the remaining term of the JTIQ Generator Charge for each JTIQ Upgrade authorized for construction by the Transmission Provider. At Interconnection Customer’s request, such JTIQ Security may be reduced to reflect decreased remaining JTIQ Upgrade Cost Responsibility applicable

to each JTIQ Upgrade authorized for construction by the Transmission Provider on the first anniversary of the In-Service Date of that upgrade and may continue to be reduced to reflect decreased remaining balance of JTIQ Upgrade Cost Responsibility each year over the term of the JTIQ Generator Charge for that JTIQ Upgrade.

1. The following forms of security are acceptable to the Transmission Provider:

- a. Letter of credit as specified in Appendix C to Attachment X of the Tariff,
- b. Cash;
- c. Surety bond issued by an insurer and acceptable to the Transmission Provider; or
- d. Guaranty in a form consistent with Appendix D of Attachment X of the Tariff.

ii. The JTIQ Security portion for the JTIQ Upgrades authorized for construction by MISO shall be provided by the Interconnection Customer to JTIQ Transmission Owner(s) in the MISO Region pursuant to the terms of the security agreement(s) entered into between the JTIQ Transmission Owner(s) and Interconnection Customer.

b. In the event that the JTIQ Upgrade Cost Responsibility of the Interconnection Customer subsequently increases, Interconnection Customer will be required to provide additional security associated with this increase to SPP within thirty (30) Calendar days of SPP's request for additional security.

c. In the event the Interconnection Customer fails to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff and Section 7 of the Tariff, Transmission Provider shall be entitled to draw on the portion of the JTIQ Security posted by the Interconnection Customer for the JTIQ Upgrades authorized for construction by Transmission Provider in the amount of missed payments.

d. JTIQ Security shall remain in place for the duration of the JTIQ Generator Charge applicable for each JTIQ Upgrade in accordance with Attachment AV of the Tariff and in accordance with the MISO Tariff. Any JTIQ Security provided by Interconnection Customer must be kept active and must be available to the



Transmission Provider and JTIQ Transmission Owner(s) in the MISO Region in the event that Interconnection Customer fails to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff and in accordance with the MISO Tariff. Any fees or costs associated with the provision of the JTIQ Security are the responsibility of the Interconnection Customer.

C. Default

Default of the Interconnection Customer under Section 7 of the Tariff will be considered a default under this GIA. Default of the Interconnection Customer of the JTIQ security agreement with JTIQ Transmission Owner(s) in the MISO Region will be considered a default under this GIA.

D. Billing and Payment

For administration of billing and related activities associated with the JTIQ Generator Charge for the JTIQ Upgrade Cost Responsibility, Section 7 of the Tariff shall be applicable. Interconnection Customer shall be treated as a Transmission Customer for the limited purpose of billing and related activities under Section 7 of the Tariff.

E. Termination

Termination of this GIA shall not relieve the Interconnection Customer of its obligation to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff.

**APPENDIX 43 TO ATTACHMENT AW**

**EXPEDITED RESOURCE ADEQUACY STUDY**

**GENERATOR INTERCONNECTION AGREEMENT (GIA)**

**(For use when Western-UGP is a Party to the GIA, as the Transmission Owner)**

## TABLE OF CONTENTS

### Recitals

### Article 1. Definitions

### Article 2. Effective Date, Term, and Termination

#### 2.1 Effective Date

#### 2.2 Term of Agreement

#### 2.3 Termination Procedures

##### 2.3.1 Written Notice

##### 2.3.2 Failure to Achieve Commercial Operation

##### 2.3.3 Default

##### 2.3.4 Notice to FERC

#### 2.4 Termination Costs

#### 2.5 Disconnection

#### 2.6 Survival

### Article 3. Regulatory Filings

#### 3.1 Filing

### Article 4. Scope of Service

#### 4.1 Interconnection Product Options

##### 4.1.1 Energy Resource Interconnection Service

###### 4.1.1.1 The Product

###### 4.1.1.2 Transmission Delivery Service Implications

##### 4.1.2 Network Resource Interconnection Service

###### 4.1.2.1 The Product

###### 4.1.2.2 Transmission Delivery Service Implications

#### 4.2 Provision of Service

#### 4.3 Performance Standards

#### 4.4 No Transmission Delivery Service

#### 4.5 Interconnection Customer Provided Services

Article 5. Interconnection Facilities Engineering, Procurement, and Construction

5.1 Options

5.1.1 Standard Option

5.1.2 Option to Build

5.1.3 Negotiated Option

5.2 General Conditions Applicable to Option to Build

5.3 Reserved

5.4 Power System Stabilizers

5.5 Equipment Procurement

5.6 Construction Commencement

5.7 Work Progress

5.8 Information Exchange

5.9 Limited Operation

5.10 Interconnection Customer's Interconnection Facilities ('ICIF')

5.10.1 Interconnection Customer's Interconnection Facility Specifications

5.10.2 Transmission Owner's Review

5.10.3 ICIF Construction

5.10.4 Updated Information Submission by Interconnection Customer

5.10.5 Information Supplementation

5.11 Transmission Owner's Interconnection Facilities Construction

5.12 Access Rights

5.13 Lands of Other Property Owners

5.14 Permits

5.15 Early Construction of Base Case Facilities

5.16 Suspension

5.16.1 Suspension by Interconnection Customer

5.16.2 Exemptions

5.17 Reserved

5.18 Tax Status

5.19 Modification

5.19.1 General

5.19.2 Standards

5.19.3 Modification Costs

5.20 Delays

Article 6. Testing and Inspection

6.1 Pre-Commercial Operation Date Testing and Modifications

6.2 Post-Commercial Operation Date Testing and Modifications

6.3 Right to Observe Testing

6.4 Right to Inspect

Article 7. Metering

7.1 General

7.2 Check Meters

7.3 Standards

7.4 Testing of Metering Equipment

7.5 Metering Data

Article 8. Communications

8.1 Interconnection Customer Obligations

8.2 Remote Terminal Unit

8.3 No Annexation

8.4 Provision of Data from a Variable Energy Resource

8.5 Phasor Measurement Unit (PMU) Recording Equipment

Article 9. Operations

9.1 General

9.2 Control Area Notification

9.3 Transmission Provider and Transmission Owner Obligations

9.4 Interconnection Customer Obligations

9.5 Start-Up and Synchronization

9.6 Reactive Power and Primary Frequency Response

9.6.1 Power Factor Design Criteria

9.6.1.1 Synchronous Generation

9.6.1.2 Non-Synchronous Generation

9.6.2 Voltage Schedules

9.6.2.1 Voltage Regulators

9.6.3 Payment for Reactive Power

9.6.4 Primary Frequency Response

9.6.4.1 Governor or Equivalent Controls

9.6.4.2 Timely and Sustained Response

9.6.4.3 Exemptions

9.6.4.4 Electric Storage Resources

9.7 Outages and Interruptions

9.7.1 Outages

9.7.1.1 Outage Authority and Coordination

9.7.1.2 Outage Schedules

9.7.1.3 Outage Restoration

9.7.2 Interruption of Service

9.7.3 Under-Frequency and Over Frequency Conditions

9.7.3.1 Frequency Ride Through and Voltage Ride Through for a  
Generating Facility no larger than 20 MW

9.7.4 System Protection and Other Control Requirements

9.7.4.1 System Protection Facilities

9.7.5 Requirements for Protection

9.7.6 Power Quality

9.8 Switching and Tagging Rules

9.9 Use of Interconnection Facilities by Third Parties

9.9.1 Purpose of Interconnection Facilities

9.9.2 Third Party Users

9.10 Disturbance Analysis Data Exchange

Article 10. Maintenance

- 10.1 Transmission Owner Obligations
- 10.2 Interconnection Customer Obligations
- 10.3 Coordination
- 10.4 Secondary Systems
- 10.5 Operating and Maintenance Expenses

Article 11. Performance Obligation

- 11.1 Interconnection Customer Interconnection Facilities
- 11.2 Generating Facility
- 11.3 Transmission Owner's Interconnection Facilities
- 11.4 Network Upgrades and Distribution Upgrades
  - 11.4.1 Agreement to Fund Shared Network Upgrades
  - 11.4.2 Contingencies Affecting Network Upgrades, System Protection Facilities and Distribution Upgrades
  - 11.4.3 Agreement to Restudy
- 11.5 Transmission Credits
  - 11.5.1 Credits for Amounts Advanced for Network Upgrades
  - 11.5.2 Special Provisions for Affected Systems
- 11.6 Initial Payment
- 11.7A Provision of Security
- 11.7B Provision of Security for JTIQ Upgrades
- 11.8 Advance Payment
- 11.9 Interconnection Customer Compensation
  - 11.9.1 Interconnection Customer Compensation for Actions During Emergency Condition

Article 12. Invoice

- 12.1 General
- 12.2 Final Invoice
- 12.3 Payment



12.4 Disputes

Article 13. Emergencies

13.1 Definition

13.2 Obligations

13.3 Notice

13.4 Immediate Action

13.5 Transmission Provider and Transmission Owner Authority

13.5.1 General

13.5.2 Reduction and Disconnection

13.6 Interconnection Customer Authority

13.7 Limited Liability

Article 14. Regulatory Requirements and Governing Law

14.1 Regulatory Requirements

14.2 Governing Law

Article 15. Notices

15.1 General

15.2 Billings and Payments

15.3 Alternative Forms of Notice

15.4 Operations and Maintenance Notice

Article 16. Force Majeure

16.1 Force Majeure

Article 17. Default

17.1 Default

17.1.1 General

17.1.2 Right to Terminate

Article 18. Indemnity, Consequential Damages and Insurance

18.1 Indemnity

18.1.1 Indemnified Person

18.1.2 Indemnifying Party

18.1.3 Indemnity Procedures

18.2 Consequential Damages

18.3 Interconnection Customer Insurance

18.4 Transmission Owner Insurance

Article 19. Assignment

19.1 Assignment

Article 20. Severability

20.1 Severability

Article 21. Comparability

21.1 Comparability

Article 22. Confidentiality

22.1 Confidentiality

22.1.1 Term

22.1.2 Scope

22.1.3 Release of Confidential Information

22.1.4 Rights

22.1.5 No Warranties

22.1.6 Standard of Care

22.1.7 Order of Disclosure

22.1.8 Termination of Agreement

22.1.9 Remedies

22.1.10 Disclosure to FERC, its Staff, or a State

Article 23. Environmental Releases

Article 24. Information Requirements

24.1 Information Acquisition

24.2 Information Submission by Transmission Provider

Article 25. Information Access and Audit Rights

25.1 Information Access

25.2 Reporting of Non-Force Majeure Events

25.3 Audit Rights

25.4 Audit Rights Periods

25.4.1 Audit Rights Period for Construction-Related Accounts and Records

25.4.2 Audit Rights Period for All Other Accounts and Records

25.5 Audit Results

Article 26. Subcontractors

26.1 General

26.2 Responsibility of Principal

26.3 No Limitation by Insurance

Article 27. Disputes

27.1 Submission

Article 28. Representations, Warranties, and Covenants

28.1 General

28.1.1 Good Standing

28.1.2 Authority

28.1.3 No Conflict

28.1.4 Consent and Approval

Article 29. Joint Operating Committee

29.1 Joint Operating Committee

Article 30. Miscellaneous

30.1 Binding Effect

30.2 Conflicts

30.3 Rules of Interpretation

30.4 Entire Agreement

30.5 No Third Party Beneficiaries

30.6 Waiver

30.7 Headings

30.8 Multiple Counterparts

30.9 Amendment

30.10 Modification by the Parties

30.11 Reservation of Rights

30.12 No Partnership

Appendix A - Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B – Milestones

Appendix C – Interconnection Details

Appendix D – Security Arrangements Details

Appendix E – Commercial Operation Date

Appendix F – Addresses for Delivery of Notices and Billings

Appendix G – Requirements of Generators Relying on Newer Technologies

Appendix H – Reserved for future use

Appendix I – Cost Responsibility for Portion of Costs for a Portfolio of JTIQ Upgrades

**EXPEDITED RESOURCE ADEQUACY STUDY**

**GENERATOR INTERCONNECTION AGREEMENT**

This Generator Interconnection Agreement (“Agreement”) is made and entered into this day of 20 , by and among , a organized and existing under the laws of the State/Commonwealth of (“Interconnection Customer” with a Generating Facility), Southwest Power Pool, Inc., a corporation organized and existing under the laws of the State of Arkansas (“Transmission Provider”) and Western Area Power Administration-Upper Great Plains Region (“Western-UGP”), a Federal power marketing agency organized under the United States Department of Energy (“Transmission Owner”). Interconnection Customer, Transmission Provider and Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

**Recitals**

**WHEREAS,** Transmission Provider functionally controls the operation of the Transmission System; and,

**WHEREAS,** Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Generating Facility in Appendix C to this Agreement; and,

**WHEREAS,** Transmission Owner owns facilities to which the Generating Facility is to be interconnected and may be constructing facilities to allow the interconnection; and,

**WHEREAS,** Interconnection Customer, Transmission Provider and Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the 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 Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used or the Open Access Transmission Tariff (Tariff).

## **Article 1. Definitions**

**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 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 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.

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

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

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

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

**Commercial Operation** 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 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.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing. Contingent Facilities are identified in Appendix A of the Generator Interconnection Agreement.

**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 Generator Interconnection Agreement.

**Definitive Interconnection System Impact Study (DISIS)** shall have the meaning set forth in Attachment V of the Tariff.

**Expedited Resource Adequacy Study (ERAS)** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of 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, or that may be caused by the withdrawal or addition of an Interconnection Request, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in this Attachment AW.

**Definitive Interconnection System Impact Study Queue** shall mean a Transmission Provider separately maintained queue for valid Interconnection Requests for a Definitive Interconnection System Impact Study.

**Deliverability Area** shall mean a portion of the Transmission System in which a generator can reliably deliver all or a portion of its output capability.

**Dispute Resolution** shall mean the procedure in Section 13.5 of Attachment AW 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 Owner's facilities and equipment that are not included in the Transmission System. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the 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 Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electromagnetic Transient Study or EMT Study** shall mean an analysis to determine the electromagnetic transient response of the electric power system due to system disturbances.

**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 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 or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Owner's Interconnection Facilities; or (4) 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 Generator Interconnection Agreement to possess black start capability.

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

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Owner 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.

**Environmental Review** shall mean a study conducted by the Transmission Owner that contains a review of the proposed interconnection to the Transmission Owner's transmission facilities, pursuant to 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 review of the interconnection.

**Existing Generating Facility** shall mean a Generating Facility that is currently interconnected to the Transmission System of the Transmission Provider.

**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 and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities and shall not include a Storage as Transmission Only Asset as defined in Section 1 of the Tariff. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**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.

**Generating Facility Modification** shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.

**ERAS Generator Interconnection Agreement (Generator Interconnection Agreement or GIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Generating Facility that is included in Appendix 6 to this Attachment AW or in Appendix 13 when Western-UGP is a Party, as the Transmission Owner, to the ERAS GIA.

**Generator Interconnection Procedures (GIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility that are included in the Transmission Provider's Tariff.

**Expedited Resource Adequacy Study Agreement (ERAS Agreement)** shall mean the study agreement for the Expedited Resource Adequacy Study in Appendix 1 to this Attachment AW.

**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, Transmission Owner 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 Owner's Interconnection Facilities to obtain back feed power.

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

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the 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 System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Owner'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 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 Owner's Interconnection Facilities and Network Upgrades as identified in the ERAS report), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System. The scope of the study is defined in Section 8 of Attachment AW.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 3 to the Generator Interconnection Procedures or Appendix 1 to the Expedited Resource Adequacy Study Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of an Existing Generating Facility that is interconnected with the 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 Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Replacement Impact Study, the Reliability Assessment Study, the Definitive Interconnection System Impact Study and the Interconnection Facilities Study described in the Generator Interconnection Procedures.

**Interconnection Study Agreement** shall mean any of the following agreements described in the Generator Interconnection Procedures: the Generator Interconnection Study Agreement.

**IRS** shall mean the Internal Revenue Service.

**Joint Operating Agreement between the Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc. ("MISO-SPP JOA")**: shall have the meaning as defined in Section 1 of the Tariff.

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

**Joint Targeted Interconnection Queue ("JTIQ")** shall have the meaning as defined in Section 1 of the Tariff.

**JTIQ Upgrade** shall have the meaning as defined in Section 1 of the Tariff.

**Material Modification** shall mean (1) modification to an Interconnection Request in the queue that has a material adverse impact on the cost or timing of any other Interconnection Request with a later Queue priority date; or (2) planned modification to an Existing Generating Facility that is undergoing evaluation for a Generating Facility Modification or Generating Facility Replacement, and has a material adverse impact on the Transmission System with respect to: i) steady-state thermal or voltage limits, ii) dynamic system stability and response, or iii) short-circuit capability limit; compared to the impacts of the Existing Generating Facility prior to the modification or replacement.

*Maximum Injection Capability shall mean the maximum amount of real power that may be injected by a Generating Facility at the Point of Interconnection.*

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the 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.

MISO shall have the meaning as defined in Section 1 of the Tariff.

*Nameplate Capacity shall mean the maximum real power rating listed on the nameplate of the Generating Facility measured in alternating current megawatts (AC MW), or the sum of all such ratings of a Generating Facility where it includes multiple energy production devices.*

NERC shall mean the North American Electric Reliability Corporation 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 Deliverability shall mean the amount of real power that can be delivered to the aggregate of Network Load within a Deliverability Area by a Generating Facility, as measured at the Point of Interconnection. Network Resource Deliverability in and of itself does not convey transmission service.*

Network Resource Interconnection Service (NRIS) shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Generating Facility with the Transmission System in *the same* manner as *all other* Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

Network Upgrades shall mean the additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission System to accommodate the interconnection of the Generating Facility to the Transmission System.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Generator Interconnection Agreement or its performance.

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 Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission System.

**Queue** shall mean the Definitive Interconnection System Impact Study Queue, or the Interconnection Facilities Study Queue, as applicable.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the 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.

**Reliability Assessment Study** shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of Transmission System during the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility.

**Replacement Generating Facility** shall mean a Generating Facility that replaces an Existing Generating Facility, or a portion thereof, at the same electrical Point of Interconnection pursuant to Section 3.9 of this Attachment V.

**Replacement Impact Study** shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of the Transmission System.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer, Transmission Owner 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.

**Shared Network Upgrade** shall mean a Network Upgrade listed in Appendix A of the Generator Interconnection Agreement that is needed for the interconnection of multiple Interconnection Customers' Generating Facilities and which is the shared funding responsibility of such Interconnection Customers that may also benefit other Interconnection Customer(s) that are later identified as beneficiaries.

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size for the purpose of constructing the Generating Facility or Generating Facility's tie line; (2) an option to purchase or acquire a leasehold site of sufficient size 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 of sufficient size for such purpose.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected Systems that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. The Transmission Provider, Transmission Owner and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection

Agreement. If the Transmission Provider, Transmission Owner and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Owner must provide the Interconnection Customer a written technical explanation outlining why the Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within fifteen (15) days of its determination.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection substation and at the same voltage level would remain the same.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the 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 System or on other delivery systems or other generating systems to which the Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the 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 Owner's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Owner'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.

**Western Area Power Administration-Upper Great Plains Region (“Western-UGP”)** shall mean a division of the Western Area Power Administration, a Federal power marketing agency, and Transmission Owner, that markets and transmits Federal power over Federal transmission facilities that have been transferred to the functional control of the Transmission Provider.

## **Article 2. Effective Date, Term, and Termination**

**2.1 Effective Date.** This GIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. Transmission Provider shall promptly file this GIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this GIA 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 GIA 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 GIA. Upon receiving such notice, Transmission Provider and Transmission Owner shall enter into good faith discussions regarding an extension of the GIA at Interconnection Customer’s request.

## **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This GIA may be terminated by Interconnection Customer after giving Transmission Provider and Transmission Owner ninety (90) Calendar Days advance written notice, or by Transmission Provider notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Failure to Achieve Commercial Operation.** If the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date specified in Appendix B, this GIA may be terminated by the Transmission Provider after giving the Interconnection Customer ninety (90) Calendar Days advance written notice. Where a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date specified in Appendix B, the Transmission Provider shall issue a revised GIA to reflect the amount of the Generating Facility Capacity that achieved Commercial Operation. The revised GIA shall be consistent with the GIP in effect on the Effective Date of the GIA.

**2.3.3 Default.** Any Party may terminate this GIA in accordance with Article 17.

**2.3.4 Notice to FERC.** Notwithstanding Articles 2.3.1, 2.3.2 and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this GIA, which notice has been accepted for filing by FERC.

**2.4 Termination Costs.** If a Party elects to terminate this Agreement pursuant to Article 2.3 above, Interconnection Customer and Transmission Owner shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by any other Party, as of the date of such Party's receipt of such notice of termination, that are the responsibility of the Terminating Party under this GIA. In the event of termination by any Party, all Parties shall use Commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this GIA:

**2.4.1** With respect to any portion of Transmission Owner's Interconnection Facilities that have not yet been constructed or installed, Transmission Owner 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 Owner 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 Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this GIA, 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 Owner has incurred expenses and has not been reimbursed by Interconnection Customer and the Interconnection Customer's allocated share of Network Upgrade(s) costs as calculated pursuant to Section 4.2.2 of Attachment AW and as listed in Appendix A of this GIA which are required for service to other Interconnection Customer(s).

**2.4.2** Transmission Owner 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 Owner 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 GIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5** **Disconnection.** Upon termination of this GIA, the Parties will take all appropriate steps to disconnect the 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 GIA or such non-terminating Party otherwise is responsible for these costs under this GIA.

**2.6** **Survival.** This GIA 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 GIA; to permit payments for any credits under this GIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this GIA was in effect; and to permit each Party to have access to the lands of another Party pursuant to this GIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **Article 3. Regulatory Filings**

**3.1** **Filing.** Transmission Provider shall file this GIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this GIA, or any amendment thereto, Interconnection Customer shall reasonably cooperate with Transmission Provider with respect to such filing and to provide any information reasonably requested by Transmission Provider needed to comply with applicable regulatory requirements.

### **Article 4. Scope of Service**

**4.1** **Interconnection Product Options.** Interconnection Customer has selected the following (checked) type of Interconnection Service:

#### **4.1.1 Energy Resource Interconnection Service.**

**4.1.1.1 The Product.** Energy Resource Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission System and be eligible to deliver the Generating Facility's *Maximum Injection Capability* 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 Generating Facility into and deliver power across the

Transmission System on an "as available" basis. The Interconnection Customer's ability to inject its Generating Facility output beyond the Point of Interconnection, therefore, will depend on the existing capacity of the Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of Firm Point-To-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

#### **4.1.2 Network Resource Interconnection Service.**

**4.1.2.1 The Product.** Transmission Provider must conduct the necessary studies and *the Transmission Owner must* construct the Network Upgrades needed to integrate the Generating Facility in *the same* manner as all *other* Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Owner shall construct the facilities identified in Appendix A to this GIA.

**4.1.2.2 Transmission Delivery Service Implications.** Network Resource Interconnection Service allows Interconnection Customer's Generating Facility to be designated by any Network Customer under the Tariff on the Transmission System as a Network Resource, up to the Generating Facility's full *Network Resource Deliverability*, on the same basis as existing Network Resources interconnected to the 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 Generating Facility in the same manner as it accesses Network Resources. A 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 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 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 Generating Facility to any particular load on the Transmission System without incurring congestion costs. In the event of transmission constraints on the Transmission System, Interconnection Customer's 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 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 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 Generating Facility within the 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 Generating Facility be undertaken, regardless of whether or not such Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the 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 Generating Facility outside the 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 Generating Facility at the Point of Interconnection.

**4.3** **Performance Standards.** Each Party shall perform all of its obligations under this GIA 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 GIA for its compliance therewith. If such Party is a Transmission Provider or Transmission Owner, then that Party shall amend the GIA and Transmission Provider shall submit the amendment to FERC for approval.

**4.4** **No Transmission Delivery Service.** The execution of this GIA 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 GIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.9.

**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 the Option To Build as described under Article 5.1.2 or the Negotiated Option described under Article 5.1.3, and such dates and selected option, as applicable, shall be set forth in Appendix B, Milestones. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.2 below. If the dates designated by Interconnection Customer are not acceptable to Transmission Owner, Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Transmission Owner, the Interconnection Customer shall notify Transmission Owner within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build.

**5.1.1 Standard Option.** Transmission Owner shall design, procure, and construct Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event Transmission Owner reasonably expects that it will not be able to complete Transmission Owner's Interconnection Facilities, and Network Upgrades by the specified dates, Transmission Owner shall promptly provide written notice to Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Option to Build.** Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.1. Transmission Owner 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.

**5.1.3 Negotiated Option.** If the dates designated by Interconnection Customer are not acceptable to Transmission Owner, 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 all facilities other than Transmission Owner's Interconnection Facilities and Stand Alone Network

Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.2). If the Parties are unable to reach agreement on such terms and conditions, then, pursuant to Article 5.1.1(Standard Option), Transmission Owner shall assume responsibility for the design, procurement and construction of all facilities other than Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects the Option to Build.

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

- (1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Owner'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 Owner;
- (2) Interconnection Customer's engineering, procurement and construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (3) Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) Prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider and Transmission Owner 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 and Transmission Owner;
- (5) At any time during construction, Transmission Owner shall have the right to gain unrestricted access to Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
- (6) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Owner, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (7) Interconnection Customer shall indemnify Transmission Provider and Transmission Owner for claims arising from Interconnection Customer's construction of Transmission Owner's Interconnection Facilities and Stand Alone

Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

- (8) The Interconnection Customer shall transfer control of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;
- (9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Owner's Interconnection Facilities and Stand-Alone Network Upgrades to Transmission Owner not later than the Commercial Operation Date;
- (10) Transmission Owner shall approve and accept for operation and maintenance Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and
- (11) Interconnection Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Owner to assure that the Interconnection Facilities and Stand- Alone Network Upgrades are built to the standards and specifications required by Transmission Provider.
- (12) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.2, Interconnection Customer shall pay Transmission Owner the agreed upon amount of [\$ PLACEHOLDER] for Transmission Owner to execute the responsibilities enumerated to Transmission Owner under Article 5.2. Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.

### **5.3 Reserved.**

**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 Generating Facility. If the Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, Interconnection Customer shall immediately notify Transmission Owner's system operator, or its designated representative. The requirements of this paragraph shall not apply to non-synchronous generators.

**5.5 Equipment Procurement.** If responsibility for construction of Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by Transmission Owner, then Transmission Owner shall commence design of Transmission Owner'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 Interconnection Facilities Study pursuant to the ERAS Agreement;
- 5.5.2 Transmission Owner 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 11.7 and advance payment to Transmission Owner in accordance with Article 11.8 by the dates specified in Appendix B, Milestones.
- 5.6 Construction Commencement.** Transmission Owner shall commence construction of Transmission Owner'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 Owner's Interconnection Facilities and Network Upgrades;
- 5.6.3 Transmission Owner 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 11.7 and advance payment to Transmission Owner in accordance with Article 11.8 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. Parties may, at any time, request a progress report from other Parties. If, at any time, Interconnection Customer determines that the completion of Transmission Owner's Interconnection Facilities and Network Upgrades will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider and Transmission Owner of such later date upon which the completion of Transmission Owner's Interconnection Facilities and Network Upgrades will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation.** If any of Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the 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 Generating Facility and Interconnection Customer's Interconnection Facilities may operate prior to the completion of Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this GIA ("Limited Operation"). Transmission Owner shall permit Interconnection Customer to operate the Generating Facility and Interconnection Customer's Interconnection Facilities under Limited Operation in accordance with the results of such studies performed by Transmission Provider.

**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 Owner 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 Owner shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Transmission Owner's Review.** Transmission Owner'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 Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Transmission Owner, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Owner.

**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 Owner "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the 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 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 Generating Facility. The Interconnection Customer shall



provide Transmission Owner specifications for the excitation system, automatic voltage regulator, Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

**5.10.4 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date. Interconnection Customer shall submit a completed copy of the Generating Facility data requirements contained in Attachment A to Appendix 1 to Attachment AW. It shall also include any additional information provided to Transmission Provider for the Interconnection Facilities Studies. Information in this submission shall be the most current Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the ERAS Agreements between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission System based on the actual data submitted pursuant to this Article 5.10.4. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**5.10.5 Information Supplementation.** Prior to the Commercial Operation Date, or as soon as possible thereafter, the Parties shall supplement their information submissions described above in this Article 5 with any and all “as-built” 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 Generating Facility as required by Good Utility Practice such as an open circuit “step voltage” test on the Generating Facility to verify proper operation of the Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of 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 Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Generating Facility terminal or field voltages is provided. Generating

Facility testing shall be conducted and results provided to the Transmission Provider for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide Transmission Owner and Transmission Provider any information changes due to equipment replacement, repair, or adjustment. Transmission Owner shall provide the Interconnection Customer and Transmission Provider any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information no later than thirty (30) Calendar Days after the date of the equipment replacement, repair or adjustment.

**5.11 Transmission Owner's Interconnection Facilities Construction.** Transmission Owner's Interconnection Facilities and Network Upgrades shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Transmission Owner shall deliver to Interconnection Customer the following "as-built" drawings, information and documents for Transmission Owner's Interconnection Facilities and Network Upgrades [include appropriate drawings and relay diagrams].

Transmission Owner will obtain control of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to any 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 Generating Facility with the Transmission System; (ii) operate and maintain the 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 GIA. 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 Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Owner, 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 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 Owner to construct, and Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Transmission System which are included in the Base Case of the Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

## **5.16 Suspension.**

**5.16.1 Suspension by Interconnection Customer.** Interconnection Customer, upon written notice to Transmission Provider and Transmission Owner, may suspend, for a period not to exceed 18 months, work by Transmission Owner associated with the construction and installation of Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this GIA under the following terms and conditions,

- i. Construction of Network Upgrades that are required to provide Interconnection Service to other Generating Facilities and for which Interconnection Customer shares cost responsibility cannot be suspended pursuant to this Article 5.16.
- ii. If the suspension period begins later than or extends beyond six months following the Effective Date of the GIA, the Interconnection Customer shall provide to the Transmission Provider security in the form described under Article 11.7 in an amount equal to the greater of:
  - a. the Interconnection Customer's allocated share of Network Upgrade(s) as calculated pursuant to Section 4.2.2 of Attachment AW and as identified in Appendix A of this GIA unless previously provided under Section 8.9 of the GIP; or
  - b. \$5,000,000 if the Generating Facility is greater than or equal to 100 MW; or
  - c. \$2,500,000 if the Generating Facility is greater than or equal to 50 MW and less than 100 MW; or
  - d. \$1,000,000 if the Generating Facility is less than 50 MW; or

- e. \$500,000 if the Generating Facility is less than or equal to 2 MW.
  - iii. In the event that this GIA is terminated under this Article 5.16, the Transmission Provider shall retain the security provided pursuant to Article 5.16.1.ii in the amount required to meet Interconnection Customer's obligations pursuant to this GIA. Any difference between the security provided and Interconnection Customer's obligations shall be settled pursuant to Article 12.
  - iv. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16 and has not requested Transmission Owner to resume the work required under this GIA on or before the expiration of 18 months from the date of suspension, this GIA shall be deemed terminated unless Article 16 applies.
  - v. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16 and has not complied requirements of Article 5.16.1.ii on or before the later of the expiration of 6 months following the effective date of the GIA or the date the suspension is requested, this GIA shall be deemed terminated by the Interconnection Customer.
  - vi. In the event Interconnection Customer suspends work by Transmission Owner required under this GIA pursuant to this Article 5.16, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Owner's safety and reliability criteria. Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Owner and Transmission Provider (i) have incurred pursuant to this GIA prior to the suspension and (ii) incur 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 Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Owner shall obtain Interconnection Customer's authorization to do so. Transmission Owner and Transmission Provider shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs.
  - vii. In the event Interconnection Customer provides written notice to resume work for those facilities for which work has been suspended pursuant to this Article 5.16.1, the Interconnection Customer shall receive a refund, including interest, of any payments provided in accordance with Article 5.16.1.ii in excess of the sum of Interconnection Customer's allocated share of Network Upgrade(s) costs and any costs incurred under Article 5.16.1.vi within 30 days of the date of such notice.
- 5.16.2 Exemptions.** The Interconnection Customer shall be exempt from the payments described under Article 5.16.1.ii.b, 5.16.1.ii.c and 5.16.1.ii.d if the following occurs or Suspension is requested for the following reasons:

- i. Construction of a Network Upgrade or the Generating Facility is prevented by order of a Governmental Authority; or
- ii. Transmission Provider determines through an Interconnection Study that the Suspension does not qualify as a modification that has an impact on the cost or timing of any Interconnection Request with an equal or later Queue priority date (Material Modification); or
- iii. Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction of a Network Upgrade.

### **5.17 Reserved.**

**5.18 Tax Status.** All Parties shall cooperate with each other to maintain their tax status. Nothing in this GIA is intended to adversely affect any Party's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

### **5.19 Modification.**

**5.19.1 General.** Each Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect another Party's facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties 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 Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Generating Facility Modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Owner'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 GIA 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 Owner

makes to Transmission Owner's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Owner'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.

**5.20 Delays.** If a Network Upgrade(s) identified in Appendix A is delayed during the construction process and the Commercial Operation Date for the Generating Facility identified in Appendix B is no longer feasible, the Commercial Operation Date in Appendix B may be modified to no later than six (6) months following the in-service date for the last Network Upgrade identified in Appendix A.

## **Article 6. Testing and Inspection**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, Transmission Owner shall test Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the 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 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 Generating Facility with the Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

**6.3 Right to Observe Testing.** Each Party shall notify the other Parties in advance of its performance of tests of its Interconnection Facilities. The other Parties have 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 another Parties' 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 Parties' System Protection Facilities and other protective equipment; and (iii) review another Parties' maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Any Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by another 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 any 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 GIA.

## **Article 7. Metering**

- 7.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Unless otherwise agreed by the Parties, Transmission Owner shall install Metering Equipment at the Point of Interconnection prior to any operation of the Generating Facility and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Generating Facility shall be measured at or, at Transmission Owner's option, compensated to, the Point of Interconnection. Transmission Owner shall provide metering quantities, in analog and/or digital form, to Interconnection Customer and Transmission Provider on a same-time basis using communication as provided in Article 8. 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 Owner'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 GIA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Transmission Owner 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 Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.
- 7.4 Testing of Metering Equipment.** Transmission Owner shall inspect and test all Transmission Owner-owned Metering Equipment in accordance with Transmission Owner's meter testing policies. If requested to do so by Interconnection Customer, Transmission Owner shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than the periods set forth in the Transmission Owner's meter testing policies. Transmission Owner 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 Owner's failure to maintain, then Transmission Owner 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 Owner 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 Owner 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 Generating Facility to the Point of Interconnection.

## **Article 8. Communications**

- 8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with Transmission Owner's Transmission System dispatcher or representative designated by Transmission Owner. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its 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 Owner as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Generating Facility to the location(s) specified by Transmission Owner. Any required maintenance of such communications equipment shall be performed by Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.

- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of the 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 Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Owner 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 Owner. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Owner.

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 (i) site-specific meteorological data including: temperature, wind speed, wind direction, relative humidity and atmospheric pressure and (ii) site specific geographic data including location (latitude and longitude) of the Variable Energy Resource and location (latitude and longitude) and height of the facility that will contain the equipment necessary to provide the meteorological data for such resource. 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, geographical and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such requirements for meteorological, geographical and forced outage data are set forth in Appendix C, Interconnection Details, of this GIA, as they may change from time to time.

**8.5 Phasor Measurement Unit (PMU) Recording Equipment.** Prior to the Initial Synchronization Date of a Generating Facility having a Generating Facility Capacity equal to or greater than 50 MW, phasor measurement recording and communications equipment shall be installed by the Transmission Owner at Interconnection Customer's expense that is capable of gathering phasor measurements as specified in the PMU Communications Handbook. To the extent similar quality equipment is being added or already exists, such as relays or digital fault recorders, that can collect data at least at the same rate as PMUs and which data is synchronized via a high-accuracy satellite clock, such equipment can be utilized to satisfy this requirement if the equipment is located on the Transmission Owner's side of the Point of Change of Ownership and if mutually agreed to by the Parties. The phasor measurement equipment shall be installed at the Transmission Owner's side of the Point of Change of Ownership and become part of the Transmission Owner Interconnection Facilities. Phasor measurements shall be streamed in IEEE C37.118 or equivalent format and be provided to the Transmission Provider. This data shall at least be sufficient to determine (i) positive-sequence voltage magnitude and angle, (ii) positive-

sequence current magnitude and angle, (iii) frequency, and (iv) rate of change of frequency. Such data shall be transmitted over the data circuit(s) as indicated in Article 8.1.

Each Party will promptly advise the other Parties 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 applicable Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

## **Article 9. Operations**

**9.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to the other Parties all information that may reasonably be required by the other Parties 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 and Transmission Owner in writing of the Control Area in which the Generating Facility will be located. If Interconnection Customer elects to locate the Generating Facility in a Control Area other than the Control Area in which the 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 GIA, 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 Generating Facility in the other Control Area.

**9.3 Transmission Provider and Transmission Owner Obligations.** Transmission Provider and Transmission Owner shall cause the Transmission System and Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this GIA. Transmission Provider or Transmission Owner may provide operating instructions to Interconnection Customer consistent with this GIA and Transmission Owner's operating protocols and procedures as they may change from time to time. Transmission Provider and Transmission Owner will consider changes to its operating protocols and procedures proposed by Interconnection Customer.

**9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA. Interconnection Customer shall operate the 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 GIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. Any Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this GIA.

**9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of the Generating Facility to the Transmission System.

**9.6 Reactive Power and Primary Frequency Response.**

**9.6.1 Power Factor Design Criteria.**

**9.6.1.1 Synchronous Generation.** Interconnection Customer shall design the 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 synchronous generators in the Control Area on a comparable basis.

**9.6.1.2 Non-Synchronous Generation.** Interconnection Customer shall design the Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all non-synchronous generators in the Control Area on a comparable basis. This power factor range standard shall be dynamic and can be met 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, or a combination of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that had not executed an interconnection facilities study agreement as of September 21, 2016.

**9.6.2 Voltage Schedules.** Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Transmission Provider and/or Transmission Owner shall require Interconnection Customer to operate the Generating Facility to produce or absorb reactive power within the design limitations of the Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). Transmission Owner's voltage schedules shall treat all sources of reactive power in the Control Area in an equitable and not unduly discriminatory manner. Transmission Owner 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 Generating Facility to maintain the specified output voltage or power factor at the Point of Interconnection within the design limitations of the 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 Transmission Owner.

**9.6.2.1 Voltage Regulators.** Whenever the Generating Facility is operated in parallel with the Transmission System and voltage regulators are capable of operation, Interconnection Customer shall operate the Generating Facility

with its voltage regulators in automatic operation. If the Generating Facility's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify Transmission Owner's system operator, or its designated representative, and ensure that such Generating Facility's reactive power production or absorption (measured in Mvars) are within the design capability of the Generating Facility's generating unit(s) and steady state stability limits. Interconnection Customer shall not cause its Generating Facility to disconnect automatically or instantaneously from the Transmission System or trip any generating unit comprising the Generating Facility for an under or over frequency condition in accordance with Good Utility Practice and Applicable Reliability Standards.

**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 Generating Facility when Transmission Owner requests Interconnection Customer to operate its Generating Facility outside the range specified in Article 9.6.1. Payments shall be pursuant to Article 11.9 or such other agreement to which the Parties have otherwise agreed; provided however, to the extent the Tariff contains a provision providing for such compensation, that Tariff provision shall control.

**9.6.4 Primary Frequency Response.** Interconnection Customer shall ensure the primary frequency response capability of its Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency



deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Interconnection Customer shall operate the Generating Facility consistent with the provisions specified in Sections 9.6.4.1 and 9.6.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Generating Facilities.

**9.6.4.1 Governor or Equivalent Controls.** Whenever the Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Generating Facility's governor or equivalent controls to a minimum whenever the Generating Facility is operated in parallel with the Transmission System.

**9.6.4.2 Timely and Sustained Response.** Interconnection Customer shall ensure that the Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations,

outages of mechanical equipment, or regulatory requirements. The Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

**9.6.4.3 Exemptions.** Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Sections 9.6.4, 9.6.4.1, and 9.6.4.2 of this Agreement. Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 9.6.4, but shall be otherwise exempt from the operating requirements in Sections 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

**9.6.4.4 Electric Storage Resources.** Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Appendix C of its GIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 9.6.4, 9.6.4.1, 9.6.4.2 and 9.6.4.3 of this Agreement. Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission



System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **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 all 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 Parties of such removal.

**9.7.1.2 Outage Schedules.** Transmission Provider shall post scheduled outages of its transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the 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 another 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 Parties, 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 and/or Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's and/or Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

**9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission System;

**9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider or Transmission Owner 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 or Transmission Owner shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider or Transmission Owner 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 Owner;

**9.7.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the 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 Generating Facility as required by the Applicable Reliability Council to ensure "ride through" capability of the Transmission System. 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.

**9.7.3.1 Frequency Ride Through and Voltage Ride Through for a Generating Facility no larger than 20 MW.** For Generating Facilities no larger than 20 MW, the Interconnection Customer shall ensure “frequency ride through” capability and “voltage ride through” capability of its Generating Facility. The Interconnection Customer shall enable these capabilities such that its 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 6.1 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 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 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 on a comparable basis. The term “frequency ride through” as used herein shall mean the ability of a 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 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.

#### **9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Owner shall install at Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Owner's Interconnection Facilities or the Transmission System as a result of the interconnection of the Generating Facility and the 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 Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Owner'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 Generating Facility and the Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the 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 Generating Facility and Interconnection Customer's other equipment if conditions on the Transmission System could adversely affect the Generating Facility.

**9.7.6 Power Quality.** No 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 Parties 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 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 Owner'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 Owner, 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 Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If

the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Generating Facility or the 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 Owner Obligations.** Transmission Owner shall maintain the Transmission System and Transmission Owner's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA.

**10.2 Interconnection Customer Obligations.** Interconnection Customer shall maintain the Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA.

**10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Generating Facility and the Interconnection Facilities.

**10.4 Secondary Systems.** Each Party shall cooperate with the others 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 another Party. Each Party shall provide advance notice to the other Parties 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 Owner's Interconnection Facilities.

## **Article 11. Performance Obligation**

**11.1 Interconnection Customer Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control Interconnection Customer's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at its sole expense.



**11.2 Generating Facility.** Interconnection Customer shall install the Generating Facilities described in Appendix C no later than the Commercial Operation Date(s) specified in Appendix B.

**11.3 Transmission Owner's Interconnection Facilities.** Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Owner's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.

**11.4 Network Upgrades and Distribution Upgrades.** All Network Upgrades and Distribution Upgrades described in Appendix A shall be constructed in accordance with the process set forth in Section VI of Attachment O. 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 that are associated with that Transmission Owner's system. The Distribution Upgrades and Network Upgrades described in Appendix A shall be solely funded by Interconnection Customer unless Transmission Owner elects to fund the capital for the Distribution Upgrades or Network Upgrades.

**11.4.1 Agreement to Fund Shared Network Upgrades.** Interconnection Customer agrees to fund Shared Network Upgrades, as determined by Transmission Provider. Where applicable, payments to fund Shared Network Upgrade(s) that are made to Transmission Provider by Interconnection Customer will be disbursed by Transmission Provider to the appropriate entities that are constructing the Shared Network Upgrades in accordance with Attachment O of the Tariff. In the event that Interconnection Customer fails to meet its obligation to fund Shared Network Upgrades, Transmission Owner and Transmission Provider shall not be responsible for the Interconnection Customer's funding obligation.

**11.4.2 Contingencies Affecting Network Upgrades, System Protection Facilities and Distribution Upgrades.** Network Upgrades, System Protection Facilities and Distribution Upgrades that are required to accommodate the Generating Facility may be modified because (a) a higher queued Interconnection Request withdrew or was deemed to have withdrawn, (b) the GIA associated with a higher queued Interconnection Request was terminated, or (c) changes occur in equipment design standards or reliability criteria giving rise to the need for restudy. The higher queued Interconnection Requests that could impact the Network Upgrades, System Protection Facilities and Distribution Upgrades required to accommodate the Generating Facility, and possible modifications that may result from the above listed events affecting the higher queued Interconnection Requests, to the extent such modifications are reasonably known and can be determined, and estimates of the costs associated with such required Network Upgrades, System Protection Facilities and Distribution Upgrades, shall be provided in Appendix A.



**11.4.3 Agreement to Restudy.** The Interconnection Customer agrees to allow the Transmission Provider to perform a restudy in accordance with Sections 8.8 and 8.13 of Attachment AW if the Transmission Provider determines a restudy is required because one or more of the contingencies in Article 11.4.2 occurred. If a restudy is required, the Transmission Provider shall provide notice to Interconnection Customer. The Parties agree to amend Appendix A to this GIA in accordance with Article 30.10 to reflect the results of the restudy.

## **11.5 Transmission Credits.**

**11.5.1 Credits for Amounts Advanced for Network Upgrades.** Interconnection Customer shall be entitled to compensation in accordance with Attachment Z2 of the Tariff for any Network Upgrades including any tax gross-up or other tax-related payments associated with Network Upgrades.

**11.5.2 Special Provisions for Affected Systems.** Unless Transmission Provider provides, under the GIA, 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.

**11.5.3** Notwithstanding any other provision of this GIA, 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 Generating Facility.

## **11.6 Initial Payment.**

Interconnection Customer shall make an initial payment ("Initial Payment") equal to the greater of a) twenty (20) percent of the total cost of Network Upgrades (excluding JTIQ Upgrade costs), Shared Network Upgrades, Transmission Owner Interconnection Facilities and/or Distribution Upgrades listed in Appendix A or b) \$4,000/MW of the size of the Generating Facility. Any financial security provided in Section 8.2 of Attachment AW will be applied to this requirement. The Initial Payment shall be provided to Transmission Owner or Transmission Provider as required in Appendix B by Interconnection Customer pursuant to this Article 11.6 within the later of a) thirty (30) days of the execution of the GIA by all Parties, or b) thirty (30) days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer, or c) thirty (30) days of the filing if the GIA is filed unexecuted and the Initial Payment is not being protested by Interconnection Customer. If this GIA is terminated, then the Initial Payment

shall be refunded with accrued interest calculated from the date of the receipt of the Initial Payment to the date of the refund, if any, to the Interconnection Customer less:

- a. any costs that have been incurred for the construction of the facilities specified in Appendix A;
- b. any funds necessary for the construction of those Shared Network Upgrades, or Network Upgrades, that would be assigned to another interconnection customer where such upgrade costs would not have been assigned but for the termination of the GIA; and
- c. any costs that have been incurred for the construction of those Shared Network Upgrades, or Network Upgrades, that are no longer required due to the termination of the GIA that were paid for by another interconnection customer.

**11.7A Provision of Security.** Payments for any upgrades installed by the Transmission Owner will be addressed in accordance with Article 11.8 of this GIA. For Network Upgrades and Distribution Upgrades that are not installed by the Transmission Owner, at least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of Network Upgrades, or Distribution Upgrades as defined in Appendix A of this GIA, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, procuring and installing the applicable portion of Network Upgrades or Distribution Upgrades as defined in Appendix A of this GIA and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider for these purposes. If Interconnection Customer requests suspension pursuant to Article 5.16, Interconnection Customer may be required to provide Transmission Provider security in the form described above for its allocated share of Network Upgrade(s) costs as calculated pursuant to Section 4.2.2 of Attachment AW and defined in Appendix A of this GIA.

In addition:

**11.7A.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.7A.2** The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.7A.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.7B Provision of Security for JTIQ Upgrades.** If the Transmission Provider determines, pursuant to Section 3.6.4(A) of Attachment AW that the Interconnection Request impacts

one or more of the JTIQ Upgrades, Interconnection Customer is required to provide security in accordance with Appendix I to this GIA.

## **11.8 Advance Payment.**

**11.8.1** For Transmission Owner's Interconnection Facilities, Network Upgrades and Distribution Upgrades constructed by Transmission Owner, Interconnection Customer shall be required to pay Transmission Owner for all actual costs incurred by Transmission Owner for the procurement, installation, or construction of a discrete portion of a Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades and shall pay Transmission Owner, in advance, for all work to be conducted by the Transmission Owner, under the terms and conditions set forth in this GIA. 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 Owner, which shall be delivered by Transmission Owner to Interconnection Customer at least ten (10) Business Days prior to the date of such payment being due. Transmission Owner 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.

**11.8.2** Interconnection Customer shall not be required to make any subsequent payment to the Transmission Owner in the event tasks relating to the prior payment have not been substantially completed.

**11.8.3** Transmission Owner 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 Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, or upon close-out of any phase of such activities, costs by Transmission Owner are expected to exceed the sum of payments made by Interconnection Customer, Transmission Owner 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 Owner in full and without interest for the billed amount. If, upon completion of the procurement, installation, or construction of a discrete portion of Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, costs incurred by Transmission Owner are less than the sum of payment(s) made to Transmission Owner by Interconnection Customer, Transmission Owner shall refund the difference, unless such payments are otherwise non-refundable

pursuant to Article 11.6 (Initial Payment), without interest, as soon as the necessary vouchers may be prepared.

**11.9 Interconnection Customer Compensation.** If Transmission Provider or Transmission Owner 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 GIA, 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 the Tariff. Interconnection Customer shall serve Transmission Provider 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 GIA, 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.

**11.9.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Transmission Provider shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.9.

## **Article 12. Invoice**

The terms of this Article 12 apply to billing between the Parties for construction and operation and maintenance charges. All other billing will be handled according to the Tariff.

**12.1 General.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this GIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of Interconnection Facilities and the Network Upgrades, the Interconnection Customer shall receive an invoice of the final cost due under this GIA, including any applicable cost due to termination, which 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. Interconnection Customer shall receive a refund of any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

- 12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by either Party will not constitute a waiver of any rights or claims either Party may have under this GIA.
- 12.4 Disputes.** In the event of a billing dispute between the Parties, Transmission Owner, and Transmission Provider shall continue to provide Interconnection Service under this GIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Owner 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 Owner 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 Transmission Provider and Interconnection Customer to pay the amount due with the accrued interest, if any.

### **Article 13. Emergencies**

- 13.1 Definition.** “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 the Transmission System, or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, Transmission Owner's Interconnection Facilities; or (4) 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 Generator Interconnection Agreement to possess black start capability.
- 13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of NERC, the Applicable Reliability Council, Transmission Provider, Applicable Laws and Regulations, and any emergency procedures agreed to by the Joint Operating Committee.
- 13.3 Notice.** Transmission Provider or Transmission Owner shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Owner's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider and Transmission Owner promptly when it becomes aware of an Emergency Condition that affects the Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Owner'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 Owner'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 Owner, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Generating Facility or Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or Transmission Owner or otherwise regarding the Transmission System.

### **13.5 Transmission Provider and Transmission Owner Authority.**

**13.5.1 General.** Transmission Provider and/or Transmission Owner may take whatever actions or inactions with regard to the Transmission System or Transmission Owner'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 Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider and Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider and/or Transmission Owner may, on the basis of technical considerations, require the 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 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 Generating Facility and Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's and Transmission Owner's operating instructions concerning Generating Facility real power and reactive power output within the manufacturer's design limitations of the 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 and/or Transmission Owner may reduce Interconnection Service or disconnect the 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 and/or Transmission Owner can schedule the reduction or

disconnection in advance, Transmission Provider and/or Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider and/or Transmission Owner shall coordinate with Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer, Transmission Provider and/or Transmission Owner. 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 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 GIA and the GIP, Interconnection Customer may take actions or inactions with regard to the Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the 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 Owner's Interconnection Facilities. Transmission Provider and/or Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.9.1 of this GIA, no Party shall be liable to the other Parties 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 GIA 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 GIA 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 2005, or the Public Utility Regulatory Policies Act of 1978 as amended by the 2005 Energy Policy Act.

## **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this GIA 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 GIA 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 GIA, any notice, demand or request required or permitted to be given by any Party to another and any instrument required or permitted to be tendered or delivered by any Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Any Party may change the notice information in this GIA 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 any Party to another 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 Parties 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** No 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 Parties in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be

required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **Article 17. Default**

### **17.1 Default.**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this GIA or the result of an act or omission of another 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 GIA 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 GIA, 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 GIA.

## **Article 18. Indemnity, Consequential Damages and Insurance**

**18.1 Indemnity.** Each Party shall indemnify and hold harmless the other Parties, and the other Parties' officers, shareholders, stakeholders, members, managers, representatives, directors, agents and employees, and Affiliates, from and against any and all loss, liability, damage, cost or expense to third parties, including damage and liability for bodily injury to or death of persons, or damage to property or persons (including reasonable attorneys' fees and expenses, litigation costs, consultant fees, investigation fees, sums paid in settlements of claims, and any such fees and expenses incurred in enforcing this indemnity or collecting any sums due hereunder) (collectively, "Loss") to the extent arising out of, in connection with, or resulting from (i) the indemnifying Party's breach of any of the representations or warranties made in, or failure of the indemnifying Party or any of its subcontractors to perform any of its obligations under, this GIA, or (ii) the negligence or willful misconduct of the indemnifying Party or its contractors; provided, however, that no Party shall have any indemnification obligations under this Section 18.1 in respect of any Loss to the extent the Loss results from the negligence or willful misconduct of the Interconnection Party seeking indemnity. Notwithstanding the provisions of this Article 18, the liability of the Transmission Owner shall be limited to and determined in accordance with the Federal Tort Claims Act, 28. U.S.C. § 1346(b), 2401(b), 2402, 2671, 2672, 2674-2680, as amended or supplemented.

**18.1.1 Indemnified Person.** If an indemnified person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this Article 18, the amount owing to the indemnified person shall be the amount of such indemnified person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnified Person shall cooperate with the indemnifying Party with respect to the matter for which indemnification is claimed. The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Except as otherwise provided in this Article 18 and other than Liquidated Damages heretofore described, the liability of a Party under this GIA shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances shall any Party or its Affiliates, directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits. The limitations on damages specified in this Section 18.2 are without regard to the cause or causes related thereto, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. This limitation on damages shall not affect any Party's rights to obtain equitable relief as otherwise provided in this GIA. The provisions of this Section 18.2 shall survive the termination or expiration of this GIA.

**18.3 Interconnection Customer Insurance.** Interconnection Customer shall at its own expense, maintain in force throughout the period of this GIA, and until released by all other Parties, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The minimum limits for the Employers' Liability insurance shall be One Million Dollars (\$1,000,000) each accident bodily injury by accident, One Million Dollars (\$1,000,000) each employee bodily injury by disease, and One Million Dollars (\$1,000,000) policy limit bodily injury by disease.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards (if applicable), independent contractors coverage, coverage for pollution (if exposure is present) and punitive or exemplary damages, with minimum limits of One Million Dollars (\$1,000,000) each occurrence/Two Million Dollars (\$2,000,000) general aggregate and Two Million Dollars (\$2,000,000) products and completed operations 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 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) each occurrence/Twenty Million Dollars (\$20,000,000) general aggregate.

- 18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this GIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this GIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed to by all Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Interconnection Customer are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.
- 18.3.9** Within ten (10) days following execution of this GIA, 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 GIA, executed by each insurer or by an authorized representative of each insurer to the Other Party Group.
- 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, such 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 an Interconnection Customer's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such 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 the other Party that it meets the requirements to self-insure and that its self-insurance program meets the

minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this GIA.

**18.4** **Transmission Owner Insurance.** Transmission Owner is self-insured in accordance with its status as a Federal agency.

## **Article 19. Assignment**

**19.1** **Assignment.** This GIA may be assigned by any Party only with the written consent of the other Parties to any Affiliate of the assigning Party, or other third party, with an acceptable credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this GIA. Interconnection Customer shall have the right to assign this GIA, with the written consent of Transmission Provider and Transmission Owner, for collateral security purposes to aid in providing financing for the Generating Facility. Any financing arrangement entered into by the Interconnection Customer pursuant to this article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner 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 11.7 and 18.3. Any attempted assignment that violates this article is void and ineffective. Any assignment under this GIA 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 GIA 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 GIA; provided that if Interconnection Customer (or any third party, but only if such third party is not acting at the direction of Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Negotiated Option (Article 5.1.3), 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 any of the Parties to another prior to the execution of this GIA.

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 any Party, a 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 GIA, and for a period of three (3) years after the expiration or termination of this GIA, 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 GIA; or (6) is required, in accordance with Article 22.1.7 of the GIA, 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 GIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No 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 GIA, 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 another Party. The disclosure by any Party to another Party of Confidential Information shall not be deemed a waiver by the disclosing 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, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another 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 another Party under this GIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a 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 Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this GIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this GIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another 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.** This Section 22.1.9 shall not apply to the Transmission Owner. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an

exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. Section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this GIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying another Party to this GIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the GIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, if consistent with the applicable Federal and state laws, rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this GIA ("Confidential Information") shall not be disclosed by another Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this GIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**22.1.12** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**Article 23. Environmental Releases**

- 23.1** Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the 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 Generating Facility or Interconnection Facilities, and any such substances migrating from real property it owns at the 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.
- 24.2 Information Submission by Transmission Provider.** The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**Article 25. Information Access and Audit Rights**

**25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Parties to: (i) verify the costs incurred by the disclosing Party for which the other Parties are responsible under this GIA; and (ii) carry out its obligations and responsibilities under this GIA. 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 GIA.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this GIA 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 Parties receiving such notification to allege a cause for anticipatory breach of this GIA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this GIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to another Party, to audit at its own expense that other Party's accounts and records pertaining to either Party's performance or either Party's satisfaction of obligations under this GIA. Such audit rights shall include audits of the other Party's costs, calculation of invoiced amounts, Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation on the Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this GIA. 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 Owner's Interconnection Facilities, and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Owner'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 any Party's performance or satisfaction of all obligations under this GIA 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 GIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this GIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this GIA in providing such services and each Party shall remain primarily liable to the other Parties 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 GIA. The hiring Party shall be fully responsible to the other Parties 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 Owner 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 GIA. Any applicable obligation imposed by this GIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **Article 27. Disputes**

**27.1 Submission.** In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with this GIA or its performance, the Parties agree to resolve such dispute using the dispute resolution procedures of the Generator Interconnection Procedures.

## **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 laws or the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the 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 GIA 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 GIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this GIA, to become a Party hereto and to perform its obligations hereunder. This GIA 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 GIA 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 GIA 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 GIA, and it will provide to any Governmental Authority notice of any actions under this GIA that are required by Applicable Laws and Regulations.

## **Article 29. Joint Operating Committee**

**29.1 Joint Operating Committee.** At least six (6) months prior to the expected Initial Synchronization Date, Interconnection Customer, Transmission Owner and Transmission Provider shall each appoint one representative and one alternate to the Joint Operating Committee. Each Party shall notify the other Parties 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 any 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 GIA. All Parties 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 Owner'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 Generating Facility and other facilities that impact the normal operation of the interconnection of the 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 GIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this GIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this GIA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This GIA, 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 GIA, 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 GIA), 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 GIA or such Appendix to this GIA, or such Section of Attachment AW or such Appendix to Attachment AW, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this GIA 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 GIA, including all Appendices and Schedules attached hereto, and also incorporating through reference Section 39.3 of the Tariff as if it were a part hereof, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this GIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, a Party's compliance with its obligations under this GIA.

**30.5 No Third Party Beneficiaries.** This GIA 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 GIA to insist, on any occasion, upon strict performance of any provision of this GIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this GIA 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 GIA. Termination or Default of this GIA 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 GIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this GIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this GIA.

**30.8 Multiple Counterparts.** This GIA may be executed in three 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 GIA by a written instrument duly executed by each of the Parties.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this GIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this GIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this GIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this GIA pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this GIA shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This GIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No 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, another Party.

IN WITNESS WHEREOF, the Parties have caused this GIA to be executed by their respective authorized officials, and copies delivered to each Party, to become effective as of the Effective Date.

**SOUTHWEST POWER POOL, INC.**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Transmission Owner]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX A TO GIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Transmission Owner's Interconnection Facilities]:**

**2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Shared Network Upgrades]:**

**(c) [insert Contingent Facilities]:**

**3. Distribution Upgrades:**

**4. *Type and Amount of* Interconnection Service:**

**(a) *Maximum Injection Capability at the POI:* MW**

**(b) *Type (check only one)***

***[ ] Energy Resource Interconnection Service***

***[ ] Network Resource Interconnection Service***

***Network Resource Deliverability at the POI: MW***

***Deliverability Area associated with Network Resource Deliverability:***

**5. Construction Option Selected by Customer:**

**6. Permits, Licenses, and Authorizations:**

**7. Description of the Point of Change of Ownership:**

**8. Description of the Point of Interconnection:**

**9. Higher-Queued Interconnection Customers:**

**10. Environmental Requirements:**

**This GIA is subject to completion of the appropriate National Environmental Policy Act (NEPA) level of Environmental Review. Until a NEPA decision document is issued, no construction activities relating to Transmission Owner's Interconnection Facilities and/or Network Upgrades may commence.**

- (a) [Insert Environmental Requirements for an Environmental Impact Statement (EIS) level of Environmental Review]
- (b) [Insert Environmental Requirements for an Environmental Assessment (EA) level of Environmental Review]

**11. Candidate Incremental Long-Term Congestion Rights:**

- \* Source \_\_\_\_\_
- \* Sink \_\_\_\_\_
- \* Candidate Incremental LTCR MW \_\_\_\_\_
- \* Term (years from in-service date of Network Upgrade) \_\_\_\_\_

**12. JTIQ Upgrades**

\_\_\_\_\_ [To be included in GIA if Interconnection Customer is responsible for a portion of a portfolio of JTIQ Upgrades] Interconnection Customer is subject to the JTIQ Generator Charge in accordance with Attachment AV of the SPP Tariff and Appendix I of this GIA.

JTIQ Security amount:

A. Transmission Provider:

B. MISO:

APPENDIX B TO GIA

Milestones

## **APPENDIX C TO GIA**

### **Interconnection Details**

#### **1. Description of Generating Facility:**

##### **(a) Nameplate Capacity (AC MW)**

#### **Wind Generating Facility Output Reduction**

To protect the reliability of the Transmission System, a Generating Facility that is a wind plant shall be capable of reducing its generation output in increments of no more than fifty (50) MW in five (5) minute intervals. The requirements may be met by using: (a) SCADA control of circuit breakers protecting wind farm collector distribution circuits, (b) automatic control of wind turbine power output, or (c) a combination of (a) and (b).

#### **Inverter-Based Resource EMT Study Results Mitigations**

If an Electromagnetic Transient Study is determined to be required by the Transmission Provider and the study results reveal an Adverse System Impact to the Transmission System, mitigation(s) shall be the responsibility of the Interconnection Customer and shall be implemented prior to the injection of power into the Transmission System.

## **APPENDIX D TO GIA**

### **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 and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.



**APPENDIX E TO GIA**

**Commercial Operation Date**

**[Date]**

\_\_\_\_\_,  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

\_\_\_\_\_  
**[Transmission Owner Address]**

Re: \_\_\_\_\_ 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 Generating Facility, effective as of **[Date plus one day]**.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**APPENDIX F TO GIA**

**Addresses for Delivery of Notices And Billings**

**Notices:**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

\_\_\_\_\_  
Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Billings and Payments:** [Specify addresses for construction invoices, O&M invoices and settlement of ancillary services]

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936

Phone: \_\_\_\_\_  
Facsimile: 501-482-2022

\_\_\_\_\_  
Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Operational Communications: [Identify contacts for operations]**

Transmission Provider:

\_\_\_\_\_, \_\_\_\_\_  
Southwest Power Pool, Inc.  
201 Worthen Drive  
Little Rock, AR 72223-4936  
Phone: \_\_\_\_\_  
Facsimile: 501-482-2022

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**APPENDIX G TO GIA**  
**Requirements Of Generators Relying On Newer Technologies**

Appendix G sets forth requirements and provisions specific to a wind generating plant. All other requirements of this GIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

The following reactive power requirements apply only to a newly interconnecting wind generating plant that has executed a facilities study agreement as of September 21, 2016. A wind generating plant to which this provision applies shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

**Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or “GSU”), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static var Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the Transmission System at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

#### **Post-transition Period LVRT Standard**

All wind generating plants subject to FERC Order No. 661 and not covered by the transition period described above must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static var Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the Transmission System 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 GIA, if the Transmission Provider's System Impact Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

#### **iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

|



APPENDIX H TO GIA  
Reserved for Future Use

**APPENDIX I TO GIA**

**Cost Responsibility for Portion of Costs for a Portfolio of JTIQ Upgrades**

This Appendix I to this GIA is only applicable if an Interconnection Customer is assigned responsibility for a portion of costs for a portfolio of JTIQ Upgrades, as specified in Appendix A to this GIA.

**A. Rate**

The Interconnection Customer is required to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff.

**B. Security**

a. The Interconnection Customer is required to provide security in an amount equal to the portion of the total engineering and construction cost of the JTIQ Upgrades that serves as the basis for the JTIQ Generator Charge to the Interconnection Customer for those JTIQ Upgrades authorized for construction by the Transmission Provider (“JTIQ Upgrade Cost Responsibility”), as specified in Appendix A to this GIA (“JTIQ Security”). The JTIQ Security shall be provided to Transmission Provider and JTIQ Transmission Owner(s) in the MISO Region as follows:

i. The JTIQ Security portion for the JTIQ Upgrades authorized for construction by Transmission Provider shall be provided to Transmission Provider within the later of: (a) thirty (30) Calendar Days of the execution of this GIA by all Parties; (b) thirty (30) Calendar Days of acceptance of this GIA by FERC if this GIA is filed unexecuted at FERC and the JTIQ Security amount is being protested by Interconnection Customer; or (c) thirty (30) Calendar Days of the filing if the GIA is filed unexecuted and the JTIQ Security amount is not being protested by Interconnection Customer. The JTIQ Security, or any reduced amount applicable to this Interconnection Request, shall remain with Transmission Provider for the remaining term of the JTIQ Generator Charge for each JTIQ Upgrade authorized for construction by the Transmission Provider. At Interconnection Customer’s request, such JTIQ Security may be reduced to reflect decreased remaining JTIQ Upgrade Cost Responsibility applicable

to each JTIQ Upgrade authorized for construction by the Transmission Provider on the first anniversary of the In-Service Date of that upgrade and may continue to be reduced to reflect decreased remaining balance of JTIQ Upgrade Cost Responsibility each year over the term of the JTIQ Generator Charge for that JTIQ Upgrade.

1. The following forms of security are acceptable to the Transmission Provider:
        - a. Letter of credit as specified in Appendix C to Attachment X of the Tariff,
        - b. Cash;
        - c. Surety bond issued by an insurer and acceptable to the Transmission Provider; or
        - d. Guaranty in a form consistent with Appendix D of Attachment X of the Tariff.
      - ii. The JTIQ Security portion for the JTIQ Upgrades authorized for construction by MISO shall be provided by the Interconnection Customer to JTIQ Transmission Owner(s) in the MISO region pursuant to the terms of the security agreement(s) entered into between the JTIQ Transmission Owner(s) and Interconnection Customer.
    - b. In the event that the JTIQ Upgrade Cost Responsibility of the Interconnection Customer subsequently increases, Interconnection Customer will be required to provide additional security associated with this increase to SPP within thirty (30) Calendar days of SPP's request for additional security.
    - c. In the event the Interconnection Customer fails to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff and Section 7 of the Tariff, Transmission Provider shall be entitled to draw on the portion of the JTIQ Security posted by the Interconnection Customer for the JTIQ Upgrades authorized for construction by Transmission Provider in the amount of missed payments.
    - d. JTIQ Security shall remain in place for the duration of the JTIQ Generator Charge applicable for each JTIQ Upgrade in accordance with Attachment AV of the Tariff and in accordance with the MISO Tariff. Any JTIQ Security provided by Interconnection Customer must be kept active and must be available to the

Transmission Provider and JTIQ Transmission Owner(s) in the MISO Region in the event that Interconnection Customer fails to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff and in accordance with the MISO Tariff. Any fees or costs associated with the provision of the JTIQ Security are the responsibility of the Interconnection Customer.

C. Default

Default of the Interconnection Customer under Section 7 of the Tariff will be considered a default under this GIA. Default of the Interconnection Customer of the JTIQ security agreement with JTIQ Transmission Owner(s) in the MISO Region will be considered a default under this GIA.

D. Billing and Payment

For administration of billing and related activities associated with the JTIQ Generator Charge for the JTIQ Upgrade Cost Responsibility, Section 7 of the Tariff shall be applicable. Interconnection Customer shall be treated as a Transmission Customer for the limited purpose of billing and related activities under Section 7 of the Tariff.

E. Termination

Termination of this GIA shall not relieve the Interconnection Customer of its obligation to pay the JTIQ Generator Charge in accordance with Attachment AV of the Tariff.

## APPENDIX 7 TO ~~GIP~~ATTACHMENT AW

### INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT

Appendix 7 sets forth procedures specific to a wind generating plant. All other requirements of this ~~GIP~~Attachment AW continue to apply to wind generating plant interconnections.

#### A. Special Procedures Applicable to Wind Generators

The wind plant Interconnection Customer, in completing the Interconnection Request required by Section 3.4 of the ~~GIP~~Attachment AW, may provide to the Transmission Provider a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the ~~queue~~study and receive the base case data as provided for in this ~~GIP~~Attachment AW.

Before returning the ~~Generator Interconnection Study~~ERAS Agreement, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the Transmission Provider to complete the ~~System Impact Study~~ERAS.

## ATTACHMENT V GENERATOR INTERCONNECTION PROCEDURES (GIP)

\*\*\*

### 8.4 Scope of Definitive Interconnection System Impact Study.

**8.4.1** The Definitive Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The Definitive Interconnection System Impact Study will consider the Base Case, as well as all Interconnection Requests in the Definitive Interconnection System Impact Study Queue and all generating facilities (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Definitive Interconnection System Impact Study is commenced:

- (i) are directly interconnected to the Transmission System;

- (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request;
- (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System, except for Interconnection Requests submitted pursuant to Attachment AW of the Tariff; and
- (iv) have no Interconnection Queue Position but have executed a GIA or requested that an unexecuted GIA be filed with FERC.