

**Conservation Plan
for the Illinois Chorus Frog
Flanigan 138kV Substation Project**

**Prepared for:
Illinois Department of Natural Resources**

Prepared & Submitted by:
WSP USA Environment and Infrastructure, Inc.
15933 Clayton Road, Suite 110
Ballwin, Missouri 63011

**On behalf of:
Ameren Illinois Company
Collinsville, Illinois**



WSP Project No. 325223308

June 2023

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LIST OF ABBREVIATIONS AND ACRONYMS

AC	alternating current
AIC	Ameren Illinois Company
BMP	Best Management Practice
DC	direct current
EcoCAT	Ecological Compliance Assessment Tool
ECT	Environmental Consulting and Technology, Inc.
EO	Element Occurrence
ICF	Illinois Chorus Frog
IDNR	Illinois Department of Natural Resources
ITA	Incidental Take Authorization
kV	kilovolt
MW	Megawatt
NLCD	National Land Cover Database
NRCS	Natural Resources Conservation Service
POI	Point of Interconnection
SESC	Soil Erosion and Sedimentation Control
SWPPP	Storm Water Pollution Prevention Plan
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
WOTUS	Waters of the U.S.
WSP	WSP USA Environment & Infrastructure, Inc.



Illinois Department of Natural Resources

CONSERVATION PLAN

(Application for an Incidental Take Authorization)
Per 520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080

PROJECT APPLICANT: Ameren Illinois Company

PROJECT NAME: Flanigan 138kV Substation Project

COUNTY: Cass County

SPECIES: Illinois Chorus Frog (*Pseudacris illinoensis*)

AMOUNT OF BURROWING HABITAT IMPACT AREA: Approximately 0.79 acres permanent impact and 1.43 acres temporary impact (preconstruction activities in these areas included in the 2022 Cass County Solar Project, LLC conservation plan)

AMOUNT OF BREEDING HABITAT IMPACT AREA: None

OVERLAND TRAVEL IMPACT AREA: Approximately 2.56 acres permanent impact and 6.35 acres temporary impact

1. INTRODUCTION

Ameren Illinois Company (AIC; Applicant) is proposing to develop a 138-kilovolt (kV) Point of Interconnection (POI) substation on approximately 3.79 acres of the 8.9-acre Project Area located immediately west of US 67 on the south side of Edgewood Drive, southwest of Beardstown, Illinois in Cass County (Figure 1). On behalf of the Applicant, WSP USA Environment & Infrastructure, Inc. (WSP) has prepared this Conservation Plan for the Illinois chorus frog (ICF; *Pseudacris illinoensis*) in support of the Applicant's efforts to develop the Flanigan 138kV Substation (Project). This Flanigan 138kV Substation Conservation Plan has been prepared in accordance with Title 17, Chapter I (c), Section 1080 of the Illinois Administrative Code (Incidental Taking of Endangered or Threatened Species). In accordance with Section 1080, the Illinois Department of Natural Resources (IDNR) can authorize the incidental take of species listed as endangered or threatened by the State of Illinois with an approved Conservation Plan.

2. PROJECT DESCRIPTION & IMPACT ANALYSIS

2.1 Purpose and Need

This Conservation Plan addresses the Project's potential effects to the ICF due to the construction of the proposed Flanigan 138kV Substation and associated facilities. The Project will serve as the POI to the 2,400-acre Cass County Solar Project, LLC 150-MW (megawatt) AC (alternating current) ground-mounted solar energy facility, which is being constructed adjacent and to the west

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of the proposed Flanigan 138kV Substation and was designed to provide clean, renewable electricity to approximately 40,600 Illinois homes. The Flanigan Substation would connect the Cass County Solar Project to the existing adjacent Meredosia East – Frederick North segment of the Ipava Meredosia East 138kV transmission system.

The Cass County Solar Project and associated Flanigan Substation Project were developed and designed to optimize the solar resource while minimizing impacts to natural resources and suitable habitat. This Project is part of the effort to develop clean renewable energy sources within the state of Illinois and get the state closer to its statutory requirements, established recently through SB2408, to reach 100 percent by 2050. Subject to the requirements of §1-75, the state is required to procure up to 45,000,000 Renewable Energy Credits annually from utility-scale solar projects by 2030 – 55 percent of which must come from photovoltaics projects, which these projects intend to contribute towards.

In 2022, on behalf of Cass County Solar Project, LLC, Environmental Consulting and Technology, Inc. (ECT) prepared a Conservation Plan and secured an incidental Take Authorization (ITA) for the ICF; ornate box turtle (*Terrapene ornata*), plains hog-nosed snake (*Heterodon nasicus*), and regal fritillary butterfly (*Speyeria idalia*) to support development of the Cass County Solar Project (ECT 2022). Prior to operation of the solar project, Cass County Solar Project, LLC will transfer fee title of the POI property to AIC for connection and distribution of the power generated by the Cass County Solar Project to the electric grid. Execution of the purchase option is anticipated to occur in April 2023, with full property transfer from Cass County Solar Project, LLC to AIC expected in August 2023.

During the IDNR consultation process in 2021 for the solar project, IDNR recommended a separate Ecological Compliance Assessment Tool (EcoCAT) review be conducted and a separate ITA be secured, if needed, for the POI property that would be transferred to AIC. Consultation with the IDNR for the Flanigan 138kV Substation Project (Appendix A) included an Illinois EcoCAT review (#2110514) dated February 15, 2021. The EcoCAT response letter from IDNR, dated August 4, 2021, indicated that the ICF, listed as threatened pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10), may potentially occur in the vicinity of the Project Area and that an ITA for the ICF be pursued (Appendix A).

Preconstruction activities (grading, installation of stormwater best management practices [BMPs], and construction of the access road) on the POI property for the solar project were addressed in the Cass County Solar Project Conservation Plan and ITA, issued by IDNR on September 13, 2022. AIC (Applicant) is preparing this conservation plan in pursuit of a separate ITA for construction activities on the POI property, including construction of the Flanigan 138kV Substation and associated facilities. Cass County Solar Project, LLC plans to complete the preconstruction activities approved in their ITA during June and July 2023. AIC anticipates construction of the new Flanigan 138kV Substation on the POI property to begin in September 2023, after the property transfer process is complete.

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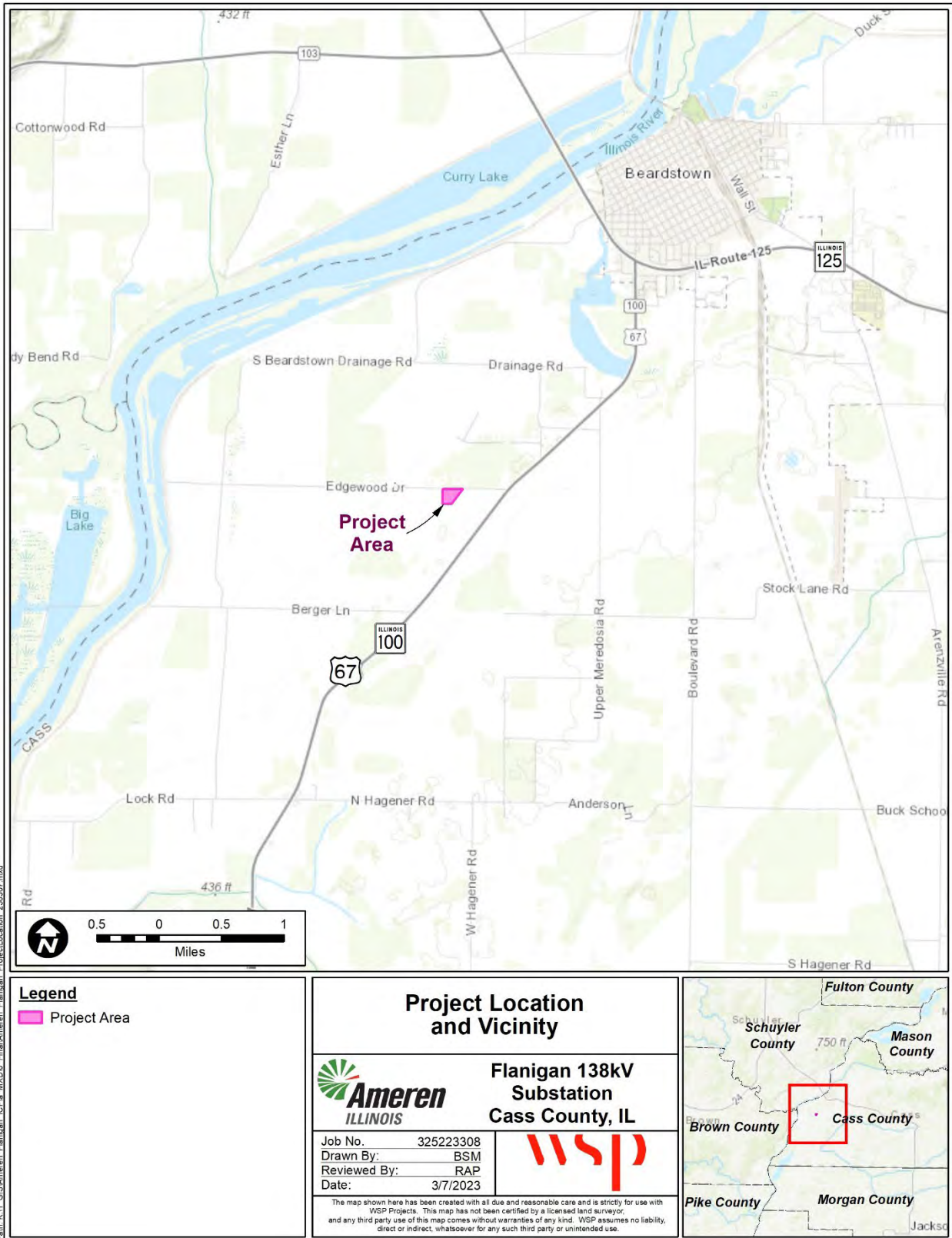


Figure 1. Flanigan 138kV Substation Project Location



2.2 Area to be Affected

The Project Area is located within Beardstown township, southwest of the City of Beardstown, in Cass County, Illinois in Sections 32 and 33 of Township 18N, Range 12W (Figure 1). Based on the National Land Cover Database (NLCD) (Dewitz 2019) and field visual inspections, the Project Area consists of approximately 8.9 acres of row crop agricultural land (Figure 2) and is situated just south of Edgewood Drive west of its intersection with US 67. The “Buildable Area” measures approximately 3.79 acres and defines the limits of construction of the Project (Figure 2). This Buildable Area has been sited to avoid wetlands and waterways, IDNR-documented ICF breeding areas, sandy soils, and forested areas to the extent practicable.

The Project Area for the Flanigan Substation is located on privately owned property. The property is being purchased by Cass County Solar Project, LLC and will be quit claimed to the Applicant [the Transmission Owner (AIC)]. Cass County Solar Project, LLC will bear the full cost and responsibility for property acquisition, site grading to AIC specifications, constructing and furnishing an access road, permitting, right-of-way, and all other costs associated with acquiring the necessary real estate for the substation. The Applicant has entered into a land purchase option agreement for approximately 9 acres for the Flanigan 138kV Substation (Appendix E: Land Control Documentation). The Project’s Generator Interconnection Agreement requires that the POI property be transferred from Cass County Solar Project, LLC to the Applicant following the completion of the POI preconstruction activities required to be completed by Cass County Solar Project, LLC under their ITA issued by IDNR in September 2022.

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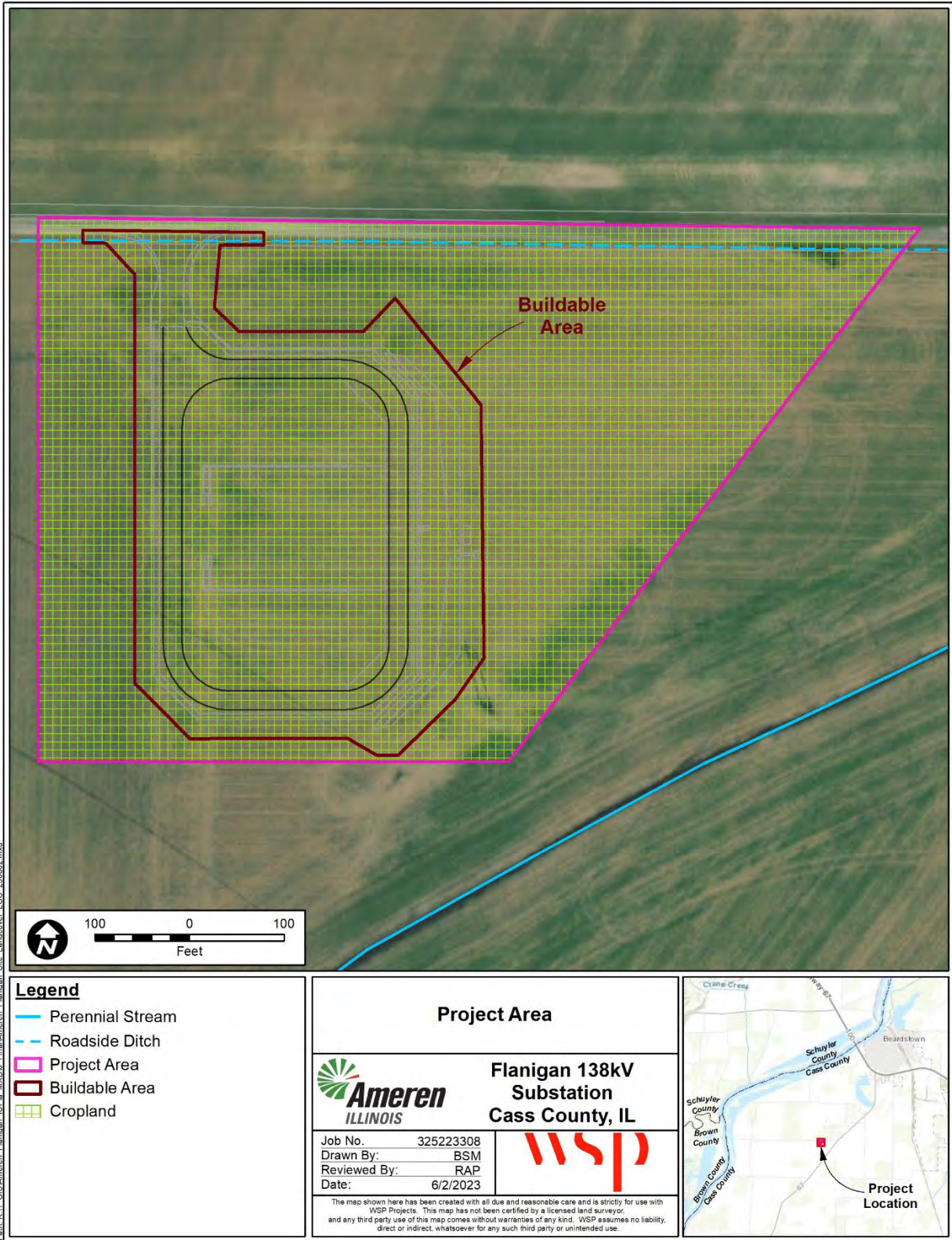


Figure 2. Flanigan 138kV Substation Project Area and Land Cover

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Waters of the U.S. (WOTUS) delineation field surveys were conducted by Ecology and Environment, Inc. in the Project Area and adjacent Cass County Solar Project Area on August 23, 2018 (ECT 2022). No wetlands, open water features, or streams were delineated within the Project Area. One unnamed ephemeral stream was identified approximately 90 feet south of the southeast corner of the Project Area (ECT 2022). Additionally, a roadside ditch running along the eastbound shoulder of Edgewood Drive and northern boundary of the project area was identified during an ICF habitat assessment in 2021 (Wood 2021), which was not delineated as a stream or jurisdictional WOTUS by Ecology and Environment, Inc. WOTUS surveys.

A request for an Approved Jurisdictional Determination was submitted to U.S. Army Corps of Engineers (USACE) September 1, 2020, and the USACE concurred on February 24, 2021, that there would be no impact to WOTUS (Appendix C). As shown in Figure 3, the Buildable Area has been sited to avoid direct impacts to all delineated WOTUS. Therefore, permitting under Section 404 of the Clean Water Act is not required.

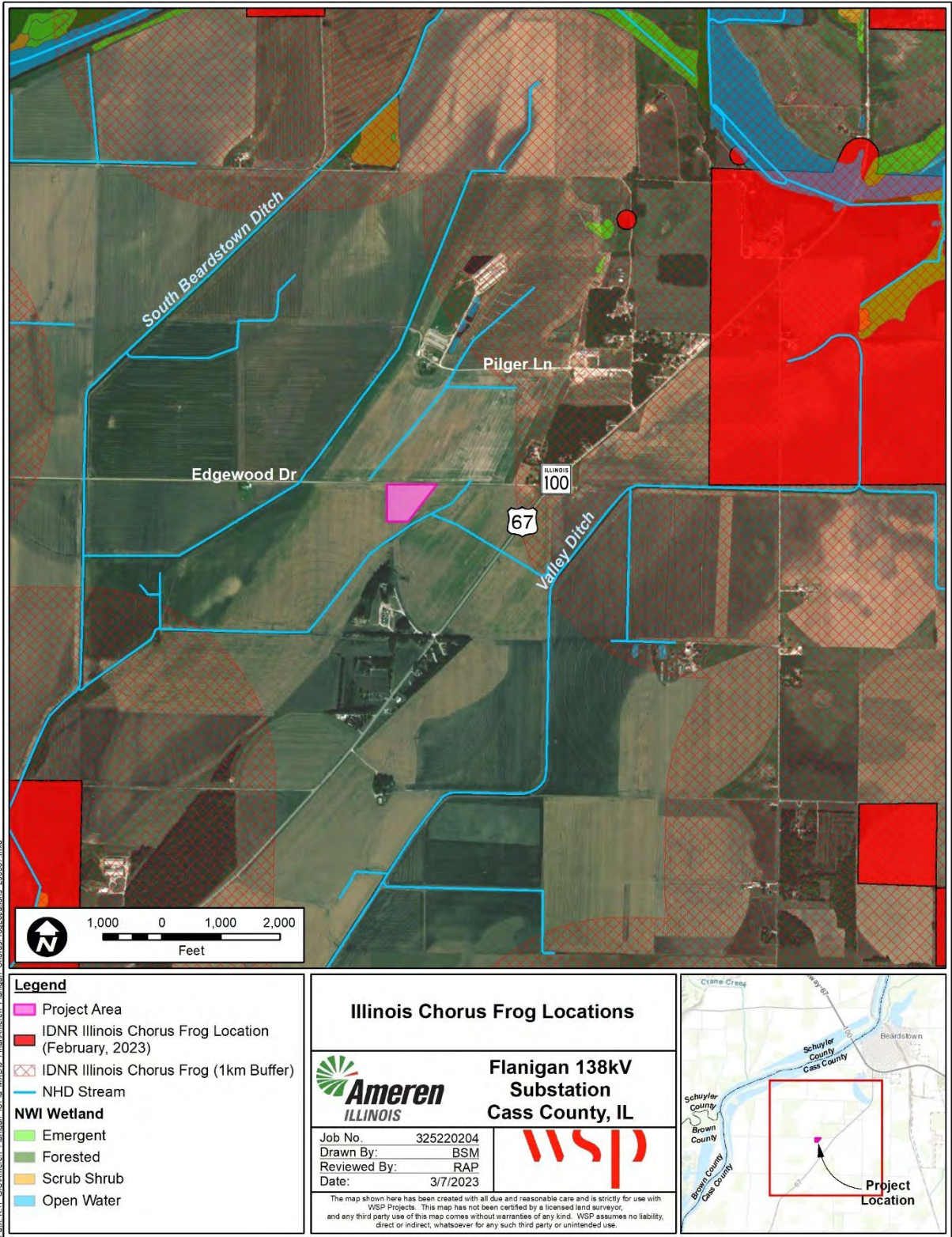
As mapped by the Natural Resources Conservation Service (NRCS), soils within the entire 8.9-acre Project Area are comprised of 6.7 acres (75.1 percent) Orio Loam at 0-2 percent slopes, 1.9 acres (21.2 percent) Sparta loamy sand, Illinois till plain at 2-6 percent slopes, and 0.33 acres (3.7 percent) Watseka loamy fine sand at 0-2 percent slopes. Only approximately 0.79 acres (20.8 percent) of the Buildable Area consists of sandy soils (Sparta loamy sand) that may be suitable for ICF upland burrowing habitat (Table 1 and Figure 4). However, construction of the access road, a portion of which is within the Buildable Area, was covered under the existing ITA for the Cass County Solar Project.

Table 1. Soils of the Project Area and Buildable Area

Soil Type (Map Unit Symbol)	Project Area		Buildable Area		Sandy (Y/N)
	Acres	Percent	Acres	Percent	
Watsseka loamy fine sand, 0 to 2 percent slopes	0.33	3.7%	0.00	0.0%	Y
Orio loam, 0 to 2 percent slopes	6.69	75.1%	3.00	79.2%	N
Sparta loamy sand, Illinois till plain, 2 to 6 percent slopes	1.89	21.2%	0.79	20.8%	Y
Total	8.91	100%	3.79	100%	

Source: USDA NRCS 2023

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Figure 3. Illinois Chorus Frog IDNR Documented Breeding Areas in the Vicinity of the Project Area

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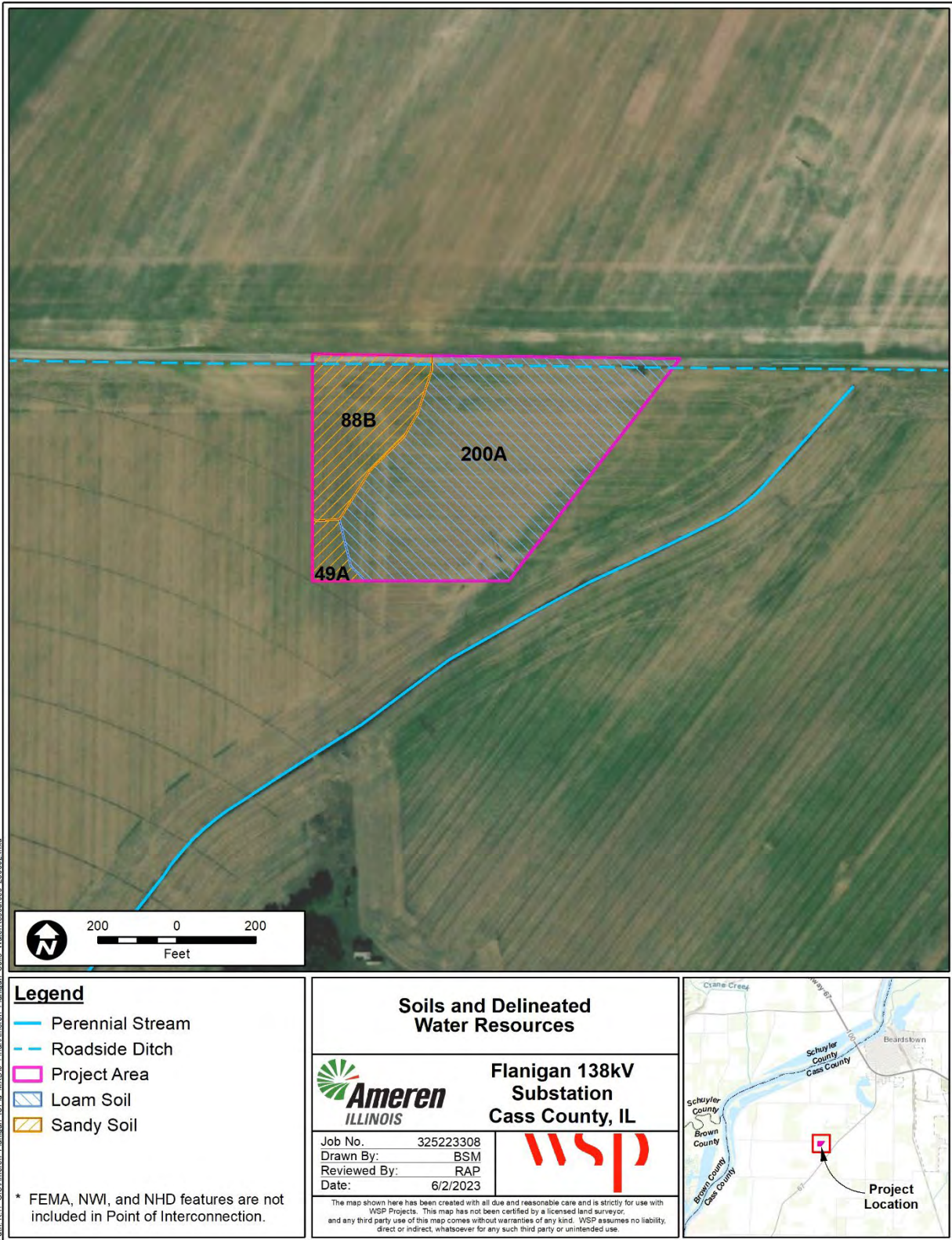


Figure 4. NRCS Mapped Soils and Delineated Water Resources within the Project Area



2.3 Biological Data on Illinois Chorus Frog

This Conservation Plan has been prepared in accordance with the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080) in support of an ITA application to the IDNR. The purpose of this Conservation Plan is to review the proposed Project in sufficient detail to determine to what extent the proposed action may result in “incidental take” of the ICF, which is a state-threatened species in Illinois.

2.3.1 Field Survey

As described in Subsection 2.1, consultation with the IDNR in August 2021 indicated that the ICF may potentially occur in the vicinity of the Project Area. According to the Illinois Natural Heritage Database (Illinois Natural Heritage Database 2023), the nearest Element Occurrence (EO) for the ICF is approximately 0.85 miles (1.4 kilometers) from the Project Area (Figure 3).

A desktop and field habitat assessment and two general presence/absence anuran call surveys (i.e., audible species-specific frog calls) were performed in 2021 for the Project Area. Because of the considerable distance from documented breeding pond EOs, the intent of the surveys was to determine presence of suitable habitat and general presence/absence of ICF within the Project Area. Prior to the field investigation, several data sources were reviewed to identify areas of suitable habitat for the ICF. These data sources included:

- USGS 1:24,000 Scale Topographic Maps
- Recent and historic aerial photography
- NLCD (Dewitz 2019)
- NRCS soils data for Cass County, Illinois (Figure 4 and Appendix D)

The anuran surveys were carried out during suitable weather conditions as soon as authorization was received from the Applicant, which was at the end of the species’ typical breeding season. A WSP (formerly Wood) biologist conducted anuran call surveys and visual inspections of the proposed Project Area over two nights, on May 10 and May 14, 2021, to detect the potential occurrence of the ICF and its habitat. Surveys were conducted during ideal conditions for potential ICF call activity, which included temperatures no lower than 52°F with calm to light wind speeds. No ICF activity was detected during the mid-May 2021 anuran surveys at the proposed Project Area. However, ICF may not have been detected because the surveys were not able to be conducted until after the peak breeding season, which is typically in March and April. The anuran habitat assessment and survey report is included in Appendix B.

Site inspections did not identify depressions or other surface water-holding features that periodically become inundated and might provide suitable breeding habitat for ICF; however, a roadside ditch adjacent to Edgewood Drive was identified just outside the Project Area’s northern boundary (Figure 4). The ditch appeared to only hold water during and immediately after rain events but was determined to possess potentially suitable breeding habitat.



2.3.2 Species Description

The ICF is a small frog with a range restricted to sandy floodplain regions in western Illinois, southeast Missouri, and northeast Arkansas (Illinois Natural History Survey 2017). The ICF is listed by the state as a threatened species in Illinois (IDNR 2015).

The ICF is a secretive, fossorial species that emerges from underground burrows only during the breeding season. Adults are stout but small (growing up to 1.8 inches from snout to vent) with toad-like bodies and robust forearms. Adults have a distinguishing dark, mask-like stripe from snout to shoulder and a V- or Y-shaped mark between the eyes (Illinois Natural History Survey 2017).

2.3.2.1 Upland Life History

Between April to February, ICF live predominantly underground in sandy, loamy sand, or sandy loam loose soils conducive for burrowing (Illinois Natural History Survey 2017). Burrowing habitat predominates in areas with no or relatively sparse vegetation near ephemeral breeding pools. In laboratory and field environments, adult burrows have ranged from less than 1.0 inch up to 9.0 inches deep (Tucker et al. 1995).

While underground, ICF feed on invertebrates found in the soil. Prey species of ICF are likely most abundant close to the soil surface. Unlike other *Pseudacris* species, ICF are not freeze-tolerant and must burrow below the frost line to survive freezing temperatures in winter (Packard et al. 1998). ICF likely need to burrow between 5.0 inches and 10.0 inches below the surface to escape freezing (Brown et al. 1972).

2.3.2.2 Breeding

ICFs emerge from their sandy burrows for the breeding season following early spring rains where they travel to nearby shallow, isolated waters lacking predators, such as ephemeral ponds, flooded fields, and ditches, for reproduction. Larger bodies of water or streams with flowing water are not suitable for breeding (Brown and Rose 1988). The breeding season for this species in central Illinois is February through April, possibly extending through late May (Brown and Rose 1988; Hulin et al. 2015). Tadpoles mature into their terrestrial form about two months following hatching and leave their natal wetlands to burrow in late May or early June (Tucker 2000).

2.3.2.3 Population Status

The largest threat to this species includes habitat loss and severe fragmentation resulting from the draining of ephemeral wetlands and flooded fields for agricultural use or development (Illinois Natural History Survey 2017; Tucker et al. 2008; Trauth et al. 2006). Chemical runoff from agricultural practices into adjacent wetlands is also detrimental to the ICF (Illinois Natural History Survey 2017; IDNR 2009). Nonetheless, agricultural practices can be compatible with the wetland habitat requirements of the ICF if natural vegetation in and around wetland habitats is left unmowed, and harmful runoff is minimized through a limitation of chemical use and/or maintaining a vegetated buffer around wetlands (IDNR 2009).

A review of the Illinois Natural Heritage Database determined no EOs of ICF breeding locations exist within 1 kilometer of the Project Area (Figure 3). According to the literature, ICF typically do not travel more than 1 kilometer between their aestivation and breeding sites (Tucker and Philipp



1995). ICFs require sandy soils in which to burrow, and they are believed to travel through agricultural lands to reach breeding sites (Tucker and Philipp 1995). In summary, no EOs exist within 1 kilometer and no ICFs were detected by WSP within or near the Project Area during May 2021 field surveys. However, 2.22 acres of sandy soils do occur within the Project Area, and 0.79 acres of these soils occur within the Buildable Area (see Table 1, Figure 4, and Appendix D), although construction of the access road within the Buildable Area was covered under the existing ITA for the Cass County Solar Project.

2.4 Description of Project Activities

2.4.1 Activities with Potential for Incidental Take

Construction of the proposed Project has the potential to result in incidental take of the ICF because this species has been confirmed to be present in flooded fields/ditches in Cass County, there is a roadside ditch on the northern boundary of the Project Area, and sandy soils potentially suitable for upland burrowing habitat occur in the Project Area. However, the roadside ditch has not been confirmed to provide breeding habitat for the ICF.

ICF may be most vulnerable to direct take from February through April, when adult frogs emerge from underground and congregate at breeding ponds. ICF may be at increased risk during this period due to their increased mobility and overland travel. Higher concentrations of ICF that occur at breeding ponds/ditches relative to upland habitat also may increase the population's susceptibility to negative impacts during this period if construction activities occur near an occupied ditch between February and April. In addition, work near active breeding areas has the potential to change the ditch's hydrology through siltation.

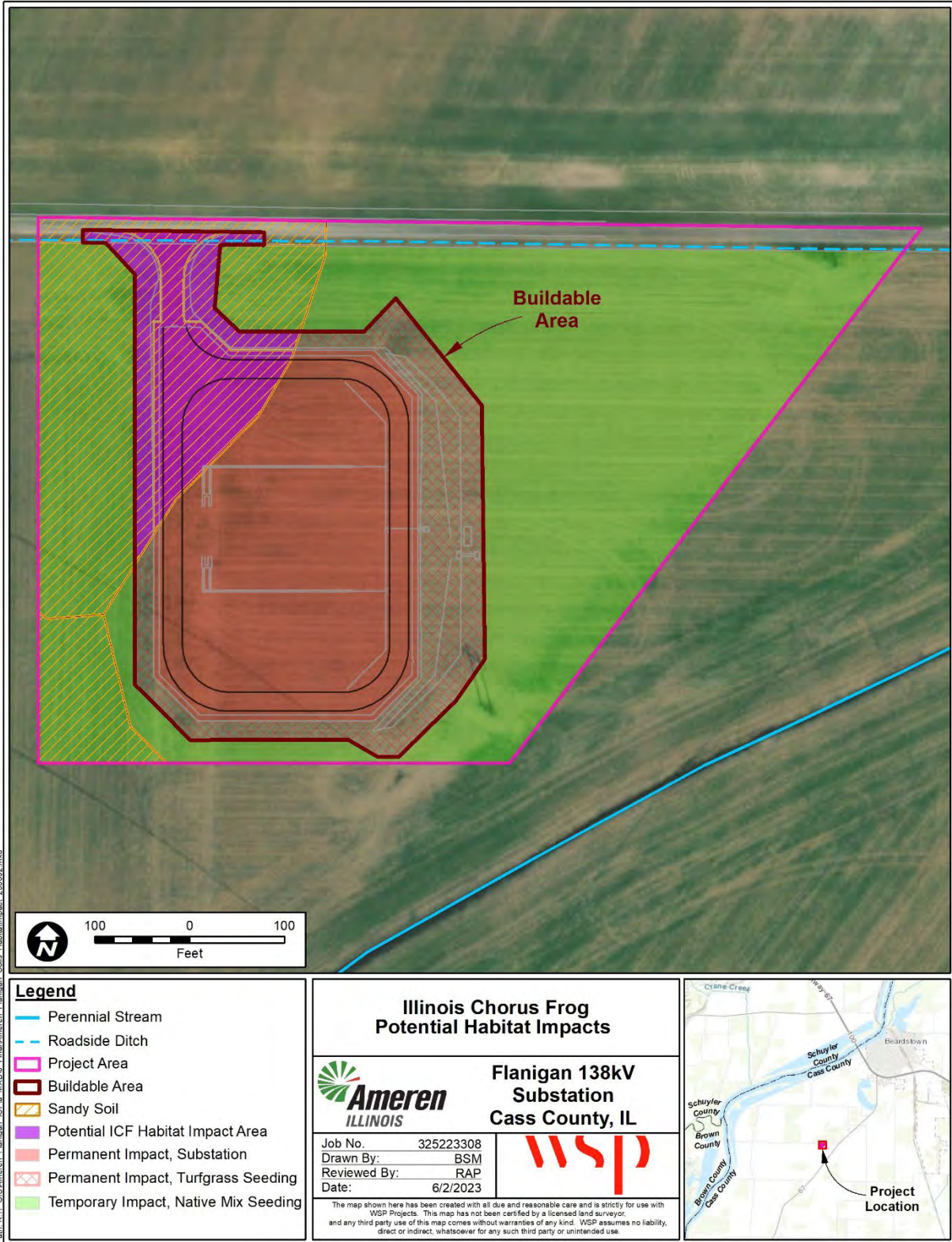
Ground disturbance associated with excavation and compaction of the soil also has the potential to adversely impact ICF. However, the Project Area does not occur within 1 kilometer of documented IDNR EOs and there are only 0.79 acres of sandy soils mapped within the Buildable Area. Construction of the Flanigan Substation on agricultural lands with sandy soils may adversely affect potential ICF upland burrowing habitat shown on Figure 5.

Construction activities are described in detail below.

2.4.2 Construction Sequence and Schedule

Construction activities and infrastructure may have the potential to alter the habitat for the ICF and to affect individuals of this species. Changes in habitat can result from both construction activity as well as seasonal timing. Most of the construction activities take place within the Buildable Area shown on Figure 2, with the majority of the work covered under this Conservation Plan taking place from fall 2023 through late spring 2024 (Table 2). Preconstruction activities (grading, installation of stormwater BMPs, and construction of the access road) on the POI property for this project were addressed in the Cass County Solar Project Conservation Plan and ITA, issued by IDNR on September 13, 2022. Prior to operation of the solar facility, Cass County Solar Project, LLC will transfer fee title of the POI property (Flanigan Substation Project Area) to AIC. AIC is responsible for obtaining an ITA for construction of the Flanigan Substation and associated facilities on the POI property.

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Figure 5. Illinois Chorus Frog Potential Impact Areas



Table 2. General Construction and Installation Sequence Schedule for the Flanigan 138kV Substation Project

Construction/Installation Action	Responsibility ¹	Schedule ²
Point of interconnection grading	Cass County Solar Project	6/1/23-7/31/23
Stormwater BMP installation	Cass County Solar Project	6/1/23-7/31/23
Access road installation	Cass County Solar Project	6/1/23-7/31/23
Construction of Flanigan Substation and associated facilities	Flanigan Substation Project	9/1/23-5/22/24
Installation of ICF exclusion fencing to a depth of 6 inches below grade around construction areas	Flanigan Substation Project	1/1/24-1/31/24
ICF monitoring at Project Area	Flanigan Substation Project	2/1/24-5/31/24
Seeding/permanent stabilization	Flanigan Substation Project	6/1/24-7/31/24

¹Preconstruction Activities, including grading, stormwater BMP installation, and access road construction are to be completed by Cass County Solar Project, LLC and were covered under the 2022 Cass County Solar Project Conservation Plan and ITA, issued September 2022 (ECT 2022).

²Current representation of Project schedule, plans subject to change.

2.4.3 Project Elements

The proposed Flanigan 138kV Substation would be located on the approximately 8.9-acre POI property (Project Area) and will be owned, constructed, and operated by AIC. Approximately 3.79 acres of this POI property (Buildable Area) include construction disturbance, laydown, and access road. It is assumed that the entire Project Area may be temporarily disturbed during the construction period. Once the substation equipment is installed, the Buildable Area would be permanently occupied by the substation, access road, security fencing, drainage swales and associated facilities (Figure 5).

For the construction of the new Flanigan 138kV Substation, the Cass County Solar Project, LLC is responsible for clearing vegetation, removing topsoil, and grading, as detailed in the site-specific Storm Water Pollution Prevention Plan (SWPPP) and the associated Conservation Plan submitted to IDNR in 2022 (ECT 2022). The site access road and stormwater BMPs, including silt fences and site drainage structures, would also be installed by Cass County Solar Project, LLC and maintained throughout Project construction. Primary access to the site, both during construction and operation, would be via a new graveled access road constructed by Cass County Solar Project, LLC from Edgewood Drive to the substation, a distance of approximately 200 feet.

For the Project covered under this Conservation Plan, the Flanigan 138kV Substation would be constructed by the Applicant on a previously graded location. AIC will install a gravel base, concrete equipment pads, concrete drilled piers, and mat foundations that are considered permanent structures. The 3.79-acre Buildable Area would include a 2.6-acre substation area

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enclosed with security chain link fencing, an entrance road, and a 1.2-acre buffer of turfgrass drainage swales (see Figure 5). As such, these structures are considered permanent impacts to the habitat. Approximately 5 acres of undeveloped portions of the Project Area outside of the Buildable Area would not be contained within security fencing and would be planted with a native prairie seed mix.

All of these facilities would be constructed in open, undeveloped fields within the Buildable Area shown on Figure 2. The description of Project facilities and estimates provided are based on preliminary design and may change with final design. Construction activities covered under this Conservation Plan would include the proposed substation, lighting, and the following related equipment and structures:

- Installation of temporary exclusion fencing to a depth of 6 inches below grade around the Project substation construction area.
- Installation of drilled concrete piers and mat foundations for substation area
- Two (2) 138 kV steel dead-end arbor structures
- Three (3) 138 kV Gas Circuit Breakers, 3000A, 40kA interrupting capability
- Two (2) 138 kV Motor Operated Disconnect Switches, 2000A
- Seven (7) 138 kV Disconnect Switches, 3000A
- Six (6) 138 kV Coupling Capacitor Voltage Transformers
- Nine (9) 138 kV Surge Arresters
- AC Station Service: Two (2) station service voltage transformers
- Bus and Fittings: Five-inch aluminum tube with bolted aluminum bus connectors, fittings, and terminals
- Insulators: High strength porcelain station post insulators
- Ground Grid: Designed utilizing buried copper wire and exothermic welds
- Fence: Standard chain link fencing to surround the 2.4-acre substation area, with seven-foot fabric, three strands of barbed wire, and reinforcement cables
- Prefabricated Steel Control Enclosure containing:
 - Relaying and Control: Two (2) line protection relay panels, three (3) breaker control panels, one (1) RTU panel, one (1) communications panel, one (1) fiber panel, and one (1) network panel
 - DC Station Service: One (1) 125-volt battery, two (2) battery chargers, and two (2) DC distribution panels
 - AC Station Service Equipment: One (1) automatic AC transfer switch and three (3) AC distribution panels.
- Temporarily disturbed construction and laydown areas will be restored and seeded with native prairie seed mixes.



No open trenching of the conduit will be conducted in sandy soils. Disturbance from conduit installations are temporary impacts to potential overland travel habitat for ICFs. Some fence posts will be installed in sandy soil potential burrowing habitat and would be permanent impacts.

Temporary facilities associated with construction will include construction laydown yards that will be placed within the Buildable Area, as practicable, but could also be placed in the Project Area outside of the Buildable Area. Temporary laydown areas would be established away from sandy soils and potential ICF breeding areas. The laydown areas will be constructed from a layer of gravel placed on top of existing site soils. The laydown areas will accommodate the storage of construction materials, employee parking, ease offloading of supplies transported to the Project, and stage Project tasks. Once construction of the Project is completed, facilities and the gravel will be removed, and the preconstruction soil conditions would be restored. The impacts to habitat from the laydown areas are temporary.

Site restoration and revegetation will be based on the degree of disturbance caused by construction activities. Where soil disturbance occurs in environmentally sensitive areas, erosion control BMPs will be installed, maintained, and monitored until the area is revegetated. AIC and its contractors will work with local suppliers to find the most suitable seed mix design for the Project that includes native prairie species and wildflowers for pollinators. A representative pollinator friendly native seed mix that will be used to restore approximately 5.1 acres outside of the Buildable Area is included in Appendix F. The species included in the list will be used to the extent possible, although there may be a few minor substitutions depending on availability. Site restoration and revegetation of disturbed areas will be complete by July 31, 2024.

2.4.4 Permitting Reviews

The Applicant will comply with all Federal, state, and local regulations. No other environmental permitting reviews are required for the Project (e.g., U.S. Fish and Wildlife Service biological opinion or USACE Section 404 review) as no other sensitive resources are impacted by the Project.

2.5 Potential Adverse Impacts on the ICF

For the purposes of this report, the term temporary impacts will be used to identify short-term impacts to habitat areas during Project construction; permanent impacts will identify impacts that that will last beyond the construction phase. All impacts from preconstruction activities, including grading, stormwater BMP installation, and access road construction was covered under the 2022 ITA for the Cass County Solar Project.

2.5.1 Breeding Habitat

Although documented breeding pond EOs provided by IDNR do not occur within 1 kilometer of the Project and no ponded areas exist within the Project Area, the ICF has been confirmed to be present in flooded fields/ditches in Cass County. A roadside ditch on the northern boundary of the Project Area was identified that has the potential to provide ICF breeding habitat. No direct impacts to this ditch are expected from the proposed Flanigan 138kV Substation Project, as the access road that crosses the ditch was previously constructed by Cass County Solar Project,



LLC. Indirect impacts to the roadside ditch, such as siltation, may occur; however, compliance with the project SWPPP, which includes use of BMPs to control off-site discharge of sediments will be used to minimize potential impacts.

2.5.2 Upland Habitat

The IDNR considers potential upland habitat for ICF to be suitable sandy soils within 0.6 miles (0.9 kilometers) of documented breeding ponds. Although there are 2.22 acres of sandy soils mapped in the Project Area (Figures 4 and 5), documented breeding pond EOs supplied by the IDNR do not include any locations within 1 kilometer of the Project Area (Figure 3). The area of sandy soils does fall within 1 kilometer of the roadside ditch along the northern boundary of the Project Area; however, ICF have not been confirmed to breed within this ditch. The Project Buildable Area has been designed to avoid sandy soils to the extent practicable. However, a small amount (0.79 acres) of sandy soils would be impacted by development of the substation infrastructure and security fencing for this Project, which would potentially introduce temporary construction impacts and minor permanent habitat impacts. However, preconstruction activities within the Buildable Area, including grading, stormwater BMP installation, and access road construction are to be completed by Cass County Solar Project, LLC and were covered under the 2022 Cass County Solar Project Conservation Plan and ITA, issued September 2022 (ECT 2022).

2.5.3 Overland Travel Habitat

The Buildable Area may be utilized by migrating, dispersing, or wandering individuals of ICF. Temporary Project activities include vehicle travel, temporary trenches, fence post installation, and vegetation maintenance and restoration. Temporary impact activities could result in direct mortality via crushing individual ICFs. All grading, stormwater BMP installation, and access road construction was covered under the 2022 ITA for the Cass County Solar Project.

After construction is complete, long-term activities conducted by AIC, such as occasional vehicle entries and vegetation management, will be necessary. The long-term activities could also result in direct mortality via crushing individual ICFs; however, this is not expected due to lack of breeding habitat in the Project Area and lack of EOs within 1 kilometer.

Additionally, the position of substation infrastructure will prevent the usage of certain areas by wildlife. Areas that will become inaccessible and/or will be converted to non-supportive habitat for the long term include the gravel substation base with concrete equipment pads, concrete drilled piers, mat foundations, and fence posts.

The entire 8.9-acre Project Area may be used by ICF for overland travel during the breeding season and may sustain impacts during or after construction. However, only 3.79 acres of this are within the Buildable Area and only 2.56 acres are within the fenced substation area, which would likely sustain the majority of permanent impacts. Approximately 1.23 acres surrounding the fenced substation area would be planted in turfgrass and would be available for overland travel once construction and restoration are complete. Most of the overland travel impacts to the Project Area would be temporary, and the habitat would be restored to previous or improved habitat conditions after the completion of construction.



2.5.4 Impact Summary

In summary, the proposed Project Area is not within 1 kilometer of IDNR documented ICF EOs. The Project was sited to avoid impacts to wetlands and sandy soil areas to the extent practicable. Potential temporary and permanent impacts from the proposed Project are summarized in Table 3 below.

Table 3. Summary of Impacts to ICF from Flanigan 138kV Substation Project

Impact Type	Estimated Temporary Impact (acres)	Estimated Permanent Impact (acres)	Total
Potential ICF breeding areas	N/A	N/A	N/A
Upland ICF habitat (sandy soil)	1.43	0.79	2.22*
Overland travel habitat	6.35	2.56	8.91

* Preconstruction activities for this project within the Buildable Area, including grading, stormwater BMP installation, and access road construction are to be completed by Cass County Solar Project, LLC and were covered under the 2022 Cass County Solar Project Conservation Plan and ITA, issued September 2022 (ECT 2022).

2.5.5 Direct Take

No direct impacts to ICF breeding habitat are expected from construction of the Flanigan Substation Project. The Project Area includes approximately 2.22 acres of sandy soils (USDA NRCS 2023), approximately 24.9 percent of the Project's total area; however, the Project Area does not occur within 1 kilometer of known ICF breeding populations. In addition, only 0.79 acres of sandy soil habitat are within the Buildable Area and would be permanently converted from agricultural lands to substation infrastructure.

Approximately 5.1 acres of agricultural land that may sustain temporary effects to the ICF will be planted with native prairie species and pollinator habitat upon restoration of the Project Area (Appendix F). As a result, the Project's potential impacts resulting from take of 0.79 acres of suitable ICF burrowing habitat are unlikely to reduce the survival and recovery of the ICF, and restoration activities are likely to aid in the conservation of the species.

As discussed in Subsection 2.4.1, ICF may be at highest risk of impacts during the breeding season when ICF are above ground within and adjacent to potential breeding areas and dispersing through a variety of habitats to reach breeding ponds/depressions. Due to minimal sandy soils in the Buildable Area, no IDNR EOs within 1 kilometer, and prior grading of the Buildable Area footprint covered by the Cass County Solar ITA, WSP expects a small loss of potential ICF burrowing habitat (0.79 acres) but does not anticipate the take of any individuals as a result of temporary and permanent construction and operation activities associated with the Project. AIC is committed to implementing the measures laid out in Section 2.5.6 to avoid and minimize impacts to potential ICF burrowing habitat.



2.5.6 Efforts to Avoid, Minimize, and Mitigate Impacts

Project impacts pertain to the potential for direct mortality and habitat alteration during construction activities. The following practices will be implemented to avoid, minimize, and mitigate temporary impacts to the ICF:

- The Project was designed to avoid impacts to wetlands. Wetlands play a critical role in the lifecycles of many species, such as ICF. There will be no reduction in acres of delineated wetlands due to the Project.
- Approximately 0.79 acres of sandy soils are mapped within the Buildable Area (USDA NRCS 2023). If sandy soils are encountered during construction, Project features will be sited to avoid areas of sandy soil to the extent practicable.
- Laydown yards will be sited to avoid areas of sandy soil to the extent practicable.
- Construction personnel will receive environmental training prior to Project construction and will focus on the identification, lifecycles, vulnerabilities, and reporting procedures with respect to the ICF.
- Temporary exclusion fencing will be installed to a depth of 6 inches below grade around the Project substation construction area. It will be removed upon completion of Project construction activities.
- Project construction and BMPs will adhere to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Site Activities (Land Disturbance Permit) and associated SWPPP requirements. If deemed necessary, AIC will obtain their own Land Disturbance Permit prior to construction activities commencing, or will seek to transfer ownership of the Cass County Solar Project's permit that likely covers the land disturbance at the POI, if appropriate. At this time it is not anticipated that AIC will disturb more than one acre of land as part of their construction efforts, since the new substation will be built on top of an already graded pad permitted by the Cass County Solar Project.
- To reduce risk to ICF, daily construction work hours in February, March, and April will stop prior to sunset to avoid the time of day when ICF are most active.
- Trenches will be refilled within 12 hours of excavation. Trenches that are open for more than 12 hours, or that have been left open overnight, will be inspected for animal presence before refilling. Animals found will be released prior to trench filling.
- Although not expected, in areas of grading and excavation in sandy soils, topsoil will be removed from the area and set aside for replacement upon completion of disturbance.
- A biological inspector/monitor will be present daily for any active construction that occurs during ICF breeding time (February to April), and weekly throughout the remainder of construction. If large congregations of ICF are observed the IDNR will be notified. However, large congregations of ICF are not anticipated at this site based on habitat suitability and lack of past occurrence records in the area.

Because there are no direct impacts expected to ICF breeding habitat, long-term impacts pertain mainly to loss of 0.79 acres of potential burrowing habitat (sandy soils) within the Buildable Area,



potential overland travel habitat loss resulting from the Project activities, and to a lesser degree, the limited potential for direct mortality during Project operations and maintenance. The following practices will be implemented to avoid, minimize, and mitigate long-term impacts to the ICF:

- Lighting density, intensity, coloration, and direction will be carefully reviewed to avoid interference with wildlife.
- Approximately 5.1 acres within the Project Area outside of the substation fencing will be planted with a native prairie seed mix containing approximately 15 native wildflower species, four native grasses, and two native sedges that benefit pollinators and other wildlife species.
- Once vegetation is established within the native grassland planting area (anticipated to occur within three years following construction), there will be no more than two annual mowings between the dates of August 1 to November 1 to minimize impacts to ICF and also to pollinators, breeding birds, and other nesting wildlife. One mowing per year is anticipated to be the normal routine.
- Mower blades will be set no lower than 6 inches if such mowings do occur in the native grassland planting area. A request will be made that the vegetation management team set mowers to 8 inches in an effort to provide additional protection to ground dwelling species such as ICF. Prescribed burning may potentially be occasionally used to manage the native prairie/pollinator habitats, if site conditions allow. Such burning would occur during late fall or winter and outside of the breeding season of the ICF.
- For the turfgrass area, any mowing between April 15 and October 20 will occur after sunrise and before sunset, and AIC would avoid mowing or restrict mowing frequency during the ICF breeding season (February 1 through May 31), when possible.
- There will be no broadcast herbicide spray. However, herbicides may be utilized in a targeted manner in order to reduce invasive species or kill vegetation that threatens the Project infrastructure.
- State and/or federal threatened and endangered species observations made at the Project site or during visits to the Project site will be reported to IDNR within 48 hours.
- Annual call surveys for ICF targeting all ponds/ditches within 0.3 miles of construction (i.e., where landowner permission is granted, and/or where ponds are within 100 feet of public roads) for two of the five years post-construction. If rainfall is substantially lower than average, AIC will confer with IDNR about postponing surveys to a year with better conditions. A WSP biologist will conduct call surveys for one night per week for 10 weeks during the main ICF breeding season when weather conditions are optimal for breeding activity and call detection (late February through early May).

2.5.7 Mitigation Measures

Monetary mitigation was previously provided by Cass County Solar Project, LLC under their 2022 ITA as compensation for potential habitat disturbance and the take of sensitive species resulting from preconstruction and construction activities within the solar energy facility's project area, which included the POI property (ECF 2022). This compensatory mitigation was offered in part to offset the permanent alteration of potential ICF upland burrowing habitat, including the maximum



of 0.79 acres of potential habitat affected within the POI property by preconstruction activities (grading, installation of stormwater BMPs, and construction of the access road) for the Flanigan Substation, shown in Figure 5 of this Conservation Plan. Therefore, because no additional permanent loss of habitat or ICF take is expected from AIC's construction or operation of the Flanigan Substation, the provision of additional monetary mitigation is not anticipated to be necessary. However, as a proactive conservation measure, AIC commits to planting approximately 5.1 acres in native grass and forb species within the Project Area outside of the fenced substation site, effectively replacing existing agricultural cropland with habitat that is more beneficial to the ICF as well as to non-target species. Table 4 summarizes the proposed conservation measures.

Table 4. Summary of Proposed Mitigation/Conservation Measures

Species	Maximum Potential Habitat Alteration	Habitat Restoration
Illinois chorus frog (<i>Pseudacris illinoensis</i>)	No additional habitat alteration by AIC. Approximately 0.79 acres within POI previously mitigated by Cass County Solar Project.	Approximately 5.1 acres of native grasses/forbs* planted to replace agricultural cropland (57% of Project Area)

* The pollinator friendly native seed mix is included in Appendix F.

3. ADAPTIVE MANAGEMENT PRACTICES

A primary objective of this Conservation Plan is to minimize adverse impacts to the ICF and provide a net benefit to this species. Adaptive management is a willingness to observe Project results and modify behaviors and activities to improve outcomes. The following practices will be implemented to ensure that the Project utilizes adaptive management:

- The construction and the environmental team will routinely monitor the implementation and effectiveness of the avoidance, minimization, and mitigation measures within this document in protecting the state-threatened ICF.
- If changed or unforeseen circumstances arise that reduce the effectiveness of the minimization measures described in this Conservation Plan, AIC will coordinate with the IDNR to determine if additional measures are warranted.

4. CASCADING EFFECTS

Currently, nearly the entire Project site is utilized to grow annual crops such as corn, soybeans, and sorghum. Annual monoculture crop systems are often subject to frequent tillage, which is detrimental to fossorial species and tends to diminish water quality. These monoculture crop systems also usually require high inputs of fertilizer, minerals, herbicides, insecticides, and fungicides. As such, modern monoculture crop fields are devoid of forage and structural diversity; and in tandem with the diminished water quality, they generally provide poor habitat for wildlife.

An unintended potential benefit of the location of the proposed substation facilities is its proximity to ICF populations, both to the east and west of the POI. These populations are likely stressed, and fitness is reduced by the intensive agriculture that occurs currently within Cass County,



including the Project Area. Returning this area to a low disturbance regime while restoring critical habitats, such as grassland plantings adjacent to potential breeding areas, may provide a net benefit to the species. The 5 acres of habitat being created on the undeveloped portions of the POI may provide a safe haven for any individuals dispersing through the area, and/or potentially repopulating the newly created habitat.

The targeted vegetation to be planted on areas of the POI property (Project Area) will be chosen to provide ground cover, structural diversity, a range of blooming dates and pollinator resources, and perennial root/soil structure. Given that the majority of the Project Area will become a habitat patch occupying approximately 5 acres, the restoration of this area to a more natural state should benefit a variety of non-target species such as birds, reptiles and amphibians, small mammal species, and hundreds of insect species, including several pollinators. Any negative effects as a result of Project construction and operation would likely be offset by the benefits to these species by removing these acres from cultivation over the medium to long term.

5. CONSERVATION PLAN FUNDING

Ameren Corporation is the parent of AIC, which provides services to electric and gas customers across central and southern Illinois. As a large utility, Ameren has adequate financial backing to support and implement mitigation activities described in this Conservation Plan. The costs of mitigation activities will be incorporated into the overall Project budget. Therefore, no specific financial instruments such as bonds, certificates of insurance, or escrow accounts will be required to implement the Conservation Plan.

6. PROJECT ALTERNATIVES

6.1 No Action Alternative

The purpose and need for the Project are to connect and distribute power generated by the Cass County Solar Project to the electric grid, thus bringing clean renewable energy sources to the state of Illinois and getting the state closer to its statutory requirements, established recently through SB2408, to reach 100 percent by 2050. The No Action Alternative for the Project would be to not construct the Flanigan 138kV Substation on the Project Area and would not satisfy the purpose and need. A decision not to construct the Project reduces the availability and distribution of clean, renewable power in Illinois for the state to reach its renewable portfolio standard.

In addition, a No Action Alternative would result in no change in habitat conditions for ICF. Existing active agricultural conditions at the Project Area may provide poor habitat for this species.

6.2 Alternative Project Locations

The Project Area and surrounding properties are dominated by a monoculture of crop fields. The POI substation is required to be adjacent to the Cass County Solar Project and to the existing Meredosia East – Frederick North segment of the Ipava Meredosia East 138kV transmission system. Shifting the Project in any direction would place the Project impacts on similar monoculture crop fields with scattered wetlands, ponds, streams, and ditches and would not result

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in a significantly different Project outcome than the design being proposed. The current Project design has been developed to minimize impacts to natural resources. Relocation of Project facilities within or outside of the Project Area boundary is unlikely to minimize Project impacts and may result in greater impacts to wetlands and streams.

6.3 Current Project Design (Preferred Alternative)

The current Project design connects and distributes a source of renewable energy to comply with the state's Future Energy Jobs Act, while making some improvements to habitat for the ICF within the Project Area. The current Project design (Buildable Area) within the selected Project Area, as shown in Figure 2, has been sited to avoid:

- Wetlands and waterways
- IDNR documented ICF breeding areas
- The majority of sandy soil area, located in the west and northwest portions of the Project Area
- Forested areas, located in the vicinity of the Project Area along waterways.

7. IMPLEMENTING AGREEMENT

7.1 Responsibilities and Schedules

The Applicant (AIC) agrees to implement this Conservation Plan upon approval by IDNR and issuance of the requested ITA. The Applicant, successor, or an assign of the Applicant would be solely responsible for meeting the terms and conditions of the ITA and would allocate sufficient personnel and resources for effective implementation of the Conservation Plan. The Applicant would be responsible for planning, contract execution, and construction supervision for the entire Project.

AIC is the developer and will be the long-term owner/operator of the Project. The Applicant, successor, or an assign of the Applicant has the responsibility to acquire all necessary permits for construction and operation of the Project, including the ITA. The Applicant will have the responsibility of complying with the terms of the ITA during both construction and operation of the substation facility.

The Applicant will serve as the Conservation Plan Coordinator and will be responsible for the implementation of the BMPs, mitigation measures, and restoration activities as described in this Conservation Plan. Joel Budnik will be the IDNR liaison and inform IDNR of adaptive management measures necessary to comply with the Conservation Plan. Contact information for the Conservation Plan Coordinator is as follows:

Joel Budnik

Ameren Services

Address: 1901 Choteau Avenue, MC602, St. Louis, MO 63103

Email: jbudnik@ameren.com; Phone: 636.628.6452

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A post-construction monitoring report will be provided to the IDNR upon completion of construction activities. The report would include a description of when the Project activities were completed, BMPs that were implemented, pre-and post-construction photographs of habitat areas, an inventory of any ICF individuals observed during construction activities, and any additional measures taken to further reduce potential impacts to this species.

In-field Project construction activities are anticipated to begin at this site in September 2023 and be completed by July 2024.

7.2 Certification

I hereby certify that the participants listed in Section 7.1 have the legal authority to carry out their respective obligations and responsibilities under the Conservation Plan.

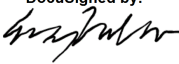


 Suzanne Pohlman
 Signatory of Ameren Illinois Company

06-13-2023

 Date

I hereby certify that preconstruction activities (grading, installation of stormwater BMPs, and construction of the access road) on the POI property described in this Conservation Plan were addressed in the Cass County Solar Project Conservation Plan and ITA, issued by IDNR on September 13, 2022 (and associated SWPPP requirements submitted to IDNR). Prior to commercial operation of the Project, Cass County Solar Project, LLC will transfer fee title of the POI property to AIC.

DocuSigned by:


 260EBD12492844F...
 Emily Truebner
 Signatory of Cass County Solar Project, LLC

06-13-2023

 Date

7.3 Compliance with Federal, State, and Local Regulations

The Applicant will comply with all pertinent Federal, State, and local regulations that govern the proposed Project and will provide copies of authorizations that could affect the terms and conditions of any ITA issued by the IDNR for this Project.



8. REFERENCES

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Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Appendix A

IDNR Correspondence

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Applicant: Cass County Solar, LLC
Contact: Matt Ihnken
Address: 3125 Sovereign Drive
Suite 9C
Lansing, MI 48911

IDNR Project Number: 2110514
Date: 02/15/2021

Project: Point of Interconnection
Address: Edgewood DR and US 67, Beardstown

Description: The project consists of 3 acres of disturbance within a 10 acre property to prepare a pad for the construction of an interconnection point with an existing electric transmission line.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Patterson's Bindweed (*Stylisma pickeringii*)

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.



County: Cass

Township, Range, Section:
18N, 12W, 32
18N, 12W, 33

**IL Department of Natural Resources
Contact**
Brian Willard
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Paul Eisenbrant
1021 N. Grand Avenue East
MC #10
Springfield, Illinois 62794

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



IDNR Project Number: 2110514

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Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

4 August 2021

Matt Ihnken
Senior Project Manager
3125 Sovereign Drive
Suite 9C
Lansing, MI 48911

**RE: Cass County Solar-Point of Interconnection
Consultation Program
EcoCAT Review #2110514
Cass County**

Dear Mr. Ihnken:

The Department has received your submission of this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], *Title 17 Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action being reviewed in this letter consists of a 3 acres of disturbance within a 10 acre property to prepare a pad for the construction of an interconnection point with an existing electric transmission line in Cass County, Illinois (39.977°, -90.465°).

The natural resource review provided by EcoCAT indicated that the state-listed **Illinois chorus frog (*Pseudacris illinoensis*)** may be in the vicinity of the proposed action. Based on the cryptic nature of this frog, the known occurrences of Illinois chorus frog surrounding the project area, the scope and scale of work required, and habitat in the project area being consistent with surrounding habitat in which this frog has been identified, the Department recommends the applicant seek an Incidental Take Authorization (ITA) pursuant to Part 1080 and Section 5.5 of the *Illinois Endangered Species Protection Act*. Be advised, an ITA can take at least four months to obtain and requires a public notice period. All questions pertaining to ITA should be directed to the ITA coordinator, Heather Osborn (Heather.Osborn@Illinois.gov). Visit the link below for information on the ITA process:

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Cass County Solar-Point of Interconnection, Consultation #2110514

<https://www.dnr.illinois.gov/conservation/NaturalHeritage/Pages/ApplyingforanIncidentalTakeAuthorization.aspx>.

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

The Department also offers the following conservation measures to help protect native wildlife and enhance natural areas in the project area:

Please contact me with any questions about this review.
Sincerely,

A handwritten signature in black ink that reads "Bradley Hayes". The signature is written in a cursive, flowing style.

Bradley Hayes
Resource Planner
Office of Realty & Capital Planning
Illinois Dept. of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
Bradley.Hayes@Illinois.gov
Phone: (217) 782-0031

cc. Heather Osborn - Incidental Take Authorization Coordinator

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Appendix B

Illinois Chorus Frog Monitoring Report

Flanigan Substation (Option 4) Project
Illinois Chorus Frog Monitoring

Technical Memorandum

Project Name:	Flanigan Substation (Option 4) Project near Beardstown, IL	
Project Number:	325221228	
Date:	May 28, 2021	
To:	Kenny Lynn, Ameren	
Subject:	Illinois Chorus Frog Monitoring Results	
	Prepared by:	Kirby Branch, Wood
	Reviewed by:	Matt Basler and Joel Budnik, Wood

1.0 Introduction

This memorandum presents the results of the anuran call surveys for the Illinois chorus frog (ICF) near a proposed new Ameren substation. The proposed new substation is in Cass County, Illinois near Beardstown. Reported survey results can be used by Ameren in support of any subsequent coordination required with the Illinois Department of Natural Resources.

1.1 Background Ecology

The ICF (*Pseudacris illinoensis*) have a limited habitat range that extends from central Illinois to northern Arkansas. The proposed new substation is within this general range. The ICF is listed as State-threatened in Illinois and only found in areas of sandy soils and require ephemeral ponds and wetlands to complete their life cycle. Breeding typically occurs from February to March and tadpoles metamorphose into young frogs by late May to mid-June. Young frogs then move to burrowing sites where they spend much of the year buried underground.

2.0 Methods

2.1 Anuran Call Surveys

Wood Environment & Infrastructure Solutions (Wood) biologists conducted anuran call surveys and visual inspections of the proposed substation location for two nights in mid-May 2021 to detect presence, or potential absence, of the ICF. Prior to conducting the two nightly surveys, Wood personnel monitored the proposed substation regional weather forecast for the week to select the nights with the most ideal conditions for ICF activity. These conditions included temperatures no lower than 52°F with calm to light wind speeds. Rain during the time of surveys was acceptable if it did not impede the ability of the biologist to hear anuran calling. Presence or absence was determined using call surveys (i.e., audible species-specific frog calls).

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Ballwin, MO 63011



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At the survey location for the proposed substation site near Beardstown, IL (see **Figure 1**), the surveyor recorded all anuran calls for approximately one hour. Data was recorded and included information on cloud cover, temperature, and wind speed. Calls were categorized using a call index with the following categories:

- 0 = None – no calls
- 1 = Individuals – individuals can be counted; there is spacing between calls
- 2 = Overlapping – calls of individuals can be distinguished, but there is some overlapping
- 3 = Continuous Chorus – full chorus, calls are constant, continuous, and overlapping

2.2 Site Visual Inspection

Visual inspection of a small drainage as identified from aerial imagery located southeast of the proposed substation was inspected prior to sunset. The drainage was evaluated for standing water as potential breeding habitat for anuran species. Photos were collected with GPS coordinates to document this feature and are included in the attached photo-log.

3.0 Results and Conclusions

3.1 Survey Conditions

ICF surveys were performed over two nights during the second week in May 2021. Each night a Wood biologist arrived on site before sunset and stayed for approximately one hour after last sunlight. Anuran surveys were completed on the nights of May 10 and May 14, 2021.

Weather conditions at the time of arrival on May 10, 2021 were 57°F, winds light at 1 to 3 mph with a partly cloudy, scattered or variable sky. The air temperature upon completion of the survey and leaving the site was 52°F. The second survey, completed on May 14, 2021 had weather conditions upon arrival of 65°F, a slight breeze at 4 to 7 mph with a partly cloudy, scattered or variable sky. At the completion of the second survey and time of site departure, the air temperature was 62°F. There was no precipitation recorded during either of the two surveys.

3.2 Site Inspection

No water features that could serve as potential anuran breeding habitat was observed within the site boundary. Furthermore, no standing water was observed within the drainage southeast of the proposed substation. The drainage was completely vegetated and lacked the sandy soils and standing water required for ICF breeding habitat. The only potential anuran habitat could be the roadside ditch along Edgewood Drive near the northern edge of the proposed substation, just outside of the proposed substation boundary. This roadside ditch appears to only hold water during and immediately after rain events.

3.3 ICF Survey

No ICF were heard during the course of the two survey nights in May 2021. Additionally, anuran species were heard during only one of the survey nights. On May 10, 2021, the western

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chorus frog (*Pseudacris triseriata*) was heard calling east of the proposed substation with a call index of 2 (calls overlapping with individuals distinguishable). Also, the American toad (*Anaxyrus americanus*) could be heard in the ditch alongside Edgewood Drive on the northern perimeter of the proposed substation. Call index for the American toad was 1 (individuals – individuals can be counted; there is spacing between calls).

Although weather conditions were ideal during the two May 2021 anuran call surveys, there was no presence of the ICF observed and very little activity for other anuran species. Lack of anuran calling activity was likely related to limited availability of suitable breeding habitat for the ICF or other anuran species near the proposed new substation.

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Path: K:\11_GIS\amesos_Elanigan_ICEPs_MXD\amesos_Elanigan_ProjectLocation_210627.mxd

Legend

- ▭ Area of Investigation
- NHD Stream
- NWI Wetland**
- ▭ Emergent
- ▭ Open Water

Figure 1.
Project Location and Vicinity

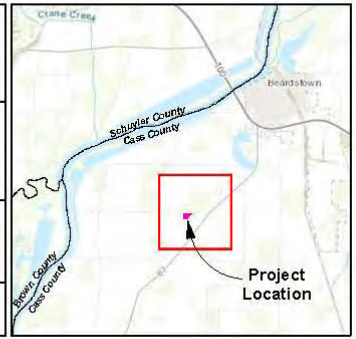
Ameren
 ILLINOIS

**Flanigan Substation
 (Option 4)
 Illinois Chorus Frog Survey
 Cass County, IL**

Job No:	325220204
Drawn By:	BSM
Reviewed By:	JMB
Date:	5/27/2021

wood.

The map shown here has been created with all due and reasonable care and is strictly for use with Wood Projects. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind. Wood assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.



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Photo Log

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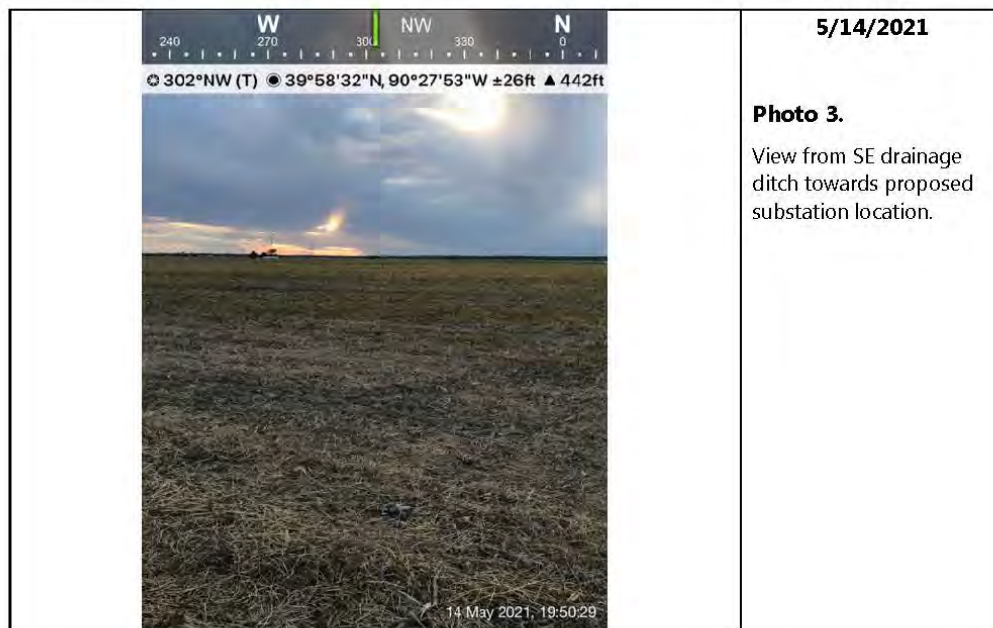
	<p>5/14/2021</p> <p>Photo 1. Drainage ditch SE of proposed substation.</p>
	<p>5/14/2021</p> <p>Photo 2. Drainage ditch SE of proposed substation.</p>

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Appendix C

Wetland Delineation USACE Concurrence

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

February 24, 2021

Regulatory Division

SUBJECT: CEMVR-RD-2020-1254-Solar Farm Projects

Dear Solar Farm Proponent/Consultant:

Due to the large volume of solar projects submitted and our limited available resources, effective January 1, 2019, the Rock Island District will be returning any solar farm submittals which clearly indicate there are no waters of the United States within the project site and/or no impacts to regulated waters of the United States occurring as a result of the project. Recent projects you have submitted that meet these criteria are enclosed.

The Illinois Power Agency has provided us information (Adjustable Block Program Guidebook, Section G) that clearly identifies that correspondence from the Corps of Engineers is not required for a project to be considered eligible for their program.

The Rock Island District Regulatory Division will continue to direct our limited resources to reviewing/processing requests that require authorization under Section 404 of the Clean Water Act. Priority review will be given to those projects that require Pre-Construction Notification.

We respectfully request that future submittals be limited to those projects that will be pursued/completed/installed and require authorization from our office. We will continue to be available to provide advice related to compliance with the Clean Water Act.

Should you have any questions, please contact our Regulatory Division by letter, or contact Ms. Samantha Chavez at Samantha.j.chavez@usace.army.mil or 309/794-5104.

Sincerely,

KELLEY.JAM Digitally signed by
KELLEY.JAMES.C.JR.1
ES.C.JR.1230 230436289
436289 Date: 2021.02.24
14:20:04 -06'00'

For: Trevor E. Popkin
Chief, Eastern Branch
Regulatory Division

Enclosure(s)

Copy Furnished:

Mr. Kevin Quilliam
Illinois Adjustable Block Program Administrator
160 North LaSalle Street
Chicago, Illinois 60601
admin@illinoisabp.com

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Appendix D

Soil Report



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cass County, Illinois



March 8, 2023

June 2023



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units).

Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil



Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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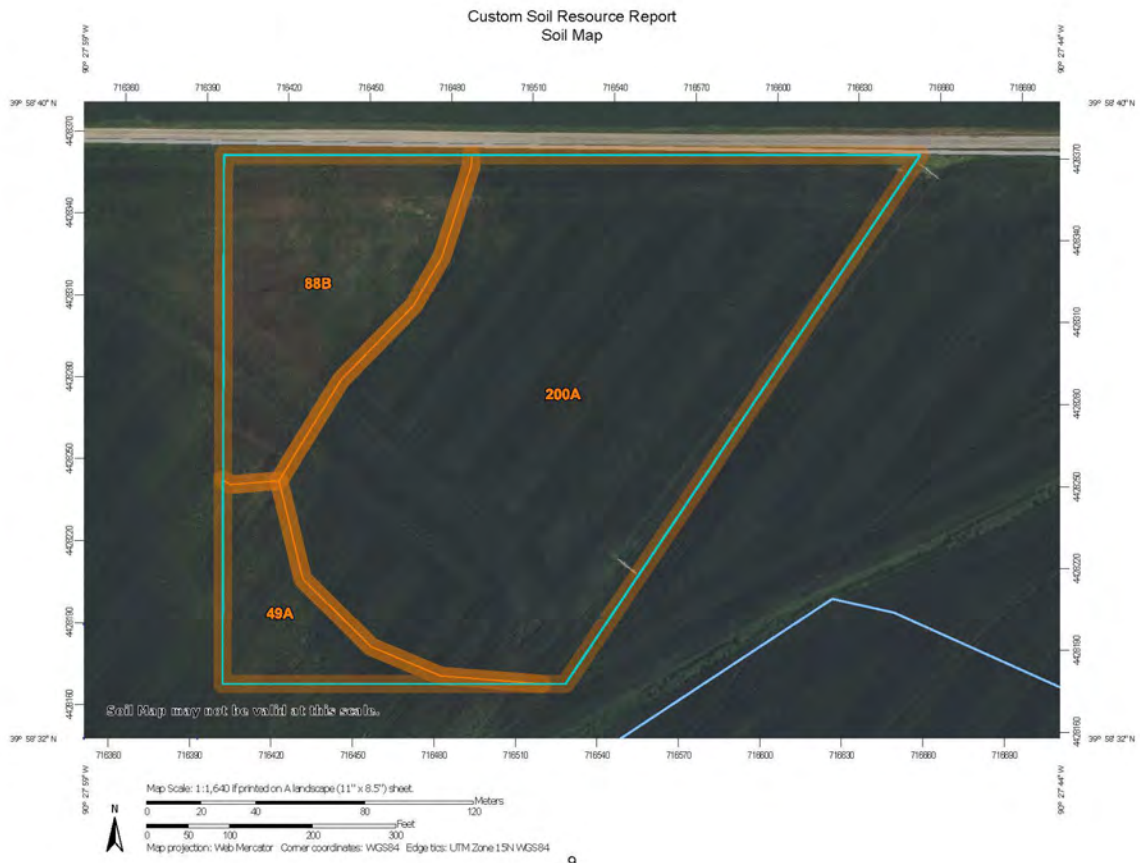
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.



Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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MAP LEGEND		MAP INFORMATION
<p>Area of Interest (AOI)</p> <ul style="list-style-type: none"> Area of Interest (AOI) <p>Soils</p> <ul style="list-style-type: none"> Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points <p>Special Point Features</p> <ul style="list-style-type: none"> Blowout Borrow Pit Clay Spot Closed Depression Gravel Pit Gravelly Spot Landfill Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot 	<ul style="list-style-type: none"> Spot Area Stony Spot Very Stony Spot Wet Spot Other Special Line Features <p>Water Features</p> <ul style="list-style-type: none"> Streams and Canals <p>Transportation</p> <ul style="list-style-type: none"> Rails Interstate Highways US Routes Major Roads Local Roads <p>Background</p> <ul style="list-style-type: none"> Aerial Photography 	<p>The soil surveys that comprise your AOI were mapped at 1:12,000.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> </div> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Cass County, Illinois Survey Area Date: Version 18, Aug 31, 2022.</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Jul 12, 2022—Aug 30, 2022</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>



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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
49A	Watseka loamy fine sand, 0 to 2 percent slopes	0.7	7.9%
88B	Sparta loamy sand, Illinois till plain, 2 to 6 percent slopes	1.8	19.7%
200A	Orio loam, 0 to 2 percent slopes	6.7	72.4%
Totals for Area of Interest		9.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The



Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



Custom Soil Resource Report

Cass County, Illinois

49A—Watseka loamy fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 8fy
Elevation: 340 to 1,300 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Watseka and similar soils: 85 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Watseka

Setting

Landform: Flats on outwash plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits or outwash

Typical profile

H1 - 0 to 18 inches: loamy fine sand
H2 - 18 to 31 inches: fine sand
H3 - 31 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A/D
Ecological site: R115XC011IL - Sand Prairie
Hydric soil rating: No

Minor Components

Gilford

Percent of map unit: 2 percent
Landform: Depressions
Ecological site: R115XC015IL - Wet Terrace Sedge Meadow

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Illinois Chorus Frog Conservation Plan



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Hydric soil rating: Yes

Ambraw

Percent of map unit: 2 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R115XC018IL - Wet Floodplain Sedge Meadow

Hydric soil rating: Yes

Sparta

Percent of map unit:

Landform: Stream terraces, stream terraces

Landform position (two-dimensional): Summit

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R115XC011IL - Sand Prairie

Hydric soil rating: No

Oakville

Percent of map unit:

Landform: Dunes

Landform position (two-dimensional): Summit, shoulder

Ecological site: F108XB017IL - Sand Woodland

Hydric soil rating: No

88B—Sparta loamy sand, Illinois till plain, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2w6s5

Elevation: 410 to 810 feet

Mean annual precipitation: 36 to 38 inches

Mean annual air temperature: 48 to 55 degrees F

Frost-free period: 160 to 190 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Sparta and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sparta

Setting

Landform: Outwash terraces

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Wind-modified sandy outwash

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Typical profile

Ap - 0 to 8 inches: loamy sand
A - 8 to 18 inches: loamy sand
Bw - 18 to 37 inches: sand
E and Bt - 37 to 59 inches: sand
E and Bt - 59 to 63 inches: loamy sand

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R115XC011IL -- Sand Prairie
Hydric soil rating: No

Minor Components

Hoopeston

Percent of map unit: 4 percent
Landform: Outwash terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F095XB005WI - Moist Loamy or Clayey Lowland
Hydric soil rating: No

Dickinson

Percent of map unit: 4 percent
Landform: Outwash terraces
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

Orio

Percent of map unit: 2 percent
Landform: Outwash terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R108XB015IL - Wet Loamy Outwash Prairie



Custom Soil Resource Report

Hydric soil rating: Yes

200A—Orio loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: sjtp
Elevation: 500 to 1,300 feet
Mean annual precipitation: 32 to 40 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 150 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Orio and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the map unit.

Description of Orio

Setting

Landform: Stream terraces, outwash plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Stratified loamy and sandy outwash or alluvium

Typical profile

A - 0 to 9 inches: loam
E - 9 to 18 inches: fine sandy loam
Btg - 18 to 35 inches: clay loam
Bg - 35 to 41 inches: fine sandy loam
Cg - 41 to 60 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: R108XB015IL - Wet Loamy Outwash Prairie
Hydric soil rating: Yes



Custom Soil Resource Report

Minor Components

Dickinson

Percent of map unit: 2 percent
Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R115XC011IL - Sand Prairie, R108XB016IL - Sand Prairie
Hydric soil rating: No



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- United States Department of Agriculture, Natural Resources Conservation Service National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelp2rb1043084>

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service
National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook
296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land
capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Appendix E

Land Ownership or Control



Sarah Nieman
Associate Corporate Counsel
Direct Dial: 317-502-0041
Email: sanieman@misoenergy.org

September 23, 2022

VIA ELECTRONIC FILING

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

Re: Midcontinent Independent System Operator,
Inc. FERC Docket No. ER22-2609-001

Dear Secretary Bose:

On August 5, 2022, the Midcontinent Independent System Operator, Inc. (“MISO”) filed an Amended and Restated Generator Interconnection Agreement with the Federal Energy Regulatory Commission (“Commission”) in the instant docket (“August 5th Filing”) for Project No. J859 in its interconnection queue (“Second Revised Agreement”). It has been brought to MISO’s attention that the Second Revised Agreement submitted in the August 5th Filing contains the incorrect year in Milestone 22. In order for the Second Revised Agreement to reflect the correct year in Milestone 22, MISO, on behalf of the Parties, hereby files a revised version of the Second Revised Agreement. MISO has designated this agreement as Substitute Second Revised Service Agreement No. 3413 under MISO’s FERC Electric Tariff, Fifth Revised Vol. No. 1 (“Tariff”).

The documents submitted with this filing include this transmittal letter and the following:

- Tab A: Clean copy of the Non-Public Substitute Second Revised Agreement;
- Tab A: Clean Copy of the Public Substitute Second Revised Agreement;
- Tab B: Redline of the Public Substitute Second Revised Agreement reflecting changes as compared to the Second Revised Agreement; and
- Tab C: Protective Agreement

MISO respectfully requests that the Commission accept the Substitute Second Revised Agreement, grant an effective date of July 22, 2022, the same effective date requested in the

The Honorable Kimberly D. Bose

September 23, 2022

Page 2

August 5th Filing, and grant waiver of any Commission regulations not addressed herein that the Commission may deem applicable to this filing.

MISO has served a copy of this filing, including attachments, upon all persons listed on the Commission's service list for this proceeding.

Please contact the undersigned should you have any questions regarding this filing.

Respectfully submitted,

/s/ Sarah Nieman

Sarah Nieman

Attorney for the Midcontinent Independent
System Operator, Inc.

Attachments

TAB A
PUBLIC

SA 3413 AMEREN IL-CASS COUNTY SOLAR PROJECT GIA VERSION 35.0.0

EFFECTIVE 7/22/2022

SUBSTITUTE SECOND REVISED SERVICE AGREEMENT NO. 3413

PUBLIC VERSION

Project J859

AMENDED AND RESTATED

GENERATOR INTERCONNECTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

Cass County Solar Project, LLC

And

Ameren Illinois Company d/b/a Ameren Illinois

GENERATOR INTERCONNECTION AGREEMENT (GIA)

THIS AMENDED AND RESTATED GENERATOR INTERCONNECTION AGREEMENT (“GIA”) is made and entered into this 22nd day of July, 2022, by and among **Cass County Solar Project, LLC**, a limited liability company organized and existing under the laws of the State of Delaware (“Interconnection Customer” with a Generating Facility), **Ameren Services Company** as agent for **Ameren Illinois Company** d/b/a **Ameren Illinois**, a corporation organized and existing under the laws of the State of Illinois (“Transmission Owner”), and the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”). Interconnection Customer, Transmission Owner and Transmission Provider each may be referred to as a “Party,” or collectively as the “Parties.” This GIA replaces and supersedes the Generator Interconnection Agreement executed on August 4, 2021 by and between the Parties filed under FERC Docket No. ER21-2709-000.

RECITALS

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing Transmission Service and Interconnection Service on the transmission facilities under its control; and

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

WHEREAS, Transmission Owner owns or operates the Transmission System, whose operations are subject to the functional control of Transmission Provider, to which Interconnection Customer desires to connect the Generating Facility, and may therefore be required to construct certain Interconnection Facilities and Network Upgrades, as set forth in this GIA; and

WHEREAS, Interconnection Customer, Transmission Owner and Transmission Provider have agreed to enter into this GIA, and where applicable subject to Appendix H for a provisional GIA, for the purpose of interconnecting the Generating Facility with the Transmission System; and

WHEREAS, Interconnection Customer, Transmission Owner, and Transmission Provider agreed to modify certain Interconnection Customer and Transmission Owner milestones to bring the provision of security and reimbursement for Network Upgrades into compliance with the Transmission Provider's *pro forma* Facilities Service Agreement (Appendix 14 of Attachment X of the Tariff); and

WHEREAS, Interconnection Customer had requested a one-year delay of the Generating Facility's In-Service, Initial Synchronization, and Commercial Operation Dates, and Transmission Owner agreed to Interconnection Customer's request to delay the in-service date of its facilities to be constructed under this GIA accordingly, the delay having no effect on any other higher or lower queued project in the MISO queues or any other project in Transmission

Owner's construction program; and

WHEREAS, Interconnection Customer has determined that the Transmission Owner's Interconnection Facilities and Network Upgrades will not be required until after the specified In-Service Date and this GIA is now being amended to update Interconnection Customer and Transmission Owner milestones to facilitate the revised In-Service Date;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1. DEFINITIONS

When used in this GIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used. Those capitalized terms used in this GIA that are not otherwise defined in this GIA have the meaning set forth in the Tariff.

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 transmission or distribution system or the electric system associated with an Existing Generating Facility or of a higher queued Generating Facility, which is an electric system other than the Transmission Owner's Transmission System that is affected by the Interconnection Request. An Affected System may or may not be subject to FERC jurisdiction.

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 having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.

Applicable Reliability Council shall mean the Regional Entity of NERC applicable to the Local Balancing Authority of the Transmission System to which the Generating Facility is directly interconnected.

Applicable Reliability Standards shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under section 215 of the Federal Power Act, as applicable.

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

Breach shall mean the failure of a Party to perform or observe any material term or

condition of this GIA.

Breaching Party shall mean a Party that is in Breach of this GIA.

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 (COD) 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 this GIA.

Common Use Upgrade (CUU) shall mean an Interconnection Facility, Network Upgrade, System Protection Facility, or any other classified addition, alteration, or improvement on the Transmission System or the transmission system of an Affected System, not classified under Attachment FF as a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project, that is needed for the interconnection of multiple Interconnection Customers' Generating Facilities and which is the shared responsibility of such Interconnection Customers.

Confidential Information shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 22, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this GIA.

Definitive Planning Phase Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, in the Definitive Planning Phase. The Definitive Planning Phase Queue Position is established based upon the date Interconnection Customer satisfies all of the requirements of Section 7.2 to enter the Definitive Planning Phase.

Demonstrated Capability shall mean the continuous net real power output that the Generating Facility is required to demonstrate in compliance with Applicable Reliability Standards.

Dispute Resolution shall mean the procedure for resolution of a dispute between or among 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, or the Distribution System of another party that is interconnected with the Transmission Owner's Transmission System, if any, connected to the Transmission System, over which facilities Transmission Service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce and which are used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among Local Balancing Authorities and other entities owning distribution facilities interconnected to the Transmission System.

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 delivery service necessary to affect 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 this GIA becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the reasonable judgment of the Party making the claim is imminently likely to endanger, or is contributing to the endangerment of, life, property, or public health and safety; or (2) that, in the case of either Transmission Provider or 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 the Transmission System, Transmission Owner's Interconnection Facilities or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and blackstart shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by this GIA to possess blackstart capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one of the enumerated conditions or situations identified in this definition also exists.

Energy Displacement Agreement shall mean an agreement between an Interconnection Customer with an Existing Generating Facility on the Transmission Provider's Transmission System and an Interconnection Customer with a proposed Generating Facility seeking to interconnect with Surplus Interconnection Service. The Energy Displacement Agreement specifies the term of operation, the Generating Facility Interconnection Service limit, and the mode of operation for energy production (common or singular operation).

Energy Resource Interconnection Service (ER Interconnection Service) shall mean

an Interconnection Service that allows Interconnection Customer to connect its Generating Facility to the Transmission System or Distribution System, as applicable, to be eligible to deliver the Generating Facility's electric output using the existing firm or non-firm capacity of the Transmission System on an as available basis. Energy Resource Interconnection Service does not convey transmission service.

Engineering & Procurement (E&P) Agreement shall mean an agreement that authorizes 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.

Federal Holiday shall mean a Federal Reserve Bank holiday for a Party that has its principal place of business in the United States and a Canadian Federal or Provincial banking holiday for a Party that has its principal place of business located in Canada.

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, also known as Commission, or its successor.

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

Generating Facility shall mean Interconnection Customer's device(s) 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. 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 its equipment at the Existing Generating Facility.

Generating Facility Replacement shall mean replacement of one or more generating

units and/or storage devices at the Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as the generating units and/or storage devices that is/are being decommissioned and electrically disconnected.

Generator Interconnection Agreement (GIA) shall mean the form of interconnection agreement, set forth herein.

Generator Interconnection Procedures (GIP) shall mean the interconnection procedures set forth in Attachment X of the Tariff.

Generator Upgrades shall mean the additions, modifications, and upgrades to the electric system of an Existing Generating Facility or of a higher queued Generating Facility at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the Transmission Service necessary to affect Interconnection Customer's wholesale sale of electricity in interstate commerce.

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.

Group Study(ies) shall mean the process whereby more than one Interconnection Request is studied together, instead of serially, for the purpose of conducting one or more of the required Studies.

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.

HVDC Facilities shall mean the high voltage direct current transmission facilities,

including associated alternating current facilities, if any, that are subject to Section 27A of the Tariff and that are specifically identified in (i) any Agency Agreement pertaining to such facilities between Transmission Provider and Transmission Owner that owns or operates such facilities, or (ii) in any other arrangement that permits or will permit Transmission Provider to provide HVDC Service over such facilities as set forth in Section 27A of the Tariff.

HVDC Service shall mean Firm and Non-Firm Point-To-Point Transmission Service provided by Transmission Provider on HVDC Facilities pursuant to Section 27A of the Tariff.

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

In-Service Date (ISD) shall mean the date upon which Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Owner's Interconnection Facilities to obtain backfeed power.

Interconnection Customer shall mean any entity, including Transmission Provider, 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 (ICIF) shall mean all facilities and equipment, as identified in Appendix A of this GIA, 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 or Distribution System, as applicable. 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 shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Facilities Study shall mean a study conducted by Transmission Provider, or its agent, for Interconnection Customer to determine a list of facilities (including Transmission Owner's Interconnection Facilities, System Protection Facilities, and if such upgrades have been determined, Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and upgrades on Affected Systems, as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System.

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

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

Interconnection Service shall mean the service provided by Transmission Provider associated with interconnecting the 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 this GIA and, if applicable, the Tariff.

Interconnection Study (or Study) shall mean any of the studies described in the Generator Interconnection Procedures.

Interconnection Study Agreement shall mean the form of agreement contained in Attachment B to Appendix 1 of the Generator Interconnection procedures for conducting all studies required by the Generator Interconnection Procedures.

Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission 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 to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Generator Interconnection Procedures.

IRS shall mean the Internal Revenue Service.

Local Balancing Authority shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) provided in the Balancing Authority Agreement.

Loss shall mean 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 performance, or non-performance of its obligations under this GIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified party.

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.

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

Monitoring and Consent Agreement shall mean an agreement that defines the terms and conditions applicable to a Generating Facility acquiring Surplus Interconnection Service. The Monitoring and Consent Agreement will list the roles and responsibilities of an Interconnection Customer seeking to interconnect with Surplus Interconnection Service and Transmission Owner to maintain the total output of the Generating Facility inside the parameters delineated in the GIA.

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

Network Customer shall have that meaning as provided in the Tariff.

Network Resource shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. Network Resource Interconnection Service does not convey transmission service. Network Resource Interconnection Service shall include any network resource interconnection service established under an agreement with, or the tariff of, a Transmission Owner prior to integration into MISO, that is determined to be deliverable through the integration deliverability study process.

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 or Distribution System, as applicable, to accommodate the interconnection of the Generating Facility to the Transmission System. Network Upgrade shall not include any HVDC Facility Upgrades.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with this GIA or its performance.

Operating Horizon Study shall mean an Interconnection System Impact Study that includes in service transmission and generation for an identified timeframe to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities

and/or Transmission System changes required for the requested Interconnection Service.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Generator Interconnection Procedures for conducting the Optional Interconnection Study.

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

Planning Horizon Study shall mean an Interconnection System Impact Study that includes a future year study to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

Point of Change of Ownership (PCO) 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 (POI) shall mean the point, as set forth in Appendix A of the GIA, where the Interconnection Facilities connect to the Transmission System.

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

Provisional Interconnection Study shall mean an engineering study, performed at Interconnection Customer's request, as a condition to entering into a provisional GIA, that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, any Affected System. The study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications.

Provisional Generator Interconnection Agreement shall mean the interconnection agreement for Provisional Interconnection Service established between the Transmission Provider and/or the Transmission Owner and the Interconnection Customer as set forth in Section 7.9 of this Attachment X. This agreement shall take the form of the Generator Interconnection Agreement modified for provisional purposes.

Queue Position shall mean the order of a valid Interconnection Request, relative to all

other pending valid Interconnection Requests. The Queue Position is established based upon the date and time of receipt of the valid Interconnection Request by Transmission Provider.

Reasonable Efforts shall have that meaning as provided in the Tariff.

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 3.7 of this Attachment X.

Scoping Meeting shall mean the meeting between representatives of Interconnection Customer, Transmission Owner, Affected System Operator(s) 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 or Common Use Upgrade that is funded by an Interconnection Customer(s) and also benefits other Interconnection Customer(s) that are later identified as beneficiaries.

Site Control shall mean a documented right for one or more parcels of land for the purpose of constructing a Generating Facility, Interconnection Customer's Interconnection Facilities, and, if applicable (*i.e.*, when the Interconnection Customer is providing the site for such facilities), the Transmission Owner's Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. Such documented right shall be one of the following: (1) ownership of a site; (2) a leasehold interest in a site; or (3) an option to purchase or acquire a leasehold interest in a site; or (4) any other contractual or legal right to possess or occupy a site.

Small Generating Facility shall mean a Generating Facility that has an aggregate net Generating Facility Capacity of no more than five MW and meets the requirements of Section 14 and Appendix 3 of the GIP.

Special Protection System (SPS) shall mean an automatic protection system or remedial action scheme designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components, to maintain system reliability. Such action may include changes in demand (MW and MVar), energy (MWh and MVarh), or system configuration to maintain system stability, acceptable voltage, or power flows. An SPS does not include (a) underfrequency or undervoltage load shedding, (b) fault conditions that must be isolated, (c) out-of-step relaying not designed as an integral part of an SPS, or (d) Transmission Control Devices.

Stand Alone Network Upgrades shall mean Network Upgrades, that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Interconnection Customer must agree as to what constitutes Stand

Alone Network Upgrades and identify them in Appendix A to this GIA. If the Transmission Provider or Transmission Owner and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Interconnection Customer must provide the Interconnection Customer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

Surplus Interconnection Service shall mean any Interconnection Service that is derived from the unneeded portion of Interconnection Service established in a GIA or in agreement with, or under the tariff of, a Transmission Owner prior to integration into MISO, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other delivery systems or other generating systems 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 the Commission, and as amended or supplemented from time to time, or any successor tariff.

Transmission Control Devices shall mean a generally accepted transmission device that is planned and designed to provide dynamic control of electric system quantities, and are usually employed as solutions to specific system performance issues. Examples of such devices include fast valving, high response exciters, high voltage DC links, active or real power flow control and reactive compensation devices using power electronics (*e.g.*, unified power flow controllers), static var compensators, thyristor controlled series capacitors, braking resistors, and in some cases mechanically-switched capacitors and reactors. In general, such systems are not considered to be Special Protection Systems.

Transmission Owner shall mean that Transmission Owner as defined in the Tariff, which includes an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at which Interconnection Customer proposes to interconnect or otherwise integrate the operation of the Generating Facility. Transmission Owner should be read to include any Independent Transmission Company that manages the transmission facilities of Transmission Owner and shall include, as applicable, the owner and/or operator of distribution facilities interconnected to the Transmission System, over which facilities transmission service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer requests Interconnection Service and to which Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce.

Transmission Provider shall mean the Midcontinent Independent System Operator, Inc. (“MISO”), the Regional Transmission Organization that controls or operates the transmission facilities of its transmission-owning members used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff.

Transmission Owner’s Interconnection Facilities (TOIF) shall mean all facilities and equipment owned by Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this GIA, 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, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Transmission System shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service (including HVDC Service) or Wholesale Distribution 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.

Wholesale Distribution Service shall have that meaning as provided in the Tariff. Wherever the term “transmission delivery service” is used, Wholesale Distribution Service shall also be implied.

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 30 years from the Effective Date and shall be automatically renewed for each successive one-year period thereafter on the anniversary of the Effective Date.
- 2.3 Termination Procedures.** This GIA may be terminated as follows:
- 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. This GIA shall be terminated by Transmission Provider if the Generating Facility or a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Section 4.4.4 of Attachment X, including any extension provided thereunder, or has ceased Commercial Operation for three (3) consecutive years, beginning with the last date of Commercial Operation for the Generating Facility, after giving Interconnection Customer ninety (90) Calendar Days advance written notice. Where only a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Section 4.4.4 of Attachment X, including any extension provided thereunder, Transmission Provider shall only terminate that portion of the GIA. Notwithstanding the foregoing, in the limited circumstance that the Interconnection Request is served by a contingent Network Upgrade with an in-service date that is farther out than the Commercial Operation Date permitted under Section 4.4.4 of Attachment X, Transmission Provider shall only terminate this GIA for failure to achieve Commercial Operation by that later in-service date of the contingent Network Upgrade. The Generating Facility will not be deemed to have ceased Commercial Operation for purposes of this Article 2.3.1 if Interconnection Customer can document that it has taken other significant steps to maintain or restore operational readiness of the Generating Facility for the purpose of returning the Generating Facility to Commercial Operation as soon as possible.
- 2.3.1.1 Surplus Interconnection Service.** Where this GIA provides for Surplus Interconnection Service and the Energy Displacement Agreement or the Monitoring and Consent Agreement required for Surplus Interconnection Service are no longer in effect, Interconnection Customer shall immediately cease Commercial Operation of the Generating Facility and this GIA shall be deemed terminated. In the event that the Existing Generating Facility retires and/or permanently ceases commercial operation, the Surplus Interconnection Service provided under this GIA

shall terminate except as provided in Section 3.3.1.3 of the GIP.

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

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

2.4 Termination Costs. If a Party elects to terminate this GIA pursuant to Article 2.3 above, each Party shall pay all costs incurred for which that Party is responsible (including any cancellation costs relating to orders or contracts for Interconnection Facilities, applicable upgrades, and related equipment) or charges assessed by the other Parties, as of the date of the other Parties' receipt of such notice of termination, under this GIA. In the event of termination by a Party, the Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this GIA, unless otherwise ordered or approved by FERC:

2.4.1 With respect to any portion of the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades, Generator Upgrades, and if so determined and made a part of this GIA, upgrades on Affected Systems, that have not yet been constructed or installed, Transmission Owner shall to the extent possible and to the extent of Interconnection Customer's written notice under Article 2.3.1, 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 upgrades or related equipment for which Transmission Owner has incurred expenses and has not been reimbursed by Interconnection Customer.

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. If Transmission Owner does not so elect, then Interconnection Customer shall be responsible for such costs.

- 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, reconfiguration or other disposition or retirement of such materials, equipment, or facilities, and such other expenses actually incurred by Transmission Owner necessary to return the Transmission, Distribution or Generator System, as applicable, to safe and reliable operation.
- 2.5** **Disconnection.** Upon termination of this GIA, the Parties will take all appropriate steps to disconnect the Generating Facility from the Transmission or Distribution System, as applicable. 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 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 the other 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. A Party may request that any information so provided be subject to the confidentiality provisions of Article 22. If that Party has executed this GIA, or any amendment thereto, the Party 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:

Check: _____ NZ or _____ ER and/or X NR (See Appendix A for details)

4.1.1 Energy Resource Interconnection Service (ER Interconnection Service).

4.1.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission or Distribution System, as applicable, and be eligible to deliver the Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. To the extent Interconnection Customer wants to receive ER Interconnection Service, Transmission Owner shall construct facilities consistent with the studies identified in Appendix A.

An Interconnection Customer seeking ER Interconnection Service for new or added capacity at a Generating Facility may be granted conditional ER Interconnection Service status to the extent there is such capacity available on the Transmission System to accommodate the Interconnection Customer's Generating Facility. At the request of Interconnection Customer, conditional ER Interconnection Service status may be granted subject to the system being able to accommodate the interconnection without upgrades, until such time as a higher queued project(s) with a later service date affecting the same common elements is placed into service. The conditional ER Interconnection Service shall be terminated in the event Interconnection Customer fails to fund the necessary studies and the Network Upgrades necessary to grant the Interconnection Customer's ER Interconnection Service upon the completion of higher queued projects involving the same common elements.

4.1.1.2 Transmission Delivery Service Implications. Under ER 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 up to the amount of MW identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for ER Interconnection Service have been constructed. After that date FERC makes effective MISO's Energy Market Tariff filed in Docket No. ER04-691-000, Interconnection Customer may place a bid to sell into the market up to the maximum identified Generating Facility output, subject to any conditions specified in the Interconnection Service approval, and the Generating Facility will be dispatched to the extent the Interconnection Customer's bid clears. In all other instances, no transmission or other delivery service from the Generating Facility is assured, but Interconnection Customer may obtain Point-To-Point Transmission Service, Network Integration Transmission Service or be used for secondary network transmission service, pursuant to the Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Point of Interconnection or to improve its ability to do so, transmission delivery

service must be obtained pursuant to the provisions of the Tariff. 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 or Distribution System as applicable, 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 or Distribution Upgrades.

4.1.2 Network Resource Interconnection Service (NR Interconnection Service).

4.1.2.1 The Product. Transmission Provider must conduct the necessary studies and Transmission Owner shall construct the facilities identified in Appendix A of this GIA, subject to the approval of Governmental Authorities, needed to integrate the Generating Facility in the same manner as for any Generating Facility being designated as a Network Resource.

4.1.2.2 Transmission Delivery Service Implications. NR Interconnection Service allows the 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 output, on the same basis as existing Network Resources that are interconnected to the Transmission or Distribution System, as applicable, and to be studied as a Network Resource on the assumption that such a designation will occur. Although NR Interconnection Service does not convey a reservation of Transmission Service, any Network Customer can utilize Network Integration Transmission Service under the Tariff to obtain delivery of energy from the Generating Facility in the same manner as it accesses Network Resources. A Generating Facility receiving NR Interconnection Service may also be used to provide Ancillary Services after technical studies and/or periodic analyses are performed with respect to the 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 the Generating Facility has not been designated as a Network Resource by any Network Customer, 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.

NR 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 or distribution constraints on the Transmission or Distribution System, as applicable, the Generating Facility shall be subject to the applicable congestion management procedures in the 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 the Generating Facility be designated as a Network Resource by a Network Customer 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 the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining NR 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 such Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the Generating Facility. To the extent Interconnection Customer enters into an arrangement for long term Transmission Service for deliveries from the Generating Facility to customers other than the studied Network Customers, or for any Point-To-Point Transmission Service, such request may require additional studies and upgrades in order for Transmission Provider to grant such request. 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.

4.1.2.3 Conditional NR Interconnection Service. An Interconnection Customer seeking NR Interconnection Service for new or added capacity at a Generating Facility may be granted conditional NR Interconnection Service status to the extent there is such capacity available on the Transmission System to accommodate the Interconnection Customer's Generating Facility. At the request of Interconnection Customer, conditional NR Interconnection Service status may be granted subject to

the system being able to accommodate the interconnection without upgrades, until such time as higher queued project(s) with a later service date affecting the same common elements is placed into service. The conditional NR Interconnection Service status may be converted to ER Interconnection Service if either of the following occurs:

- 1) Interconnection Customer fails to fund necessary studies and Network Upgrades required to allow the Interconnection Customer's Generating Facility to receive NR Interconnection Service upon the completion of higher queued projects involving the same common elements; or
- 2) The higher queued project(s) or planned and required Network Upgrades are placed in service and the Network Upgrades required to provide NR Interconnection Service status to the Interconnection Customer's Generating Facility are not in service.

In the event Interconnection Customer fails to fund the necessary studies and Network Upgrades for NR Interconnection Service, the Interconnection Customer's conditional NR Interconnection Service status shall be converted to ER Interconnection Service status unless Interconnection Customer makes a new Interconnection Request. Such new Interconnection Request shall be evaluated in accordance with the GIP and its new queue position.

Some or all of the conditional NR Interconnection Service status may be temporarily revoked if the Network Upgrades are not in service when the higher queued project(s) are placed in service. The availability of conditional NR Interconnection Service status will be determined by Transmission Provider's studies. Upon funding and completion of the Network Upgrades required to establish the Generating Facility's NR Interconnection Service status, the Generating Facility will be granted NR Interconnection Service status.

The Parties agree that the portion of the Generating Facility classified as NR Interconnection Service is the first portion of the output of the combined output of all the units at the Generating Facility except in circumstances where Interconnection Customer otherwise elects this GIA, as amended, to allocate that portion to the output of specific unit(s) at the Generating Facility, the total of which will not exceed the output eligible for NR Interconnection Service as shown by the additional studies. To the extent Interconnection Customer desires to obtain NR Interconnection Service for any portion of the Generating Facility in addition to that supported by such additional studies, Interconnection Customer will be required to request such additional NR Interconnection Service through a separate Interconnection Request in accordance with the GIP.

4.1.3 Surplus Interconnection Service.

4.1.3.1 The Product. Surplus Interconnection Service is restricted Interconnection Service that allows an Interconnection Customer to increase the gross generating capability at the same Point of Interconnection of an Existing Generating Facility without increasing the total amount of Interconnection Service at the Point of Interconnection.

4.1.3.2 Transmission Delivery Service Implications. Surplus Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.

- 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. To the extent a Party is required or prevented or limited in taking any action by such regulations and standards, or if the obligations of any Party may become limited by a change in Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice after the execution of this GIA, that Party shall not be deemed to be in Breach of this GIA for its compliance therewith. The Party so limited shall notify the other Parties whereupon Transmission Provider shall amend this GIA in concurrence with the other Parties and submit the amendment to the Commission for approval.
- 4.4 No Transmission Delivery Service.** The execution of this GIA does not constitute a request for, or the provision of, any transmission delivery service under the 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 13.4.1. Interconnection Customer shall be paid for such services in accordance with Article 11.7.

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

- 5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall select: 1) the In-Service Date, Initial Synchronization Date, and Commercial Operation Date based on a reasonable construction schedule that will allow sufficient time for design, construction, equipment procurement, and permit acquisition of Transmission System equipment or right-of-way; and 2) either the Standard Option or Alternate Option set forth below and such dates and selected option shall be set forth in Appendix B. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 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 the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades, and Generator Upgrades using Reasonable Efforts to complete the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades and Generator Upgrades by the dates set forth in Appendix B, Milestones, subject to the receipt of all approvals required from Governmental Authorities and the receipt of all land rights necessary to commence construction of such facilities, and such other permits or authorizations as may be required. Transmission Provider or 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, Applicable Laws and Regulations and Good Utility Practice. In the event Transmission Owner reasonably expects that it will not be able to complete the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades and Generator Upgrades by the specified dates, Transmission Owner shall promptly provide written notice to Interconnection Customer and Transmission Provider and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

5.1.2 Alternate Option. If the dates designated by Interconnection Customer are acceptable to Transmission Provider and Transmission Owner, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and Transmission Owner shall assume responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities by the designated dates.

If Transmission Owner subsequently fails to complete the Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each Calendar Day that Transmission Provider refuses to grant clearances to install equipment.

Transmission Owner and Interconnection Customer may adopt an incentive payment schedule that is mutually agreeable to encourage Transmission Owner to meet specified accelerated dates. Such payment by Interconnection Customer is not subject to refund.

5.1.3 Option to Build. Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades by the dates originally designated by Interconnection Customer under Article 5.1.2. The Parties must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

5.1.4 Negotiated Option. If the dates designated by Interconnection Customer pursuant to Article 5.1 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 5.1.3). 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 to exercise the Option to Build.

Transmission Owner and Interconnection Customer may adopt an incentive payment schedule that is mutually agreeable to encourage Transmission Owner to meet specified accelerated dates. Such payment by Interconnection Customer is not subject to refund.

5.2 General Conditions Applicable to Option to Build. If Interconnection Customer assumes responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades after receipt of all required approvals from Governmental Authorities necessary to commence construction,

(1) Interconnection Customer shall engineer, procure equipment, and construct the 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, or as required by any Governmental Authority;

(2) Interconnection Customer's engineering, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law or Governmental Authority to which Transmission Owner would be subject in the engineering, procurement or construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(3) Transmission Provider, at Transmission Provider's option, and Transmission Owner shall be entitled to review and approve the engineering design, equipment acceptance tests(including witnessing of acceptance tests), and the construction (including monitoring of construction) of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, and shall have the right to reject any design, procurement, construction or acceptance test of any equipment that does not meet the standards and specifications of Transmission Provider, Transmission Owner and any Governmental Authority;

(4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider and Transmission Owner a schedule for construction of the Transmission Owner'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 Provider and Transmission Owner shall have unrestricted access to the construction site for the 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 the Transmission Owner'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 the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to meet the standards and specifications provided by Transmission Provider and Transmission Owner;

(7) Interconnection Customer shall indemnify Transmission Provider and Transmission Owner for claims arising from the Interconnection Customer's construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1, Indemnity;

(8) Interconnection Customer shall transfer control of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner in accordance with Appendix B;

(10) Transmission Provider, at Transmission Provider's option, and Transmission Owner shall approve and accept for operation and maintenance the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2 only if the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades meet the standards and specifications of Transmission Provider, Transmission Owner and any Governmental Authority.

(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 Owner.

(12) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, 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.

(13) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, and the Transmission Owner has elected to fund the costs of Network Upgrades pursuant to Article 11.3, then prior to Interconnection Customer incurring any construction costs relating to the Option to Build and by the date specified in Appendix B, Interconnection Customer shall invoice the Transmission Owner for the estimated amount to be expended by the Interconnection Customer to construct any Stand Alone Network Upgrades for which the Interconnection Customer has exercised its Option to Build in accordance with Appendix B. The Transmission Owner shall be required to reimburse Interconnection Customer for the full amount of such invoiced costs by the date specified in Appendix B, which shall be prior to the date by which Interconnection Customer must make any construction payment for such Stand Alone Network Upgrades. After completion of the construction of Stand Alone Network Upgrades by the Interconnection Customer and by the date specified in Appendix B for the Interconnection Customer to transfer such Stand Alone Network Upgrades to the Transmission Owner, Interconnection Customer shall provide an invoice of the final cost of the construction of Stand Alone Upgrades and shall set forth such costs in sufficient detail to enable the Transmission Owner to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. In the event that the actual costs exceed the estimated

costs previously invoiced by Interconnection Customer and paid by Transmission Owner, Transmission Owner shall pay to Interconnection Customer the difference between the amount previously paid and the actual costs within thirty (30) Calendar Days after receipt of a final construction invoice from Interconnection Customer. In the event that the actual costs are less than the estimated costs previously invoiced by Interconnection Customer and paid by Transmission Owner, Interconnection Customer shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Transmission Owner any amount by which the actual payment by Transmission Owner for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Following the transfer of the Stand Alone Network Upgrades from the Interconnection Customer to the Transmission Owner, the Interconnection Customer shall make payments for such facilities to the Transmission Owner pursuant to an agreement between and among the Parties.

5.3 Liquidated Damages. The actual damages to Interconnection Customer, in the event the Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Provider and Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by Transmission Owner to Interconnection Customer in the event that Transmission Owner does not complete any portion of the Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to $\frac{1}{2}$ of 1 percent per day of the actual cost of the 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 the 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 the 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 the 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) the Transmission Owner's failure to meet the specified dates is the result of the action or inaction of Transmission Provider, Interconnection Customer or any other earlier queued Interconnection Customer who has entered into an earlier GIA with Transmission Provider and/or a Transmission Owner or with an Affected System Operator, or any cause beyond Transmission Owner's reasonable control or reasonable ability to cure; (3) Interconnection Customer has assumed responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; (4) the delay is due to the inability of Transmission Owner to obtain all required approvals from Governmental Authorities in a timely manner for the construction of any element of the Interconnection Facilities, Network Upgrades or Stand Alone Network Upgrades, or any other permit or authorization required, or any land rights or other private authorizations that may be required, and Transmission Owner has exercised Reasonable Efforts in procuring such approvals, permits, rights or authorizations; or (5) the Parties have otherwise agreed.

- 5.4 Power System Stabilizers.** 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 and Transmission Owner reserve 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 are not capable of automatic operation, Interconnection Customer shall immediately notify the Transmission Provider's system operator, or its designated representative. The requirements of this paragraph shall not apply to induction generators.
- 5.5 Equipment Procurement.** If responsibility for construction of the Transmission Owner's Interconnection Facilities, Network Upgrades and/or Distribution Upgrades is to be borne by Transmission Owner, then Transmission Owner shall commence design of the Transmission Owner's Interconnection Facilities, Network Upgrades and/or Distribution 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 Interconnection Facilities Study Agreement; and
- 5.5.2** Where applicable, Interconnection Customer has provided security to Transmission Owner in accordance with Article 11.6 by the dates specified in Appendix B, Milestones.
- 5.6 Construction Commencement.** Transmission Owner shall commence construction of the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades, and Generator 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; and
- 5.6.2** Where applicable, Interconnection Customer has provided security to Transmission Owner in accordance with Article 11.6 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress.** Transmission Owner and Interconnection Customer will keep each other and Transmission Provider advised periodically as to the progress of their respective design, procurement and construction efforts. Either Transmission Owner or Interconnection Customer may, at any time, request a progress report from the other, with a copy to be provided to the other Parties. If, at any time, Interconnection Customer determines that the completion of the Transmission Owner's Interconnection Facilities, Network Upgrades, or Transmission Owner's System Protection Facilities 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 the Transmission Owner's Interconnection Facilities, Network Upgrades or Transmission Owner's System Protection Facilities will be required. Transmission Owner may delay the In-Service Date of its facilities accordingly.
- 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 Interconnection Facilities and compatibility of the Interconnection Facilities with the Transmission System or Distribution System, as applicable, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Other Interconnection Options.**
- 5.9.1 Limited Operation.** If any of the Transmission Owner's Interconnection Facilities, Network Upgrades, or Transmission Owner's System Protection Facilities, Distribution Upgrades or Generator 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 the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades or Generator Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this GIA. Transmission Provider and Transmission Owner shall permit Interconnection Customer to operate the Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies; provided, however, such studies reveal that such operation may occur without detriment to

the Transmission System as then configured and in accordance with the safety requirements of Transmission Owner and any Governmental Authority.

The maximum permissible output of the Generating Facility will be updated on a quarterly basis if the Network Upgrades necessary for the interconnection of the Generating Facility pursuant to this GIA are not in service within six (6) months following the Commercial Operation Date of the Generating Facility as specified in Appendix B of this GIA. These quarterly studies will be performed using the same methodology set forth in Section 11.5 of the GIP. These quarterly updates will end when all Network Upgrades necessary for the interconnection of the Generating Facility pursuant to this GIA are in service.

5.9.2 Provisional Interconnection Service.

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities Transmission Provider may execute a Provisional Generator Interconnection Agreement or Interconnection Customer may request the filing of an unexecuted Provisional Generator Interconnection Agreement with the Interconnection Customer for limited interconnection service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission Provider's system. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of interconnection service from the Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility in the Provisional Generator Interconnection Agreement shall be studied and updated on a quarterly basis. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Generator Interconnection Agreement and the Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

5.10 Interconnection Customer's Interconnection Facilities. Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in

Appendix A.

5.10.1 Interconnection Customer's Interconnection Facility Specifications.

Interconnection Customer shall submit initial design and specifications for the ICIF, including Interconnection Customer's System Protection Facilities, to Transmission Provider and Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final design and specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Transmission Provider at Transmission Provider's option, and Transmission Owner shall review such specifications to ensure that the ICIF are compatible with their respective technical specifications, operational control, and safety requirements and comment on such design and specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

5.10.2 Transmission Provider's and Transmission Owner's Review. Transmission Provider's and 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 Provider and 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 Provider and 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 Provider and 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 the 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. Interconnection Customer shall provide Transmission Provider and Transmission Owner with Interconnection Customer's specifications for the excitation system, automatic voltage regulator, Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

5.11 Transmission Owner's Interconnection Facilities Construction. The Transmission Owner's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually

acceptable deadline, Transmission Owner shall deliver to Transmission Provider (if requested) and Interconnection Customer the “as-built” drawings, information and documents for the Transmission Owner’s Interconnection Facilities specified in Appendix C to this GIA.

Such drawings, information and documents shall be deemed Confidential Information.

Upon completion, the Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades shall be under the control of Transmission Provider or its designated representative.

- 5.12 Access Rights.** Upon reasonable notice by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish *at no cost* to the other Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the 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 the Transmission Owner’s Interconnection Facilities, Network Upgrades, and/or Distribution 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 to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner’s Interconnection Facilities, Network Upgrades and/or Distribution 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 Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to the Transmission Owner’s own, or an Affiliate’s, generation to the extent that

Transmission Owner or its Affiliate owns generation.

5.15 Early Construction of Base Case Facilities. (Includes facilities required for all queued projects with interconnection agreements). 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, Transmission Owner's System Protection Facilities or Distribution Upgrades required for Interconnection Customer to be interconnected to the Transmission or Distribution System, as applicable, which are included in the Base Case of the Interconnection Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer with a prior GIA, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. Any such Network Upgrades, System Protection Facilities or Distribution Upgrades are included in the facilities to be constructed and as set forth in Appendix A to this GIA to the extent they are reasonably known.

5.16 Suspension.

5.16.1 Interconnection Customer's Right to Suspend for Force Majeure Event; Obligations. Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of such Interconnection Facilities, Network Upgrades or Stand Alone Network Upgrades, Interconnection Customer will not suspend unless a Force Majeure event occurs.

Interconnection Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Interconnection Customer milestones and Interconnection Facilities described in the Appendices of this GIA. Prior to suspension, Interconnection Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's System Protection Facilities, and Distribution Upgrades listed in Appendix A of this GIA. Network Upgrades and Transmission Owner's Interconnection Facilities will be constructed on the schedule described in the Appendices of this GIA unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades will no longer be constructed.

If suspension occurs, the Transmission or Distribution System, as applicable, shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Transmission Provider's and Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all

reasonable and necessary costs which Transmission Provider and Transmission Owner (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 or Distribution System, as applicable, during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider and Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider and Transmission Owner shall obtain Interconnection Customer's authorization to do so.

Transmission Provider and Transmission Owner shall each invoice Interconnection Customer for such costs pursuant to Article 12 and shall use Reasonable Efforts to minimize its costs. 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 recommence the work required under this GIA on or before the expiration of three (3) years following commencement of such suspension, this GIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Transmission Provider, if no effective date is specified.

5.16.2 Effect of Missed Interconnection Customer Milestones. If Interconnection Customer fails to provide notice of suspension pursuant to Article 5.16, and Interconnection Customer fails to fulfill or complete any Interconnection Customer Milestone provided in Appendix B ("Milestone"), this constitutes a Breach under this GIA. Depending upon the consequences of the Breach and effectiveness of the cure pursuant to Article 17, the Transmission Owners' Milestones may be revised, following consultation with Interconnection Customer, consistent with Reasonable Efforts, and in consideration of all relevant circumstances. Parties shall employ Reasonable Efforts to maintain their remaining respective Milestones.

5.16.3 Effect of Suspension; Parties Obligations. In the event that Interconnection Customer suspends work pursuant to this Article 5.16, no construction duration, timelines and schedules set forth in Appendix B shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension. Should Interconnection Customer request that work be recommenced, Transmission Owner shall be obligated to proceed with Reasonable Efforts and in consideration of all relevant circumstances including regional outage schedules, construction availability and material procurement in performing the work as described in Appendix A and Appendix B. Transmission Owner will provide Interconnection Customer with a revised schedule for the design, procurement, construction, installation and testing of the Transmission Owner's Interconnection Facilities and Network Upgrades. Upon any suspension by Interconnection Customer

pursuant to Article 5.16, Interconnection Customer shall be responsible for only those costs specified in this Article 5.16.

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 the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades and Generator 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. To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Interconnection Customer to Transmission Owner for Network Upgrades is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the parties that any amounts paid by Interconnection Customer to Transmission Owner for Network Upgrades will be reimbursed to Interconnection Customer in accordance with the terms of this GIA, provided Interconnection Customer fulfills its obligations under this GIA.

5.17.2 Representations and Covenants. In accordance with IRS Notice 2016-36, 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 the 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 the Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 2016-36, 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 2016-36. 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, with a copy to Transmission Provider. Transmission Owner represents and covenants that the cost of the 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 Upon Transmission Owner. Notwithstanding Article 5.17.1 and to the extent permitted by law, Interconnection Customer shall protect, indemnify and hold harmless Transmission Owner from the cost consequences of any 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 or 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, Network Upgrades, Transmission Owner's System Protection Facilities, and/or Distribution 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 covenant 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, Network Upgrades, Transmission Owner’s System Protection Facilities, and/or Distribution 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 shall file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission 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 amounts 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 18 C.F.R. Section 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 the Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave both parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

5.17.9 Taxes Other Than Income Taxes. Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Owner shall 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. Each Party shall cooperate with the other Parties to maintain each Party's 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. Either 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 Information 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 Provider shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission or Distribution System as applicable, Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System

Protection Facilities, and/or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof which shall be the responsibility of Interconnection Customer.

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 the costs of any additions, modifications, or replacements that Transmission Owner makes to the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades, or the Transmission or Distribution System, as applicable, to facilitate the interconnection of a third party to the Transmission Owner's Interconnection Facilities or the Transmission or Distribution System, as applicable, or to provide transmission service to a third party under the Tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

ARTICLE 6. TESTING AND INSPECTION

6.1 Pre-Commercial Operation Date Testing and Modifications. Prior to the Commercial Operation Date, Transmission Owner shall test the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities and Distribution Upgrades, and Interconnection Customer shall test each electric production device at the Generating Facility, Interconnection Customer's System Protection Facilities, including control equipment to limit injection at the POI to the level of Interconnection Service set forth in Appendix A and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Transmission Owner and Interconnection Customer shall make any modifications to their respective 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 or Distribution System, as applicable, in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the Interconnection 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 shall each 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 Transmission Owner's and Interconnection Customer's tests and/or inspection of any of their respective System Protection Facilities and other protective equipment, including power system stabilizers and control equipment;
 - (ii) review the settings of the System Protection Facilities and other protective equipment; and
 - (iii) review the maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment.
- A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this 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, at its election, or otherwise Interconnection Customer, shall install Metering Equipment (the "Metering Party") at the Point of Interconnection prior to any operation of the Generating Facility and Transmission Owner, at its election, or otherwise Interconnection Customer shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Generating Facility shall be measured at or, at the Metering Party's option, compensated to, the Point of Interconnection. In addition to the Metering Equipment installed at the Point of Interconnection, if Interconnection Customer will share Interconnection Facilities with any other projects, Interconnection Customer shall install Metering Equipment either on its own Generating Facility or its own non-shared facilities sufficient to measure the output of such Interconnection Customer's Generating Facility separately from any other Generating Facilities with which it will share Interconnection Facilities. The Metering Party shall provide metering quantities, in analog and/or digital form, to the other Parties upon request. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the Metering Equipment owned by the Metering Party. 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 Provider, Transmission Owner or their designees. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.

- 7.3 Standards.** The Metering Party shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.
- 7.4 Testing of Metering Equipment.** The Metering Party shall inspect and test Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by a Party, the Metering Party shall, at the requesting Party's expense, inspect or test Metering Equipment more frequently than every two (2) years. The Metering Party shall give reasonable notice to the other Parties of the time when any inspection or test shall take place, and the other Parties 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 the Metering Party's failure to maintain, then the Metering Party 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 (2%) from the measurement made by the standard meter used in the test, the Metering Party 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 previous test of the Metering Equipment.
- 7.5 Metering Data.** At Interconnection Customer's expense, the metered data shall be telemetered to one or more locations designated by Transmission Provider and 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 Provider's Transmission System dispatcher or representative designated by Transmission Provider. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to Transmission Provider as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Generating Facility to the location(s) specified by Transmission Provider. Any required maintenance of such communications

equipment shall be performed by and at the cost of 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.

Unless the Generating Facility is an Intermittent Resource not relying on wind as a fuel source, Interconnection Customer shall install communication and control equipment such that the Generating Facility can receive and respond to the appropriate dispatch signals while operating under the Tariff. Where applicable, the requirements of the communication and control equipment will be enumerated in Appendix C to this GIA.

- 8.2 Remote Terminal Unit (RTU).** Prior to the Initial Synchronization Date of the Generating Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to both Parties, shall be installed 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 and Transmission Provider through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1. The communication protocol for the data circuit(s) shall be specified by Transmission Owner and Transmission Provider. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider and Transmission Owner.

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. 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 will, upon request by the Transmission Provider, be required to provide the Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. The Interconnection Customer with a Variable Energy Resource having solar as the energy source will, upon request by the Transmission Provider, be required to provide the Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. The Transmission Provider and Interconnection Customer whose Generating Facility is a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for

the development and deployment of a power production forecast. The Interconnection Customer whose Generating Facility is a Variable Energy Resource also shall submit data to the Transmission Provider regarding all forced outages to the extent necessary for the Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by the Interconnection Customer to the Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Data requirements for meteorological and forced outage data will be negotiated by the Transmission Provider and the Interconnection Customer, and will be set forth in Appendix C, Interconnection Details, of this GIA.

ARTICLE 9. OPERATIONS

- 9.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to any Party all information that may reasonably be required by that Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Local Balancing Authority Notification.** At least three (3) months before Initial Synchronization Date, Interconnection Customer shall notify Transmission Provider and Transmission Owner in writing of the Local Balancing Authority in which the Generating Facility will be located. If Interconnection Customer elects to locate the Generating Facility through dynamic metering/scheduling in a Local Balancing Authority other than the Local Balancing Authority 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 Local Balancing Authority 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 Local Balancing Authority.
- 9.3 Transmission Provider and Transmission Owner Obligations.** Transmission Provider shall cause the Transmission System and the Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner in accordance with this GIA. Transmission Provider, or its designee, may provide operating instructions to Interconnection Customer consistent with this GIA and the Tariff and, if applicable, Transmission Owner's operating protocols and procedures as they may change from time to time. Transmission Provider will consider changes to its operating protocols and procedures proposed by Interconnection Customer.
- 9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Generating Facility and the Interconnection

Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA. The Generating Facility must be operated in accordance with the operating limits, if any, in the Interconnection Facilities Study and specified in Appendix C of this GIA. Interconnection Customer shall operate the Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of Transmission Provider or its designated Local Balancing Authority Operator of which the Generating Facility 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 a 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, Interconnection Customer is responsible for the proper synchronization of the Generating Facility to the Transmission or Distribution System, as applicable.

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 be capable of maintaining a composite power delivery at continuous rated power output at the Point of Interconnection at all power factors over 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all synchronous generators in the Local Balancing Authority on a comparable basis. The applicable Local Balancing Authority power factor requirements are listed on the Transmission Provider's website at

https://cdn.misoenergy.org/Reactive_Generator_Requirements108137.pdf

and may be referenced in the Appendices to this GIA. The Generating Facility shall be capable of continuous dynamic operation throughout the power factor design range as measured at the Point of Interconnection. Such operation shall account for the net effect of all energy production devices on the Interconnection Customer's side of the Point of Interconnection.

9.6.1.2 Non-Synchronous Generation. Interconnection Customer shall design the Generating Facility to be capable of maintaining a composite power delivery at continuous rated power output at the high-side of the generator substation at all power factors over 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all non-synchronous generators in the Local Balancing Authority on a comparable basis. The applicable Local Balancing Authority power factor requirements are listed on the Transmission Provider's website at

https://cdn.misoenergy.org/Reactive_Generator_Requirements108137.pdf

and may be referenced in the Appendices to this GIA. 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 have not yet completed a System Impact Study as of the effective date of the Final Rule establishing this requirement (Order No. 827). These requirements apply to existing non-synchronous generators making upgrades that require a new Generator Interconnection Agreement only where the Transmission Provider's System Impact Study shows the need for reactive power as a result of an upgrade. If applicable, these requirements will be memorialized in Appendix C to this GIA.

9.6.2 Voltage Schedules. Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Transmission Provider 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), to maintain the output voltage or power factor at the Point of Interconnection as specified by Transmission Provider. Transmission Provider's voltage schedules shall treat all sources of reactive power in the Local Balancing Authority in an equitable and not unduly discriminatory manner. Transmission Provider shall exercise Reasonable Efforts to provide Interconnection Customer with such schedules at least one (1) Calendar Day in advance, and may make changes to such schedules as necessary to maintain the reliability of the Transmission or Distribution System as applicable. 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 Transmission Provider's system operator, or its designated representative.

9.6.2.1 Voltage Regulators. Whenever the Generating Facility is operated in parallel with the Transmission or Distribution System as applicable and voltage regulators are capable of operation, Interconnection Customer shall operate the Generating Facility with its speed governors and voltage regulators in automatic operation. If the Generating Facility's voltage regulators are not capable of such automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative, and ensure that such 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 or Distribution System, as applicable, or trip any generating unit comprising the Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Local Balancing Authority on a comparable basis.

9.6.3 Payment for Reactive Power. Payments for reactive power shall be pursuant to any tariff or rate schedule filed by Transmission Provider and approved by the FERC.

9.6.4 Primary Frequency Response. This Section 9.6.4 shall only apply in the event that the Interconnection Request for the Generating Facility completed Definitive Planning Phase Interconnection Customer Decision Point 2 after May 15, 2018.

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 ± 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 GIA. 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: (a) a maximum of ± 0.036 Hz and set the droop parameter to a maximum of 5 percent; or (b) 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 GIA. 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 GIA.

9.6.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Appendix C 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 GIA. 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 GIA 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. Interconnection Customer and Transmission Owner may each in accordance with Good Utility Practice in coordination with the other Party and Transmission Provider remove from service any of its respective Interconnection Facilities, System Protection Facilities, Network Upgrades, System Protection Facilities or Distribution 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 notify one another and schedule such removal on a date and time mutually acceptable to the Parties. In all circumstances, any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

9.7.1.2 Outage Schedules. Transmission Provider shall post scheduled outages of transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the Generating Facility to Transmission Provider and Transmission Owner for a minimum of a rolling twenty-four (24) month period in accordance with the Transmission Provider's procedures. 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, pursuant to applicable Transmission Provider tariff or rate schedule, 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 the Transmission Provider's request to reschedule maintenance. Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled

maintenance, Interconnection Customer had modified its schedule of maintenance activities.

Costs shall be determined by negotiation between Transmission Provider and Interconnection Customer prior to implementation of the voluntary change in outage schedules, or if such request is made by or on behalf of a Transmission Customer requesting firm service, costs and recovery of costs shall be determined through a bilateral agreement between the Transmission Customer and Interconnection Customer. Voluntary changes to outage schedules under this Article 9.7.1.2 are separate from actions and compensation required under Article 13 and for which costs are recovered in accordance with Transmission Provider's applicable tariff or rate schedule.

9.7.1.3 Outage Restoration. If an outage on either the Interconnection Customer's or Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities or Distribution Upgrades adversely affects a 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 to the other Parties explaining the nature of the outage.

9.7.2 Interruption of Service. If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

9.7.2.1 The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission or Distribution System, as applicable;

9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its

expected duration. Telephone notification shall be followed by written notification as soon as practicable;

9.7.2.4 Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to Interconnection Customer, Transmission Owner and Transmission Provider;

9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Generating Facility, Interconnection Facilities, and the Transmission or Distribution System, as applicable to their normal operating state, consistent with system conditions and Good Utility Practice.

9.7.3 Under-Frequency, Over-Frequency, Under-Voltage, and Over-Voltage 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 or under-voltage system disturbance. Interconnection Customer shall implement under-frequency, over-frequency, under-voltage, and over-voltage relay set points for the Generating Facility as required by the Applicable Reliability Council to ensure “ride through” capability of the Transmission System. Generating Facilities that are not required to implement under-frequency, over-frequency, under-voltage, and over-voltage relays as directed by the Applicable Reliability Council shall implement such relays with set points according to guidelines published by the Applicable Reliability Council. Generating Facility response to frequency and/or voltage deviations of pre-determined magnitudes, including under-frequency, over-frequency, under-voltage, and over-voltage, 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, over-frequency, under-voltage, and over-voltage conditions, in accordance with Good Utility Practice.

9.7.4 System Protection and Other Control Requirements.

9.7.4.1 System Protection Facilities. Interconnection Customer shall, at its expense, install, operate and maintain its System Protection Facilities as a part of the Generating Facility or the Interconnection Customer’s Interconnection Facilities. Transmission Owner shall install at Interconnection Customer’s expense any Transmission Owner’s System

Protection Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the interconnection of the Generating Facility and the Interconnection Customer's Interconnection Facilities.

9.7.4.2 Interconnection Customer's and Transmission Owner's System Protection Facilities shall be designed and coordinated with Affected Systems in accordance with Good Utility Practice.

9.7.4.3 Each Party shall be responsible for protection of its facilities consistent with Good Utility Practice.

9.7.4.4 Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Generating Facility.

9.7.4.5 Each Party will test, operate and maintain their respective 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, Interconnection Customer or Transmission Owner, or their respective agents, 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, Interconnection Customer or Transmission Owner shall each perform both calibration and functional trip tests of their respective System Protection Facilities. These tests do not require the tripping of any in-service generating 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 or Distribution System, as applicable, 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 or Distribution System, as applicable. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Generating Facility and the Transmission or Distribution System, as applicable, 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 or Distribution System, as applicable, could adversely affect the Generating Facility.

- 9.7.6 Power Quality.** Neither Party's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard. In the event of a conflict between ANSI Standard C84.1-1989, and any applicable superseding electric industry standard, the applicable superseding electric industry standard shall control.
- 9.8 Switching and Tagging Rules.** Prior to the Initial Synchronization Date, each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' 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 Other 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 or Distribution System, as applicable, and shall be used for no other purpose.
- 9.9.2 Other Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld or delayed, to allow one or more Parties to use the 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 non-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 non-Party users based upon the pro rata use of the Interconnection Facilities by Transmission Owner, all non-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

Dispute Resolution pursuant to Section 12 of the Tariff.

- 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 Owner's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA and all Applicable Laws and Regulations.
- 10.2 Interconnection Customer Obligations.** Interconnection Customer shall maintain the Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA and all Applicable Laws and Regulations.
- 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 other in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact 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 Service or Transmission Service to a non-Party and such non-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 to the extent required by Transmission Owner on a comparable basis.

ARTICLE 11. PERFORMANCE OBLIGATION

11.1 Interconnection Customer's Interconnection Facilities. Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.

11.2 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 at the sole expense of Interconnection Customer.

11.3 Network Upgrades, System Protection Facilities and Distribution Upgrades. Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, Transmission Owner's System Protection Facilities and Distribution Upgrades described in Appendix A. Interconnection Customer shall be responsible for all costs related to Distribution Upgrades and/or Generator Upgrades. Transmission Owner shall provide Transmission Provider and Interconnection Customer with written notice pursuant to Article 15 if Transmission Owner elects to fund the capital for the Network Upgrades and Transmission Owner's System Protection Facilities; otherwise, such facilities, if any, shall be solely funded by Interconnection Customer.

11.3.1 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 (1) a higher queued interconnection request withdrew or was deemed to have withdrawn, (2) the interconnection agreement associated with a higher queued interconnection request was terminated prior to the project's In-Service Date, (3) the Commercial Operation Date for a higher queued interconnection request is delayed, or the project itself is delayed (including due to suspension) such that facilities required to accommodate lower queued projects or the project itself may be altered, (4) the queue position is reinstated for a higher-queued interconnection request whose queue position was subject to dispute resolution, (5) changes occur in Transmission Provider or Transmission Owner equipment design standards or reliability criteria giving rise to the need for restudy, (6) the facilities required to accommodate a higher queued Interconnection Request were modified constituting a Material Modification pursuant to Section 4.4 of the GIP, (7) a GIA with an effective date prior to this GIA is terminated, or (8) when ordered to restudy by FERC. 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, are provided in Appendix A.

11.3.2 Agreement to Restudy and Cost Reallocation. In the event that one of the contingencies listed in Article 11.3.1 occurs, at any time before the Network Upgrades, Common Use Upgrades, Shared Network Upgrades, System Protection

Facilities and/or Distribution Upgrades associated with higher queued Interconnection Requests with GIA in effect prior to this GIA are completed, Transmission Provider may determine, in its discretion, that a restudy is required. If a restudy is required, Transmission Provider will provide notice to Interconnection Customer and Interconnection Customer agrees to enter into an Interconnection Study Agreement for such restudy. Transmission Provider will reevaluate the need for any Common Use Upgrade(s) and/or Shared Network Upgrade(s), and if still required, reallocate the cost and responsibility for any Common Use Upgrade and/or Shared Network Upgrade, without a restudy when possible, or with a restudy if the Transmission Provider deems it necessary in order to ensure reliability of the Transmission System. The Parties agree to amend Appendix A to this GIA in accordance with Article 30.10 to reflect the results of any cost reallocation required under this Article 11.3.2.

11.3.3 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 funded the Shared Network Upgrades in accordance with Attachment X and Attachment FF 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 Transmission Credits.

11.4.1 Repayment of Amounts Advanced for Network Upgrades. Interconnection Customer shall be entitled to a cash repayment by Transmission Owner(s) and the Affected System Owner(s) that own the Network Upgrades, of the amount paid respectively to Transmission Owner and Affected System Operator, if any, for the Network Upgrades, as provided under Attachment FF of this Tariff and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Interconnection Customer pursuant to Article 5.17.8 or otherwise, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff and Affected System's Tariff for Transmission Services with respect to the Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 (a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Interconnection Customer has suspended construction pursuant to Article 11 or the Network Upgrades have been determined not to be needed pursuant to this Article 11.4.1. Interconnection Customer may assign such repayment rights to any person.

If the Generating Facility is designated a Network Resource under the Tariff, or if there are otherwise no incremental payments for Transmission Service resulting from the use of the Generating Facility by Transmission Customer, and in the absence of another mutually agreeable payment schedule any repayments provided under Attachment FF shall be established equal to the applicable rate for Firm Point-To-Point Transmission Service for the pricing zone where the Network Load is located multiplied by the portion of the demonstrated output of the Generating Facility designated as a Network Resource by the Network Customer(s) or in the absence of such designation, equal to the monthly firm single system-wide rate defined under Schedule 7 of the Tariff multiplied by the portion of the demonstrated output of the Generating Facility under contract to Network Customer(s) and consistent with studies pursuant to Section 3.2.2.2 of the GIP.

Notwithstanding the foregoing, as applicable and consistent with the provisions of Attachment FF of this Tariff, Interconnection Customer, Transmission Provider, Transmission Owner, and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Owner and Affected System Operator take one of the following actions no later than five (5) years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Owner or Affected System Operator will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.

If the Generating Facility is installed in phases, the amount eligible for refund as each phase achieves Commercial Operation will be reduced by the proportional amount of generation capacity not yet installed. However, all facilities in Appendix A other than the Generating Facility shall be built without consideration for the phasing of the Generating Facility as though the entire Generating Facility will be placed in Commercial Operation for the full output or increased output of the Generating Facility constructed by Interconnection Customer under this GIA.

If the Generating Facility fails to achieve Commercial Operation, but it or another generating facility is later constructed and makes use of the Network Upgrades, Transmission Owner and Affected System Operator shall at that time reimburse Interconnection Customer for the remaining applicable amounts that may be refundable pursuant to Attachment FF of this Tariff that were advanced for the Network Upgrades on their respective systems as described above. Before any such reimbursement can occur, Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for

identifying the entity to which the reimbursement must be made.

- 11.4.2** Special Provisions for Transmission Provider as an Affected System to be covered under Separate Agreements. When the Transmission Owner's Transmission or Distribution System (including for this Article 11.4.2 independent distribution systems connected to the Transmission System) is an Affected System for an interconnection in another electric system, Transmission Provider will coordinate the performance of Interconnection Studies with the other system. Transmission Provider will determine if any Network Upgrades or Distribution Upgrades, which may be required on the Transmission System as a result of the interconnection, would not have been needed but for the interconnection. Unless Transmission Owner provides, under the interconnection agreement between Interconnection Customer and the other system, for the repayment of amounts advanced to Transmission Provider or an impacted Transmission Owner for Network Upgrades, Interconnection Customer, Transmission Provider, and the impacted Transmission Owner(s) shall enter into an agreement that provides for such repayment by Transmission Owner(s) as directed by Transmission Provider. The agreement shall specify the terms governing payments to be made by Interconnection Customer to the Affected System Operator as well as the payment of refunds by the Affected System Operator.
- 11.4.3** 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 cash reimbursement or transmission credits for transmission service that is not associated with the Generating Facility.
- 11.5 Initial Payment.** Interconnection Customer shall elect (and provide its election to the Transmission Provider within five days of the commencement of negotiation of the GIA pursuant to Section 11.2 of the GIP) to make either 1) an initial payment equal to twenty (20) percent of the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades (if the In-Service Date is less than or equal to five (5) years of the initial payment date); or 2) an initial payment equal to ten (10) percent of the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades (if the In-Service Date exceeds the initial payment date by more than five (5) years); or 3) the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades in the form of security pursuant to Article 11.6. The initial payment shall be provided to Transmission Owner by Interconnection Customer pursuant to this Article 11.5 within the later of a) forty-five (45) Calendar Days of the execution of the

GIA by all Parties, or b) forty-five (45) Calendar Days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer, or c) forty-five (45) Calendar Days of the filing if the GIA is filed unexecuted and the initial payment is not being protested by Interconnection Customer. If the Interconnection Customer made its milestone payments in the form of cash and the Interconnection Customer elects a cash initial payment, then the Transmission Provider shall transfer those funds to the Transmission Owner on the Interconnection Customer's behalf.

11.6 Provision of Security. Unless otherwise provided in Appendix B, at least forty-five (45) Calendar Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of an element, not otherwise funded under Article 11.5, of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Network Upgrades, Distribution Upgrades or Stand-Alone Network Upgrades, or at the request of Transmission Owner if regulatory approvals are required for the construction of such facilities, Interconnection Customer shall provide Transmission Owner, at Interconnection Customer's selection, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Owner 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 applicable costs and cost commitments, in addition to those funded under Article 11.5, required of the Party responsible for building the facilities pursuant to the construction schedule developed in Appendix B for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the applicable portion of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Network Upgrades, Distribution Upgrades or Stand-Alone Network Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes.

In addition:

- 11.6.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Owner, 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.
- 11.6.2** The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Owner and must specify a reasonable expiration date.
- 11.6.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner and must specify a reasonable expiration date.
- 11.6.4** If the Shared Network Upgrade is not in service, Interconnection Customer will provide, as applicable, an Irrevocable Letter of Credit to fund any Shared Network Upgrade pursuant to Attachment FF of the Tariff. The Irrevocable Letter of Credit shall be in an amount sufficient to cover the Interconnection Customer's share of the applicable costs and cost commitments associated with

the Shared Network Upgrades. Transmission Provider may periodically adjust the Interconnection Customer's share of the applicable costs and cost commitment of Shared Network Upgrades and may require Interconnection Customer to adjust the amount of the Irrevocable Letter of Credit accordingly.

- 11.7 Interconnection Customer Compensation.** If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Article 13.4 of this GIA, Transmission Provider shall compensate Interconnection Customer in accordance with any tariff or rate schedule filed by Transmission Provider and approved by the FERC.

ARTICLE 12. INVOICE

- 12.1 General.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, 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 (6) months after completion of the construction of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and the Network Upgrades, Transmission Owner shall provide an invoice of the final cost of the construction of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this GIA.
- 12.4 Disputes.** In the event of a billing dispute among the Parties, 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 Provider or 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 Provider may or, at Transmission Owner's request upon Interconnection Customer's failure to pay, Transmission Owner, shall 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 another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 13. EMERGENCIES

- 13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of Transmission Provider, NERC, the Applicable Reliability Council, and Applicable Laws and Regulations.
- 13.2 Notice.** Transmission Provider or Transmission Owner shall notify the other Parties promptly when it becomes aware of an Emergency Condition that affects the Transmission Owner's Interconnection Facilities or the Transmission or Distribution System, as applicable, that may reasonably be expected to affect Interconnection Customer's operation of the Generating Facility or the Interconnection Customer's Interconnection Facilities.

Interconnection Customer shall notify Transmission Provider and Transmission Owner, which includes by definition if applicable, the operator of a Distribution System, promptly when it becomes aware of an Emergency Condition that affects the Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission or Distribution System, as applicable, or the 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 Provider'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.

- 13.3 Immediate Action.** Unless, in a Party's reasonable judgment, immediate action is required, the Party exercising such judgment shall notify and obtain the consent of the other Parties, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or otherwise regarding the Transmission or Distribution System, as applicable.
- 13.4 Transmission Provider and Transmission Owner Authority.**
- 13.4.1 General.** Transmission Provider or Transmission Owner may take whatever actions or inactions with regard to the Transmission System or the 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 the Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider or Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Generating Facility or the Interconnection Customer's Interconnection Facilities. Transmission Provider 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 13.4.2; directing Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's or 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.

13.4.2 Reduction and Disconnection. Transmission Provider or Transmission Owner may reduce Interconnection Service or disconnect the Generating Facility or the 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 the Tariff. When Transmission Provider can schedule the reduction or disconnection in advance, Transmission Provider shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider shall coordinate with Interconnection Customer and Transmission Owner using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer, Transmission Owner and Transmission Provider. Any reduction or disconnection shall continue only for so long as reasonably necessary pursuant to 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.

13.5 Interconnection Customer Authority. Consistent with Good Utility Practice and this GIA and the GIP, Interconnection Customer may take whatever actions or inactions with regard to the Generating Facility or the 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 the 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 the Transmission Owner's Interconnection Facilities. Transmission Provider and Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

- 13.6 Limited Liability.** Except as otherwise provided in Article 11.6 of this GIA, no Party shall be liable to any other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.
- 13.7 Audit.** In accordance with Article 25.3, any Party may audit the performance of another Party when that Party declared an Emergency Condition.

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 if necessary assist the other Party 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, as amended, or the Public Utility Regulatory Policies Act of 1978.

14.2 Governing Law.

14.2.1 The validity, interpretation and performance of this 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 the other Parties and any instrument required or permitted to be tendered or delivered by a Party in writing to the other Parties shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with

postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Either Party may change the notice information in this 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 the other and not required by this GIA 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 A Party shall not be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4 and 5), 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, facsimile or email 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 Reasonable Efforts 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 or Parties shall give written notice of such Breach to the Breaching Party with a copy to the other Party if one Party gives notice of such Breach. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach 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 Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

17.1.2 Termination. 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 or Parties shall terminate this GIA, subject to Article 2.3.2 of this GIA, by written notice to the Breaching Party, with a copy to the other Party if one Party gives notice of termination, and be relieved of any further obligation hereunder and, whether or not that Party(ies) terminates this GIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is (they are) entitled at law or in equity. The provisions of this Article will survive termination of this GIA.

ARTICLE 18. LIMITATION OF LIABILITY, INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

18.1 Limitation of Liability. A Party shall not be liable to another Party or to any third party or other person for any damages arising out of actions under this GIA, including, but not limited to, any act or omission that results in an interruption, deficiency or imperfection of Interconnection Service, except as provided in this Tariff. The provisions set forth in the Tariff shall be additionally applicable to any Party acting in good faith to implement or comply with its obligations under this GIA, regardless of whether the obligation is preceded by a specific directive.

18.2 Indemnity. To the extent permitted by law, an Indemnifying Party shall at all times indemnify, defend and hold the other Parties harmless from Loss.

18.2.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a non-Party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.2, to assume the defense of such claim, such Indemnified Party 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.

18.2.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss,

net of any insurance or other recovery.

18.2.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party 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 18.2 may apply, the Indemnified Party 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 Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party 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 Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party 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 Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, 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 Party, which shall not be reasonably withheld, conditioned or delayed.

18.3 Consequential Damages. Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this GIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided; however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

- 18.4 Insurance.** Transmission Owner and Interconnection Customer shall, at their own expense, maintain in force throughout the period of this GIA pursuant to 18.4.9, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business or an approved surplus lines carrier in the state where the Point of Interconnection is located:
- 18.4.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.
- 18.4.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- 18.4.3** Comprehensive Automobile Liability Insurance, for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers licensed for travel on public roads, with a minimum combined single limit of One Million Dollars (\$1,000,000) each occurrence for bodily injury, including death, and property damage.
- 18.4.4** Excess Public Liability Insurance over and above the Employer's Liability, Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.4.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, 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 Groups and provide thirty (30) Calendar Days' advance written notice to the Other Party Groups prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.4.6** 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.

- 18.4.7** 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 by Transmission Owner and Interconnection Customer.
- 18.4.8** The requirements contained herein as to the types and limits of all insurance to be maintained by Transmission Owner and Interconnection Customer are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by Transmission Owner and Interconnection Customer under this GIA.
- 18.4.9** As of the date set forth in Appendix B, Milestones, 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) Calendar Days thereafter, Interconnection Customer and Transmission Owner shall provide the other Party with certification of all insurance required in this GIA, executed by each insurer or by an authorized representative of each insurer.
- 18.4.10** Notwithstanding the foregoing, Transmission Owner or Interconnection Customer may self-insure to meet the minimum insurance requirements of Articles 18.4.1 through 18.4.8, to the extent it maintains a self-insurance program; provided that, Transmission Owner's or Interconnection Customer's senior secured debt is rated at investment grade, or better, by Standard & Poor's and that its self-insurance program meets minimum insurance requirements under Articles 18.4.1 through 18.4.8. For any period of time that a Transmission Owner's or 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 Party shall comply with the insurance requirements applicable to it under Articles 18.4.1 through 18.4.9. In the event that Transmission Owner or 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 18.4.9.
- 18.4.11** Transmission Owner and Interconnection Customer 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 a 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 either 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 of any such assignment. Any financing arrangement entered into by Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 11.5 and 18.4. 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 non-Party, but only if such non-Party is not acting at the direction of either Transmission Provider or Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

ARTICLE 21. COMPARABILITY

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations including such laws, rules and regulations of Governmental Authorities establishing standards of conduct, 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 a Party to another Party 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. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c). Such confidentiality will be maintained in accordance with this Article 22.

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

22.1.1 Term. During the term of this 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 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policy and regulations.

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 non-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 this 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 receiving 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, agents, consultants, or to non-parties who may be or are 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 it discloses to the receiving Party. The disclosure by a Party to the receiving 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 Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party 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 requesting Party) or return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party, except

that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 22 shall survive such termination.

- 22.1.9 Remedies.** 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 disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving 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 Breaching 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 CFR § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party 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 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this GIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to this 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 CFR § 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 disclosing Party claims is competitively sensitive, commercial or financial information under this GIA shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the receiving 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 disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this GIA or as the Regional Transmission Organization or a

Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 23. ENVIRONMENTAL RELEASES

- 23.1** Each Party shall notify the other Parties, 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 another 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 Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

ARTICLE 24. INFORMATION REQUIREMENTS

- 24.1 Information Acquisition.** Transmission Provider, Transmission Owner 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 and Transmission Owner** The initial information submission by Transmission Provider to Interconnection Customer, with copy provided to Transmission Owner, shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission or Distribution System information, as applicable and available, necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis, Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.** The updated

information submission by Interconnection Customer to Transmission Provider, with copy to Transmission Owner, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation.

Interconnection Customer shall submit to Transmission Provider and Transmission Owner a completed copy of the Generating Facility data requirements contained in Appendix 1 to the GIP. It shall also include any additional information provided to Transmission Provider for the Interconnection Facilities Study. 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, Interconnection Customer will work with a consultant mutually agreed to by Transmission Provider and Interconnection Customer to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission System based on the actual data submitted pursuant to this Article 24.3. Interconnection Customer shall not begin Trial Operation until such studies are completed.

24.4 Information Supplementation. Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 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. 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 %) 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 in 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 Transmission Provider and Transmission Owner for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, Interconnection Customer shall provide Transmission Provider and Transmission Owner any information changes due to equipment replacement, repair, or adjustment. Transmission Owner shall provide

Interconnection Customer, with copy to Transmission Provider, any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Owner 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.

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 another Party is 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.** A 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 any Party 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 the other Parties, to audit at its own expense the other Parties' accounts and records pertaining to the Parties' performance or the Parties' satisfaction of obligations under this GIA. Such audit rights shall include audits of the other Parties' costs, calculation of invoiced amounts, the Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission or Distribution System, as applicable, the Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation, 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 the Transmission Owner's Interconnection Facilities,

Transmission Owner's System Protection Facilities, Distribution Upgrades 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 a 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 (24) 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 (24) 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 Party or from whom the overpayment or underpayment is owed 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 Provider or 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, such Party (the "disputing Party") shall provide the other Parties with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of

each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the non-disputing Parties. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the non-disputing Parties' receipt of the Notice of Dispute, such claim or dispute shall be submitted for resolution in accordance with the dispute resolution procedures of the Tariff.

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. {RESERVED}

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.
- 30.1.1 Reversion.** If offered pursuant to an Agency Agreement under which this GIA is executed by Transmission Provider as agent for the relevant Transmission Owner, in the event that the relevant Agency Agreement terminates, any HVDC Service offered by Transmission Provider under this GIA shall revert to the relevant Transmission Owner and Transmission Provider shall be released from all obligations and responsibilities under this GIA.
- 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 the GIP or such Appendix to the GIP, 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 attachments 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 GIA. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any 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 any 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 the Interconnection Customer's legal rights to obtain Interconnection Service 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 two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 30.9 Amendment.** The Parties may by mutual agreement amend this GIA by a written instrument duly executed by all 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 all of 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 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 or between 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, the other Parties.

IN WITNESS WHEREOF, the Parties have executed this GIA in multiple originals; each of which shall constitute and be an original GIA among the Parties.

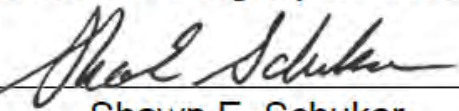
Transmission Provider
Midcontinent Independent System Operator, Inc.

By:  7/22/2022 ces

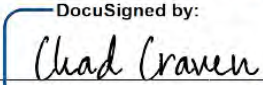
Name: Aubrey Johnson

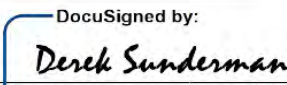
Title: VP, System Planning & Competitive Development

Transmission Owner
**Ameren Services Company, as agent for
Ameren Illinois Company d/b/a Ameren Illinois**

By: 
Name: Shawn E. Schukar
Title: Sr. Vice President

Interconnection Customer
Cass County Solar Project, LLC

By: 
Name: 7C93F4D93B4945D... Chad Craven
Title: Authorized Person

By: 
Name: 3C1C602E56CD495... Derek Sunderman
Title: Authorized Agent

APPENDICES TO GIA

- Appendix A** Interconnection Customer's Project No. J859, which includes a Generating Facility, Interconnection Facilities, and Network Upgrades, and may include System Protection Facilities, Distribution Upgrades, Generator Upgrades, Affected System Upgrades and Common Use Upgrades
- Appendix B** Milestones
- Appendix B-1** Pre-Certification Generation Test Notification Form
- 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** Interconnection Requirements for a Wind Generating Plant
- Appendix H** Interconnection Requirements for Provisional GIA
- Appendix I** Requirements Applicable to Surplus Interconnection Service

Appendix A To GIA

Interconnection Customer's Project No. J859, which includes a Generating Facility, Interconnection Facilities, and Network Upgrades, and may include System Protection Facilities, Distribution Upgrades, Generator Upgrades, Affected System Upgrades and Common Use Upgrades

1. Description of Generating Facility

Interconnection Customer shall install a 160 MVA facility, rated at 149.94 MW gross and 149.94 MW net, with all studies performed at or below these outputs. The Generating Facility is composed of fifty (50) TMEIC PVH-L3200GR solar inverter units rated at 3.2 MVA each. Interconnection Service provided under this agreement is 149.94 MW of conditional ERIS that will become 149.94 MW of ERIS and/or NRIS upon completion of all Network Upgrades, Common Use Upgrades, and Affected System Upgrades under this GIA, and the transmission assumptions listed in Table A10-1 of Exhibit A10.

Interconnection Customer shall install a collector substation with the appropriate protection equipment coordinated per Appendix C to this GIA. The Interconnection Customer's collector substation shall contain one (1) main step-up transformer 34.5/138 kV, 105/140/175 MVA, Z=7 %, X/R=34.1, MVA Base One Hundred and Five (105), one (1) 138 kV, 1200 A circuit breaker, associated line surge arrestors and disconnect switches, nine (9) 34.5 kV feeders with associated circuit breakers, disconnect switches, and associated auxiliary systems, instrument transformers, and electric relay protection. The collector substation will include a SCADA system and a data concentrator as required to manage the project and to send the required status and output data to the Transmission Owner and the Transmission Provider. The collector substation will include an 18 MVAR capacitor bank at the 34.5 kV bus, or as required to meet FERC Order 827.

These facilities are shown in Exhibit A1-1.

2. Interconnection Facilities

The J859 Generating Facility will interconnect with the Transmission System via an estimated 0.094 mile-long 138 kV leadline running from the Interconnection Customer's collector substation to the Transmission Owner's Flanigan switching station in Cass County, Illinois.

(a) Point of Interconnection

- i. The Point of Interconnection shall be at the point where the Transmission Owner Interconnection Facilities connect to the bus at the Flanigan switching station.
- ii. The Point of Change of Ownership between the Interconnection Customer and Transmission Owner occurs at the arbor connection for hardware and shield wire, the 4-hole pad for conductor, and the splice point at the base of

the arbor for OPGW. Transmission Owner will provide hardware to secure OPGW to the arbor leg and splicing of fiber optic cables inside the Transmission Owner's substation.

- iii. The metering point will be at the 138 kV leadline terminal in the new Flanigan switching station.

(b) Interconnection Customer Interconnection Facilities to be constructed by Interconnection Customer

Interconnection Customer shall construct, own, and maintain the Interconnection Customer Interconnection Facilities. These facilities shall include

- Approximately 0.094 miles of 954 kcmil ACSR 138 kV generator lead line.
- Interconnection Customer shall provide all connection hardware up to the arbor, OPGW, shield wire, and conductor, including a downward pointing NEMA four-hole terminal pad(s) (finished on both sides) for Transmission Owner connections at the Point of Change of Ownership.
- The Interconnection Customer OPGW shall comply with the Transmission Owner's requirements during the design phase of the work.
- Customer shall install and maintain conductor, hardware, shield wire, and OPGW with prearranged escorted substation access provided by the Transmission Owner.

Interconnection Customer shall coordinate with Transmission Owner on final physical connection logistics following GIA execution. In accordance with Section 5.12 of the GIA, Transmission Owner grants Interconnection Customer a license or easement to construct, operate, maintain, repair, test (or witness testing), inspect, replace, or remove facilities and equipment within or upon the lands of the Transmission Owner as may be required under the terms of this GIA. Interconnection Customer agrees to coordinate and meet all security and safety requirements of the Transmission Owner prior to access inside the fence line of any Transmission Owner facility. All Interconnection Customer transmission structures must be at least 70 feet from the station fence.

(c) Transmission Owner Interconnection Facilities (including metering equipment) to be constructed by Transmission Owner

The Transmission Owner Interconnection Facilities will consist of one 138 kV terminal in the Flanigan switching station. The terminal will consist of all necessary terminal equipment to connect the J859 leadline to the Flanigan switching station bus. See Exhibit A2.

Major Items

- One (1) 138 kV steel dead-end arbor structure
- One (1) 138kV Motor Operated Disconnect Switch, 2000A
- Three (3) 138 kV Surge Arresters

- Three (3) 138 kV Potential/Voltage Transformers
- Three (3) 138 kV Current Transformers
- One (1) Line Relay panel (SEL 411L and SEL 311C)
- One Fiber Patch Panel Housing, fiber splice box, and fiber termination in the control house
- Revenue Metering
- Bus and Fittings: five inch aluminum tube and portions of 1590 AAC (2) wire conductor with bolted aluminum bus connectors, fittings, and terminals
- Insulators: High strength porcelain station post insulators
- Foundations: Designed per Transmission Owner standard design criteria
- Structures: Steel tapered tube style

Total Estimated Cost: **\$ 775,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$. The J859 project may be required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

3. Network Upgrades

(a) Stand-Alone Network Upgrades to be installed by Transmission Owner Flanigan Switching Station

The new Flanigan switching station will be located in Cass County, Illinois. It will be on the south side of Edgewood Drive adjacent to the west side of the Meredosia East – Frederick North segment of the Ipava-Meredosia East 138 kV transmission line right-of-way. The approximate GPS coordinates are 39°58'41" North, 90°27'55" West.

The switching station will be a ring bus arrangement with three line terminal positions and provisions for one additional future terminal position. The future terminal position is not included in the scope or cost listed in this GIA, will be funded by whatever entity drives the need for the future installation. The existing Ipava-Meredosia East 138 kV transmission line will be cut and the new ends terminated at two line terminal positions in the switching station. The J859 Generating Facility will interconnect at the third terminal position.

The Flanigan switching station will be constructed adjacent to and on the west side of the Meredosia East – Frederick North segment of the Ipava Meredosia East 138 kV transmission line. The property for the site will be purchased by the Interconnection Customer and quit claimed to the Transmission Owner. The Interconnection Customer will bear the full cost and responsibility for property acquisition, site grading to Transmission Owner specifications, constructing and

furnishing an access road, permitting, right of way, and all other costs associated with acquiring the necessary real estate for the station.

An estimated 9 acres must be provided to the Transmission Owner. All Interconnection Customer facilities must be constructed outside of this area.

Major Items:

- Two (2) 138 kV steel dead-end arbor structures
- Three (3) 138 kV Gas Circuit Breakers, 3000A, 40kA interrupting capability
- Two (2) 138 kV Motor Operated Disconnect Switches, 2000A
- Seven (7) 138 kV Disconnect Switches, 3000A
- Six (6) 138 kV Coupling Capacitor Voltage Transformers
- Nine (9) 138 kV Surge Arresters
- One (1) Breaker Control and Relay Panel (SEL 351S)
 - AC Station Service: Two (2) station service voltage transformers
- Bus and Fittings: Five inch aluminum tube with portions of 2500AAC (2) wire and 1590AAC (2) wire conductor with bolted aluminum bus connectors, fittings, and terminals
- Insulators: High strength porcelain station post insulators
- Ground Grid: Designed per Transmission Owner standards utilizing buried copper wire and exothermic welds
- Fence: Standard chain link fencing with seven foot fabric, three strands of barbed wire, and reinforcement cables
- Prefabricated Steel Control Enclosure containing:
 - Relaying and Control: Two (2) line protection relay panels, three (3) breaker control panels, one (1) RTU panel, one (1) communications panel, one (1) fiber panel, and one (1) network panel
 - DC Station Service: One (1) 125 volt battery, two (2) battery chargers, and two (2) DC distribution panels
 - AC Station Service Equipment: One (1) automatic AC transfer switch and three (3) AC distribution panels

Total Estimated Cost: **\$ 6,441,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

(b) Network Upgrades to be installed by Transmission Owner

Transmission Owner shall construct the following Network Upgrades:

i. Split and Terminate the Ipava-Meredosia East 138 kV Transmission Line

Split the existing Ipava-Meredosia East 138 kV transmission line and terminate at the new Flanigan switching station.

Transmission Owner will install two wood heavy angle transmission structures in-line with the existing line. The existing conductor will be dead-ended on these structures and new conductor will be run from these structures to Flanigan switching station arbor structures. Jumpers will be installed at the dead-end structures to connect the existing line conductor to the new tapping conductor.

Major Items:

- Two (2) 138 kV wood heavy-angle structures
- Conductor, shield wire, and OPGW
- Typical 138 kV insulators
- Compression type connectors

Total Estimated Cost: **\$ 266,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

ii. Upgrade Relaying at Meredosia East Substation

Replace incompatible equipment with new equipment that will protect the new line created between the new Flanigan switching station and the Meredosia East substation. Transmission Owner will install a new 138 kV relay and control panel at the Meredosia East substation for the line to the Flannigan Switching Station.

Major Items:

- One (1) Relay and Control Panel

Total Estimated Cost: **\$ 261,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

(c) Shared Network Upgrade(s) to be funded by Interconnection Customer

None

4. System Protection Facilities

(a) System Protection Facilities not listed in Section 2 or 3 to be constructed by Interconnection Customer

None

(b) System Protection Facilities not listed in 2 or 3 to be constructed by Transmission Owner

None

5. Distribution Upgrades

None

6. Generator Upgrades

None

7. Contingency List

See Exhibit A10.

8. Affected System Upgrades

Interconnection Customer is responsible to enter into Facilities Construction Agreement(s) and/or Multi-Party Facilities Construction Agreement(s) with Affected System Owner(s) for the following upgrades:

Ameren Transmission Company of Illinois (ATXI)

- ATXI will install a new 138 kV relay and control panel at the Ipava substation for the line to the Flanigan switching station.

9. Common Use Upgrades

None

10. Additional Approvals

Construction of the Transmission Owner's Interconnection Facilities is conditioned on receipt by Transmission Owner of approval from any jurisdiction having authority over the construction. No approvals, except approvals for outages, are contemplated at this time.

11. Cost Responsibility:

Interconnection Customer and Transmission Owner hereby acknowledge and agree that the costs listed in this appendix are only estimates. Interconnection Customer shall pay Transmission Owner for all actual costs associated with Transmission Owner's installation of Transmission Owner's Interconnection Facilities, including any applicable direct or indirect taxes or tax-related gross-up.

11.1 Cost Estimates

11.1.1 Interconnection Customer's total estimated cost for the installation of Interconnection Customer's Interconnection Facilities under this GIA has not been provided by the Interconnection Customer.

11.1.2 Interconnection Customer's total estimated cost for the installation of Transmission Owner's Interconnection Facilities under this GIA is \$775,000.

11.1.3 Interconnection Customer's total estimated cost for the installation of Network Upgrades and Stand Alone Network Upgrades under this GIA is \$ 6,968,000.

11.1.4 Interconnection Customer's total estimated cost for the installation of System Protection Facilities under this GIA is \$0.

11.1.5 Interconnection Customer's total estimated cost for the installation of Distribution Upgrades under this GIA is \$0.

11.1.6 Interconnection Customer's total estimated cost for the installation of Generator Upgrades under this GIA is \$0.

11.2 Transmission Owner Election to Fund the Capital for the Network Upgrades.

As provided under Article 11.3 of this GIA, Transmission Owner has elected to fund the capital for the Network Upgrades to be constructed under this GIA. Pursuant to the Tariff, Interconnection Customer remains ultimately responsible for the costs of Network Upgrades and pursuant to Article 11.6 of the GIA, Interconnection Customer remains responsible for providing security to Transmission Owner.

In accordance with the milestones set forth in Appendix B, Transmission Owner and Interconnection Customer will establish a service agreement between the Interconnection Customer and the Transmission Owner, pursuant to which the Interconnection Customer will pay the Transmission Owner's revenue requirement associated with Network Upgrades as identified in Exhibit A9 to this

GIA (the “Revenue Requirement”). The service agreement shall be filed with FERC for FERC’s acceptance, either on an executed or unexecuted basis, as set forth in the milestones.

12. Exhibits

The following exhibits are included:

- A1 Interconnection Customer One-Line Diagram and Site-Map
 - A1-1: Interconnection Customer One-Line Diagram
 - A1-2: Interconnection Customer Generating Facility Site Map
- A2 Transmission Owner Flanigan Switching Station One-Line Diagram
- A3 Transmission Owner Flanigan Switching Station Arrangement Drawing
- A4 {Reserved}
- A5 Cost of Facilities to be Constructed by Transmission Owner
- A6 Detailed Cost of Facilities to be Constructed by Transmission Owner
- A7 Cost of Facilities to be Constructed by Interconnection Customer
- A8 Detailed Cost of Facilities to be Constructed by Interconnection Customer
- A9 Network Upgrades to be Financed by Transmission Owner
- A10 Contingent Facilities
- A11 Interconnection Customer Milestones
- A12 Construction and Coordination Schedules
- A13 Permits, Licenses, Regulatory Approvals and Authorization
- A14 Interconnection and Operating Guidelines

Exhibit A1: Interconnection Customer One-Line Diagram and Site Map

A1-1: Interconnection Customer One-Line Diagram

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A1-2: Interconnection Customer Generating Facility Site Map

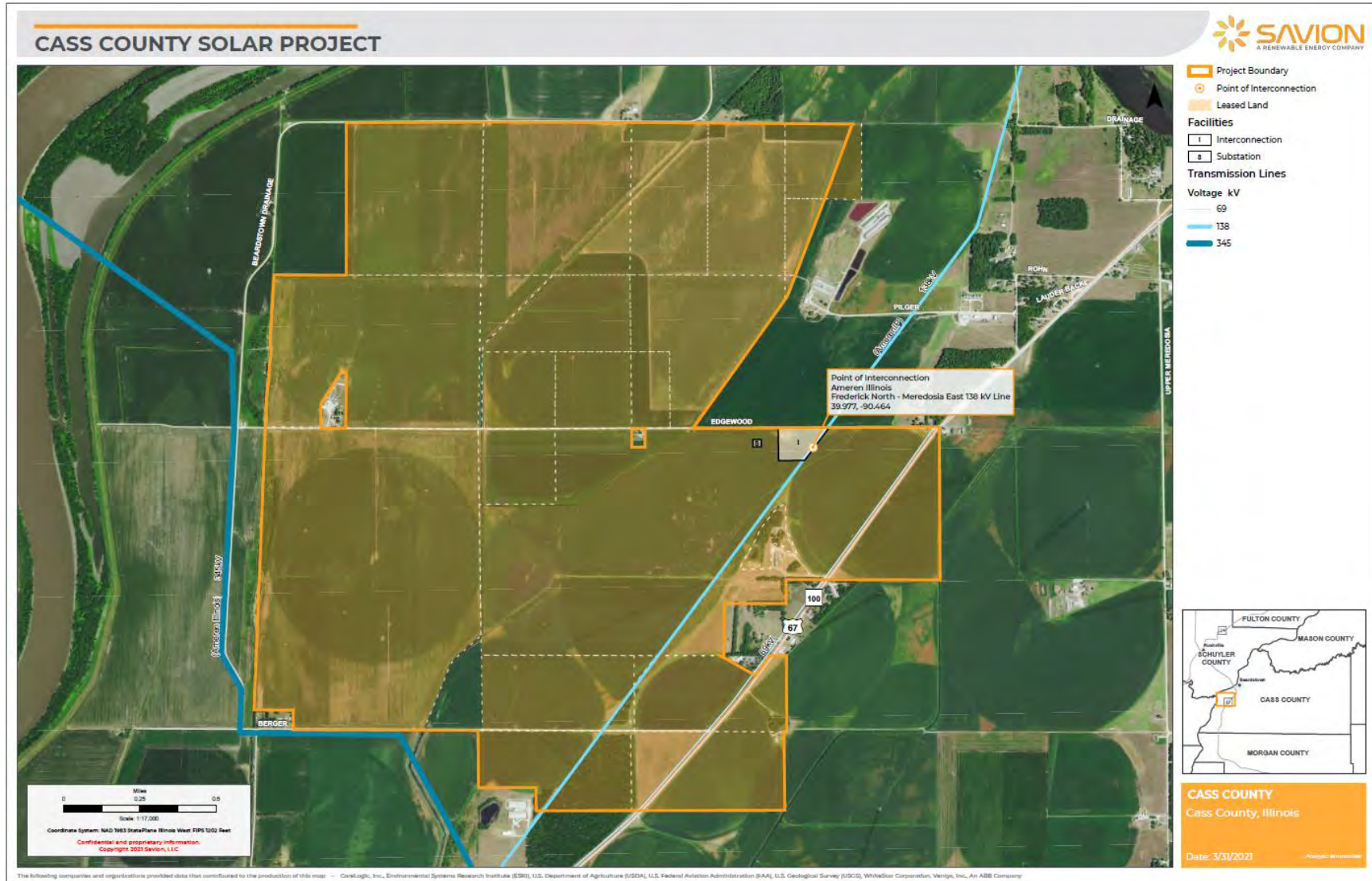


Exhibit A2: Transmission Owner Flanigan Switching Station One Line Diagram

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Exhibit A3: Transmission Owner Flanigan Switching Station Arrangement Drawing

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Exhibit A4: {Reserved}

Exhibit A5: Cost of Facilities to be Constructed by Transmission Owner

Type	Facilities to be Constructed by the Transmission Owner	Cost Estimate *
Interconnection Facilities	Construct Transmission Owner's Interconnection Facilities at the Flanigan switching station.	\$ 775,000**
Stand Alone Network Upgrade	Construct the Flanigan switching station.	\$ 6,441,000
Network Upgrade	Split the Ipava-Meredosia East 138 kV transmission line to connect the Flanigan switching station.	\$ 266,000
Network Upgrade	Upgrade relaying at the Meredosia East substation.	\$ 261,000
TOTAL		\$ 7,743,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

** The J859 project may be required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

Exhibit A6: Detailed Cost of Facilities to be Constructed by Transmission Owner**Table A6-1: Construct Transmission Owner's Interconnection Facilities ***

Engineering, Drafting, & Project Management	\$ 196,000
Material	\$ 223,000
Construction & Construction Oversight	\$ 267,000
Indirect Overheads	\$ 89,000
Total	\$ 775,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$. The J859 project is required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

Table A6-2: Construct the Flanigan Switching Station **

Engineering, Drafting, & Project Management	\$ 744,000
Material	\$ 2,468,000
Construction & Construction Oversight	\$ 2,315,000
Indirect Overheads	\$ 914,000
Total	\$ 6,441,000

Table A6-3: Split the Ipava-Meredosia East 138 kV line to connect the Flanigan Switching Station **

Engineering, Drafting, & Project Management	\$ 58,000
Material	\$ 71,000
Construction & Construction Oversight	\$ 98,000
Indirect Overheads	\$ 39,000
Total	\$ 266,000

Table A6-4: Upgrade Relaying at Meredosia East Substation **

Engineering, Drafting, & Project Management	\$ 18,000
Material	\$ 132,000
Construction & Construction Oversight	\$ 83,000
Indirect Overheads	\$ 28,000
Total	\$ 261,000

** Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

Exhibit A7: Cost of Facilities to be Constructed by Interconnection Customer

Type	Facilities to be Constructed by Interconnection Customer	Cost Estimate
Interconnection Customer Interconnection Facilities	No information about Interconnection Customer's Interconnection Facilities have been provided by the Interconnection Customer.	Not Available
Generating Facility Collector Substation	New 34.5/138 kV collector substation for collection of solar farm generation.	Not Available
Network Upgrades	No Network Upgrades are to be constructed by the Interconnection Customer.	Not Applicable
Stand Alone Network Upgrades	No Stand Alone Network Upgrades are to be constructed by the Interconnection Customer.	Not Applicable

Exhibit A8: Detailed Cost of Facilities to be Constructed by Interconnection Customer

The Interconnection Customer has not provided cost estimates for Interconnection Facilities to be constructed by the Interconnection Customer for inclusion in this report.

No Network Upgrades or Stand Alone Network Upgrades are to be constructed by the Interconnection Customer.

Exhibit A9: Network Upgrades to be Financed by Transmission Owner

Type	Facilities to be Constructed by the Transmission Owner	Cost Estimate *
Stand Alone Network Upgrade	Construct the Flanigan switching station.	\$ 6,441,000
Network Upgrade	Split the Ipava-Meredosia East 138 kV transmission line to connect the Flanigan switching station.	\$ 266,000
Network Upgrade	Upgrade relaying at Meredosia East substation.	\$ 261,000
TOTAL		\$ 6,968,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

Exhibit A10: Contingent Facilities

Higher queue and/or same DPP group study Interconnection Requests that may create contingencies pursuant to Article 11.3.1 are listed in tables below. Table A10-1 describes transmission assumptions modeled in the studies that were deemed necessary to allow for the Interconnection Service as described in Appendix A of this GIA and is not related to Article 11.3.1, i.e., does not describe projects associated with a higher queued and/or same DPP group study Interconnection Request. Nevertheless, if the transmission assumptions are not completed or are significantly modified, the Interconnection Service granted under this GIA may be restricted until such time as the Interconnection Customer funds a study to determine the applicable ERIS and NRIS level that results due to the changes in Table A10-1.

The list of higher-queued and/or same DPP group study projects in Tables A10-2 and A10-3, not yet in service, were included in the interconnection study for queue project J859. However, a project's inclusion in the System Impact Study does not necessarily mean that these facilities would be contingencies for the Interconnection Customer's Generating Facility. In the event that any of the higher queued and/or same DPP group study generators were to drop out, then the Interconnection Customer may be subject to restudy pursuant to Article 11.3.2.

Table A10-1 Transmission Assumptions

None

Table A10-2 Higher Queued Projects

DPP Cycle	Current Status	Project	Fuel	Request	Capacity MW
DPP-2016-FEB-Central	Under Construction	J351	Gas	NRIS	715
DPP-2016-AUG-Central	Under Construction	J446	Wind	NRIS	200
DPP-2016-AUG-Central	Under Construction	J456	Wind	NRIS	150
DPP-2016-FEB-Central	Under Construction	J468	Wind	NRIS	202
DPP-2016-AUG-Central	Under Construction	J474	Wind	NRIS	144
DPP-2016-AUG-Central	Under Construction	J513	Wind	NRIS	100.05
DPP-2016-FEB-Central	Under Construction	J515	Wind	ERIS	400
DPP-2016-AUG-Central	Under Construction	J641	Solar	NRIS	140
DPP-2016-AUG-Central	Under Construction	J643	Solar	NRIS	175
DPP-2016-AUG-Central	Under Construction	J644	Solar	NRIS	110
DPP-2017-FEB-Central	Under Construction	J740	Wind	NRIS	200
DPP-2017-FEB-Central	Under Construction	J753	Solar	NRIS	100
DPP-2017-FEB-Central	Under Construction	J754	Wind	NRIS	303.6
DPP-2017-FEB-Central	Under Construction	J756	Wind	NRIS	202.4
DPP-2017-FEB-Central	Under Construction	J757	Wind	NRIS	303.6
DPP-2017-FEB-Central	Under Construction	J759	Solar	NRIS	70

DPP Cycle	Current Status	Project	Fuel	Request	Capacity MW
DPP-2017-FEB-Central	Under Construction	J762	Solar	NRIS	200
DPP-2017-FEB-Central	Under Construction	J783	Solar	NRIS	70

Table A10-3 Similar Queued Projects

DPP Cycle	Current Status	Project	Fuel	Request	Capacity (MW)	ERIS/NRIS (MW)
DPP-2017-AUG-Central	Phase 3	J715	Wind	NRIS	98	98
DPP-2017-AUG-Central	Phase 3	J750	Wind	NRIS	150	150
DPP-2017-AUG-Central	Phase 3	J800	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J805	Solar	NRIS	199	199
DPP-2017-AUG-Central	Phase 3	J808	Solar	NRIS	99	99
DPP-2017-AUG-Central	Phase 3	J811	Solar	NRIS	99	99
DPP-2017-AUG-Central	Phase 3	J813	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J815	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J817	Solar	NRIS	139	139
DPP-2017-AUG-Central	Phase 3	J826	Wind	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J829	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J837	Wind	NRIS	200.1	200.1/80
DPP-2017-AUG-Central	Phase 3	J838	Wind	NRIS	100	100/40
DPP-2017-AUG-Central	Phase 3	J842	Wind	NRIS	200	200
DPP-2017-AUG-Central	Phase 3	J843	Wind	NRIS	200	200
DPP-2017-AUG-Central	Phase 3	J844	Wind	ERIS	147	147/0
DPP-2017-AUG-Central	Phase 3	J845	Wind	NRIS	120	120/52
DPP-2017-AUG-Central	Phase 3	J847	Solar	NRIS	90	90

DPP Cycle	Current Status	Project	Fuel	Request	Capacity (MW)	ERIS/NRIS (MW)
DPP-2017-AUG-Central	Phase 3	J848	Wind	NRIS	235	235
DPP-2017-AUG-Central	Phase 3	J853	Solar	NRIS	149	149
DPP-2017-AUG-Central	Phase 3	J856	Solar	NRIS	80	80
DPP-2017-AUG-Central	Phase 3	J883	Wind	NRIS	80	80
DPP-2017-AUG-Central	Phase 3	J884	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J903	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J912	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J913	Solar	NRIS	200	200/160
DPP-2017-AUG-Central	Phase 3	J949	Solar	NRIS	200	200/170

Exhibit A11: Interconnection Customer Milestones

See Appendix B.

Exhibit A12: Construction and Coordination Schedules

See Appendix B.

Exhibit A13: Permits, Licenses, Regulatory Approvals and Authorization

Permits required for the construction of the Flanigan switching station shall be the responsibility of the Interconnection Customer. This includes, but is not limited to, building permits, roadway access, wetlands permit, storm water run-off permit, Department of Transportation permits, and county zoning permits.

Permits required for the transmission line and remote terminal Network Upgrades shall be the responsibility of the Transmission Owner.

Exhibit A14: Interconnection and Operating Guidelines

Power Factor Range

FERC requires that an interconnecting generator must be able to operate over a power factor range of 0.95 lagging (supplying VARs to the system) to 0.95 leading (absorbing VARs from the system) at the high-voltage side of the Generating Facility step-up transformer.

Low Voltage Ride Through

All Solar PV generators must conform to the IEEE 1547 standard for Low Voltage Ride Through.

Dynamic Reactive Power Capability

The solar PV generators chosen for the J859 project are expected to provide dynamic reactive capability. The reactive capability of a solar PV generator is a function of the active power and terminal voltage.

Operating to a Specified Voltage or VAR Schedule

The J859 solar generation facility will be required to operate to a voltage schedule estimated to be 142 kV to 145 kV (1.029 to 1.05 PU) at the POI. The specific voltage schedule applicable to J859 will be provided at the time of startup by the Transmission Owner's Transmission Operations group.

NERC Reporting Standards

Complete and accurate modeling data is essential to the planning process. The following items are critical for the accuracy of data and are addressed by these requirements:

- field verifications of modeling parameters
- clear statement of data requirements
- protection system settings that impact system studies

In accordance with the periodicity established within the current NERC standards, the J859 solar generating facility will ensure that compliance with all applicable NERC Modelling Standards has been met. Applicability of these standards to the J859 solar generating facility will be determined based on the applicability criteria in the current version of the NERC standards. These standards are subject to change. For reference, at the time of signing, the current System Modelling Standards that may be applicable to the J859 solar generating facility include:

- MOD-025 Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability
- MOD-026 Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions
- MOD-027 Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions
- MOD-032 Data for Power System Modeling and Analysis
- PRC-024 Generator Frequency and Voltage Protective Relay Settings

Harmonic Requirements

The harmonic content of the voltage and current waveforms injected into the Transmission Owner's electric system by the Interconnection Customer's Generating Facility shall be limited to levels that are in accordance with the latest version of IEEE Standard 519 or its replacement, and which will not cause excessive distortion of Transmission Owner's waveform, telephone interference, carrier interference, or equipment operating problems for Transmission Owner or other users of the transmission system. Interconnection Customer will, if required by Transmission Owner and/or Good Utility Practice, reduce or eliminate, at Interconnection Customer's expense, the existence of any excessive harmonics caused by the operation of the Interconnection Customer's Generating Facility.

Operating Guidelines

None required

Appendix B To GIA

Milestones

1. Resolution of Conflicts:

The Parties acknowledge that Section 30.2 provides that conflicts between the Appendices and the body of the GIA are to be resolved in favor of the body of the GIA. The Parties acknowledge that the items set forth below are intended to explain the provisions of the GIA and to set forth the specific agreement of the Interconnection Customer and Transmission Owner relating to certain aspects of the agreement that are not resolved by the terms of the GIA.

2. Selected Option pursuant to Article 5.1:

Interconnection Customer selects the Standard Option as described in Article 5.1.1. Articles 5.1.2, 5.1.3, and 5.1.4 shall not apply to this GIA.

3. Milestones:

The description and date entries listed in the following tables are provided solely for the convenience of the Parties in establishing their applicable Milestones consistent with the provisions of this GIA and the GIP. The failure of Transmission Owner to meet any date on this milestone schedule shall not result in any liability on the part of Transmission Owner if such failure is not the result of the negligence or willful misconduct of Transmission Owner.

4. Commercial Operation Date:

The Interconnection Customer's desired Commercial Operation Date for the Generating Facility is December 31, 2024, based on a desired In-Service Date of September 1, 2024, which is achievable for a GIA executed in the Definitive Planning Phase 3 completion window.

Ameren (Transmission Owner) is not able to complete construction of the Transmission Owner's Interconnection Facilities and Network Upgrades by the dates originally specified in the Milestones table. As provided in Section 5.1.1 of the GIA, Ameren commits to take Reasonable Efforts to meet the earliest dates thereafter, which Ameren and the Interconnection Customer intended to agree-upon and memorialize in a revised Milestones Table in this GIA.

Interconnection Customer announced an additional delay of In-Service Date and Commercial Operation Date to June 1, 2024, and December 31, 2024, respectively. Transmission Owner will accordingly delay the in-service date of its facilities to be constructed under this GIA to June 1, 2024.

A. Interconnection Customer and Transmission Owner Milestones

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
1	Anticipated Effective Date of the GIA.	Estimated to be January 10, 2020. COMPLETED		
2	Transmission Owner to enter Network Upgrade information into Transmission Provider's MOD and MTEP databases.	Within ten (10) Business Days of the Effective Date of the GIA. COMPLETED		
3	Interconnection Customer to provide to Transmission Provider (a) evidence of continued Site Control after execution of this GIA (GIP 7.2.2) at Interconnection Customer's collection substation or (b) post \$250,000 non-refundable additional security. (GIP Article 11.3).	As may be agreed to by the Parties. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
4	Interconnection Customer to provide to Transmission Provider evidence of one or more of the following milestones being achieved: (a) execution of contract for fuel supply transport, (b) execution of contract for cooling water supply, (c) execution of contract for engineering procurement of major equipment or construction, (d) execution of contract for sale of electric energy or capacity; or (e) documentation of application for air, water or land use permits. (GIP 11.3).	Within one hundred eighty (180) Calendar Days of the Effective Date of the GIA. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
5	<p>Interconnection Customer will coordinate with the Transmission Provider to provide Transmission Owner an Initial Payment equal to 20% of the estimated cost of Transmission Owner Interconnection Facilities and Network Upgrades to be constructed under this GIA. The amount of the Initial Payment will be \$1,548,600. Interconnection Customer to make payment of \$461,770 and MISO to transfer milestone deposit balance of \$1,086,830 to cover payment and security obligation of this milestone. (GIA Article 11.5, Option 1)</p> <p>Ameren will allocate \$775,000 to the estimated cost of the Transmission Owner Interconnection Facilities and \$773,600 to security for the Network Upgrades.</p> <p>Security provided will be in the form of cash, letter of credit acceptable to Transmission Owner, or acceptable guarantee from an investment grade guarantor. (GIA Article 11.6).</p>	<p>Within the later of:</p> <p>(i) forty-five (45) Calendar Days of the execution of the GIA by all Parties, or</p> <p>(ii) forty-five (45) Calendar Days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer.</p> <p>Estimated to be February 12, 2020.</p> <p>COMPLETED</p>	\$ 775,000	\$ 773,600

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
6	Interconnection Customer to provide to Transmission Owner relaying design and specifications for the Interconnection Customer's Interconnection Facilities for review.	At least thirty (30) Calendar Days prior to Transmission Owner's start of engineering and design, Milestone 10. Estimated to be August 31, 2020. COMPLETED		
7	Transmission Owner to review and comment on Interconnection Customer's relaying design and specifications for Interconnection Customer's Interconnection Facilities.	Within twenty (20) Business Days of receipt of the Interconnection Customer's relaying design and specifications, Milestone 6. COMPLETED		
8	Transmission Owner to provide to Interconnection Customer a specification package for site preparation for the Flanigan switching station.	Provided in the J859 Interconnection Facilities Study report, Exhibit A16.		
9	Interconnection Customer to provide notification to Transmission Owner on desire to proceed with current Point of Interconnection or switch to alternative Ameren proposed Point of Interconnection.	August 31, 2020 COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
10	Interconnection Customer to provide to Transmission Owner additional security for the engineering and design, drafting, and project support (including associated overheads) of the Network Upgrades to be constructed by Transmission Owner under the GIA.	No later than five (5) Business Days prior to Transmission Owner's start of engineering and design, Milestone 12. Estimated to be no later than September 18, 2020, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		\$ 181,600
11	Interconnection Customer to provide to Transmission Owner a property survey showing physical benchmarks, a topographic survey, a grading package and civil design for the Flanigan switching station site for review, and access rights and a truck access route to the Flanigan switching station property for soil borings and ground resistance testing.	Prior to or concurrent with Transmission Owner's start of engineering and design, Milestone 12. Estimated to be no later than September 21, 2020, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
12	Transmission Owner to begin engineering and design of Transmission Owner's Interconnection Facilities and Network Upgrades to be constructed by Transmission Owner under this GIA.	<p>Upon receipt of the additional security, Milestone 9, or the Flanigan switching station site boundary and topographic surveys, grading package and civil design, and access rights and a truck access route, Milestone 11, whichever occurs later.</p> <p>Estimated to be no later than September 28, 2022, in order to meet the June 1, 2024 In Service Date, Milestone 30.</p>		
13	Transmission Owner to review and comment on Interconnection Customer's grading package and civil design for the Flanigan switching station.	<p>Within twenty (20) Business Days of receipt of Interconnection Customer's grading package and civil design, Milestone 11.</p> <p>COMPLETED</p>		
14	Interconnection Customer to provide to Transmission Owner initial design and specifications for Interconnection Customer's Interconnection Facilities for comment. (GIA Article 5.10.1).	At least one hundred eighty (180) Calendar Days prior to Initial Synchronization Date, Milestone 31.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
15	Transmission Owner to provide to Interconnection Customer comments on the initial design and specifications for Interconnection Customer's Interconnection Facilities. (GIA Article 5.10.1).	Within thirty (30) Calendar Days after submission of Interconnection Customer's initial design and specifications, Milestone 14.		
16	Interconnection Customer to provide to Transmission Owner additional security for long lead material and equipment procurement (including associated overheads) for the Network Upgrades constructed by Transmission Owner under this GIA.	No later than five (5) Business Days prior to Transmission Owner's start of procurement, Milestone 17. Estimated to be no later than February 19, 2021, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		\$ 3,107,200
17	Transmission Owner to begin procurement for long lead material and equipment for the facilities to be constructed by Transmission Owner under the GIA. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1.)	Upon receipt of the additional security from Interconnection Customer, Milestone 16. Estimated to be no later than February 26, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
18	<p>Interconnection Customer and Transmission Owner to each provide the other with all Certificates of Insurance required by the GIA. (GIA Article 18.4.9).</p>	<p>Initially thirty (30) Calendar Days prior to the start of construction of the facilities to be installed or modified under this GIA, Milestone 19 for Interconnection Customer and Milestone 22 for Transmission Owner, and thereafter within ninety (90) Calendar Days of end of fiscal year or insurance renewal date.</p>		
19	<p>Interconnection Customer to begin grading and site preparation for the Flanigan switching station.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Estimated to be June 1, 2023, in order to meet the site turnover date, Milestone 20.</p>		
20	<p>Interconnection Customer to furnish to Transmission Owner a fully graded site, the deed to the property, a usable entrance road, permits, and permit approvals for the construction of the Flanigan switching station.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Prior to or concurrent with Transmission Owner's start of construction, Milestone 22.</p> <p>Estimated to be no later than September 3, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
21	<p>Interconnection Customer to provide to Transmission Owner additional security for construction (including associated overheads) of the Network Upgrades to be constructed under this GIA.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>No later than five (5) Business Days prior to Transmission Owner's start of construction, Milestone 22.</p> <p>Estimated to be no later than September 3, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		\$ 2,905,600
22	<p>Transmission Owner to begin construction of the facilities to be constructed by Transmission Owner under the GIA.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Upon transfer of the site, Milestone 19, or receipt of Interconnection Customer's additional security, Milestone 20, whichever occurs later.</p> <p>Estimated to be no later than September 10, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		
23	<p>Interconnection Customer to install its 138 kV leadline connection to the Flanigan switching station arbor.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>No later than May 13, 2024, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
24	Interconnection Customer to provide to Transmission Owner final design and specifications for Interconnection Customer's Interconnection Facilities, protection design, SCADA, and communication equipment for comment. (GIA Article 5.10.1).	Not later than ninety (90) Calendar Days prior to the Initial Synchronization Date, Milestone 31.		
25	Transmission Owner to provide to Interconnection Customer comments on the final design and specifications for Interconnection Customer's Interconnection Facilities, protection scheme, SCADA, and communication equipment. (GIA Article 5.10.1).	Within thirty (30) Calendar Days of receipt of Interconnection Customer's final design and specifications, Milestone 24.		
26	Interconnection Customer to provide to Transmission Owner and Transmission Provider updated Generating Facility information. (GIA Article 24.3).	Not later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date, Milestone 32.		
27	Interconnection Customer to provide to Transmission Owner and Transmission Provider notification in writing of the Local Balancing Authority where Generating Facility is located. (GIA Article 9.2).	Not later than three (3) months prior to the Initial Synchronization Date, Milestone 31.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
28	Interconnection Customer to enter into an agreement with the applicable Local Balancing Authority for control area metering.	Not later than one hundred eighty (180) Calendar Days prior to Commercial Operation Date, Milestone 33. Not applicable if the Local Balancing Authority is Ameren Illinois.		
29	Transmission Owner to connect the Flanigan switching station to the existing Ipava-Meredosia East 138 kV transmission line. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1).	No later than May 2, 2024, in order to meet the June 1, 2024, In Service Date, Milestone 30.		
30	In Service Date Transmission Owner to complete Transmission Owner's Interconnection Facilities and commission the Flanigan switching station. Interconnection Customer to complete the J859 solar farm facilities to the extent required to take backfeed from the Flanigan switching station. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1).	Estimated to be June 1, 2024. Interconnection Customer requests June 1, 2024.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
31	Initial Synchronization Date. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the In Service Date, Milestone 30. Interconnection Customer requests September 1, 2024.		
32	Trial Operation Date. Delayed eighteen months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the Initial Synchronization Date, Milestone 31. Interconnection Customer requests September 1, 2024.		
33	Commercial Operation Date. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the Trial Operation Date, Milestone 32. Interconnection Customer requests December 31, 2022.*		
34	Interconnection Customer to provide Transmission Owner and Transmission Provider "as built" drawings, information, and documents regarding Interconnection Customer's Interconnection Facilities. (GIA Article 5.10.3).	Not later than one hundred twenty (120) Calendar Days following the Commercial Operation Date, Milestone 33.		
35	Transmission Owner to provide to Interconnection Customer and Transmission Provider "as built" drawings, information, and documents regarding Transmission Owner's Interconnection Facilities. (GIA Article 5.11).	Not later than one hundred twenty (120) Calendar Days following the Commercial Operation Date, Milestone 33.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
36	Transmission Owner to provide to Interconnection Customer final cost invoices. (GIA Article 12.2 et seq.).	Not later than six (6) months following the completion of all facilities to be constructed under the GIA, Milestone 30.		
37	In the event the Interconnection Customer makes any modifications to the design of the site layouts or interconnection facility routes after execution of this GIA, Interconnection Customer shall notify the Parties of such changes immediately upon identifying the need for such changes. After providing such notification, the Interconnection Customer shall provide to Transmission Provider evidence of continued Site Control for land sufficient to accommodate the changes in site layouts and/or interconnection facility routes (GIP 7.2.2).	90 Calendar Days after Interconnection Customer provides notice to Parties.		
38	Transmission Owner and Interconnection Customer to enter into a Facilities Service Agreement under which Transmission Owner will recover from Interconnection the revenue requirement for its investment in the Network Upgrades to be constructed under the GIA.	No later sixty (60) days prior to the estimated In Service Date of the Network Upgrades to be constructed under this GIA, Milestone 30.		
39	Transmission Owner to release Interconnection Customer's security for the estimated cost of the Network Upgrades to be constructed under the GIA.	Simultaneous with Transmission Owner's receipt of security from Interconnection Customer for the Network Upgrades under the Facilities Service Agreement.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
		TOTAL	\$ 775,000	\$ 6,968,000

* Modified from the original Commercial Operation Date of September 1, 2020, contained in the Interconnection Request. Interconnection Customer expects that it will need to utilize a portion of the three-year maximum extension allowed past the December 31, 2022, Commercial Operation Date listed in this GIA to achieve commercial operation. Interim milestones therefore have been calculated based on such later anticipated Commercial Operation Date of December 31, 2024.

The schedule:

- is estimated and is not guaranteed.
- may be impacted by poor weather.
- is based on five business days per week instead of seven business days used for the milestone calendar.
- assumes Transmission Provider and Transmission Owner conditions allow transmission outages as required and without delay.
- assumes the Interconnection Customer will provide the necessary information to the Transmission Owner in a timely manner such that it does not cause delays. This information includes details concerning the incoming line to the switching station pull off structure, details on the fiber optics and terminations, relay coordination, and other information that maybe necessary.
- assumes material lead times will be similar to recent purchases of similar equipment.
- assumes the Interconnection Customer and the Transmission Owner, as appropriate, have resolved permit, jurisdictional and regulatory issues prior to the scheduled start of construction.
- assumes the Interconnection Customer will furnish a completed and Transmission Owner approved access road to the interconnection switching station site prior to the start of Transmission Owner field activities.
- assumes the Interconnection Customer will furnish the interconnection switching station site fully prepared to Transmission Owner specifications in accordance with the milestones. Any delay in meeting this milestone will lead to a corresponding delay in meeting the In Service Date milestone.
- assumes the Interconnection Customer will provide to the Transmission Owner all necessary funding and information in accordance with the milestones so as to prevent delays in the schedule. This information may include details concerning the incoming line to the substation pull-off structure, details on the fiber optics and terminations, relay coordination, and other required information

B. Affected System Owner Milestones

Interconnection Customer is responsible to enter into Facilities Construction Agreement(s) and/or Multi-Party Facilities Construction Agreement(s) with Affected System Owner(s) for the following upgrades:

Ameren Transmission Company of Illinois (ATXI)

- ATXI will install a new 138 kV relay and control panel at the Ipava substation for the line to the Flanigan switching station.

C. Transmission Provider Milestones

No.	Description	Date
1	Transmission Provider to determine conditional limit for interconnection service.	Prior to Commercial Operation
2	Transmission Provider to provide Notice to the Parties when unconditional interconnection service is achieved. Unconditional Service requires completion of MTEP Contingent Facilities listed in Exhibit A10 and all Interconnection Studies.	Within 30 Calendar days of unconditional service being achieved.
3	Provide initial payment to Transmission Owner (GIA 11.5) in the amount of \$1,086,830 (Interconnection Customer to pay the remaining balance of \$461,770 to Transmission Owner).	Within 45 Calendar Days of the execution of the GIA. COMPLETED

Appendix C To GIA

Interconnection Details

1. The unique requirements of each generation interconnection will dictate the establishment of mutually agreeable Interconnection and/or Operating Guidelines that further define the requirements of this GIA. The Interconnection and/or Operating Guidelines applicable to this GIA consist of the following information. Additional detail may be provided through attachment to this Appendix C or through electronic means via the web address specified.

- (a) System Protection Facilities

The Transmission Owner along with the Interconnection Customer will construct a protective relaying scheme to protect the Transmission System from faults on the Interconnection Customer's Interconnection Facilities and faults on the Transmission Owner's Interconnection Facilities. The Interconnection Customer will be responsible for providing appropriate System Protection Facilities for the Interconnection Customer's Interconnection Facilities compatible with System Protection Facilities to be provided by the Transmission Owner at the Point of Interconnection. This scheme will be coordinated with and approved by Transmission Owner prior to implementation.

The 138 kV line position that will be connecting to the Interconnection Customer's leadline will have its own set of line protection relays. The line relay protection will consist of a SEL-411L and a SEL-311C both utilizing fiber optic communications for a line differential and permissive overreaching transfer trip scheme, respectively. Breaker failure relaying and reclosing will be accomplished with a SEL-351S.

The fiber optic cable required for the relaying will need to directly connect from the Transmission Owner's relays in the Flanigan Switching Station to identical Interconnection Customer owned relays at the Interconnection Customer's collector substation. The Interconnection Customer will supply and install the fiber optic cable.

One new remote terminal unit (RTU) will be installed to provide the Transmission Owner with supervisory control and remote indication of the Interconnection Customer's collector substation.

- (b) Communication requirements

- i. The Interconnection Customer is responsible to install all necessary equipment to transfer all required SCADA points to the Transmission Owner system control center(s) for equipment installed at the Interconnection Customer's Generating Facility substation upon specification of such communication protocol to the Interconnection Customer by the Transmission Owner. The Interconnection Customer will be responsible to install all necessary equipment to transfer all

required data for the required telemetry information to the Transmission Owner's system control center(s).

- ii. The Interconnection Customer is responsible for all operations and maintenance costs of all the required communications equipment located at the Interconnection Customer's Generating Facility substation required to transmit the required data to the Transmission Owner.

(c) Metering requirements

Interconnection revenue class metering equipment is installed for the Generation Facility by the Transmission Owner at the Transmission Owner's substation. Metering will be telemetered to the Interconnection Customer, Transmission Owner and Transmission Provider control centers via the SCADA system.

(d) Grounding requirements

Not used.

(e) Transmission Line and Substation Connection configurations

The Parties agree that the connections between the Interconnection Customer's Interconnection Facilities and Transmission Owner's Interconnection Facilities will be made in accordance with Transmission Owner's specifications.

(f) Unit Stability requirements

Not used;

(g) Equipment ratings

Transmission Owner will determine the individual equipment ratings for specific Transmission Owner's Interconnection Facilities. Interconnection Customer shall size the Interconnection Customer's Interconnection Facilities using Applicable Standards, Good Utility Practice and the information provided in the Transmission Owner design guide information, Interconnection Evaluation Study, or its equivalent, in order that the Interconnection Customer's Interconnection Facilities appropriately coordinates with the Transmission Owner's Interconnection Facilities.

(h) Short Circuit requirements

Transmission Owner will determine the required short circuit ratings for all Transmission Owner's Interconnection Facilities. Interconnection Customer agrees to provide appropriately sized or short circuit-rated Interconnection Customer's Interconnection Facilities comparable to those required by Transmission Owner using Applicable Standards, Good Utility Practice and the information provided in the

Transmission Owner design guide information document Interconnection Evaluation Study, or its equivalent.

(i) Synchronizing requirements

The Interconnection Customer's Interconnection Facilities will be backfed from the Transmission Owner's Interconnection Facilities utilizing the 138 kV breakers at the Interconnection Customer's Generating Facility substation. Transmission Owner may furnish transmission system bus potentials and bus voltage that may be used by the Interconnection Customer for synchronizing the Facility to Transmission Owner's transmission system. These potentials will be provided to the Interconnection Customer at the Transmission Owner's signal demarcation point.

(j) Generation and Operation Control requirements

The Interconnection Customer will install all necessary potential devices on its system to allow voltage control override to prevent high voltage conditions from occurring. Voltage control will override power factor in order to maintain safe and proper operation of the Transmission Owner's Transmission System as required by the standards of Transmission Owner, the Applicable Reliability Council and NERC, Good Utility Practice and documented in the Transmission Owner design guide information.

(k) Data provisions

Interconnection Customer will install all necessary equipment to monitor and send the required telemetry information to the Transmission Owner's and Transmission Provider's system control centers. The required data includes, but is not limited to: meter kW, kVAR, kWh, kVARh, breaker status. The Transmission Owner will provide detailed specifications to the Interconnection Customer for the appropriate communications protocol in the Transmission Owner design guide information.

(l) Energization inspection and testing requirements

Interconnection Customer will provide Transmission Owner with checkout records to document that Interconnection Customer has tested all protection systems and equipment for correct operation.

(m) Harmonic requirements

See Appendix A, Exhibit A14.

(n) Control equipment, if any

Appendix D To GIA

Security Arrangements Details

Infrastructure security of Transmission or Distribution System equipment and operations, as applicable, and control hardware and software is essential to ensure day-to-day Transmission and Distribution System reliability and operational security. The Commission will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission or Distribution System, as applicable, to comply with the recommendations provided by Governmental Authorities regarding Critical Energy Infrastructure Information (“CEII”) as that term is defined in 18 C.F.R. Section 388.113(c) and 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]

Midcontinent Independent System Operator, Inc.
Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

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 Calendar Day]**.

Thank you.

[Signature]

[Interconnection Customer Representative]

cc: Transmission Owner

Appendix F To GIA

Addresses for Delivery of Notices and Billings

Notices:

Transmission Provider:

MISO

Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

Transmission Owner:

Senior Vice President – Transmission
Ameren Services Company
1901 Chouteau Avenue, MC 04
PO Box 66149
St. Louis, MO 63166-6149

Interconnection Customer:

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

And

Director of Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa, KS 66219
Phone: 816-604-8458
Email: ccraven@savionenergy.com

Billings and Payments:

Transmission Provider:

MISO

Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

Transmission Owner:

Senior Vice President – Transmission
Ameren Services Company
1901 Chouteau Avenue, MC 04
PO Box 66149
St. Louis, MO 63166-6149

Interconnection Customer:

Accounts Payable
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 816-213-3561
Email: malexander@savionenergy.com

And

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission Provider:

Phone: (317) 249-5700
Email: misotap@misoenergy.org or
MISOTransmissionAccessPlanning@misoenergy.org

Transmission Owner:

Voice telephone – (314) 554-2981
Facsimile telephone – (314) 554-3066
Email address – SSchukar@ameren.com

Interconnection Customer:

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

And

Director of Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa, KS 66219
Phone: 816-604-8458
Email: ccraven@savionenergy.com

Appendix G To GIA

Interconnection Requirements for a Wind Generating Plant

Not Applicable to This GIA

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

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4-9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (*e.g.* Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

The following reactive power requirements apply only to a newly interconnecting wind generating plant that has completed a System Impact Study as of the effective date of the Final Rule establishing the reactive power requirements for non-synchronous generators in section 9.6.1 of this GIA (Order No. 827). A wind generating plant to which this provision applies shall maintain a factor within the range of 0.95 leading to 0.95 lagging, unless Transmission Provider has established different requirements that apply to all Generating Facilities in the Local Balancing Authority on a comparable basis, 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 Transmission Provider, or a combination of the two. 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 Transmission Provider to protect system reliability. Transmission Provider and 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

Interconnection Requirements for Provisional GIA

Not Applicable to This GIA

Provisional Agreement

This GIA is being provided in accordance with Section 11.5 of the Transmission Provider's GIP, which provides among other things, that an Interconnection Customer may request that Transmission Provider provide Interconnection Customer with a provisional GIA that limits the transfer of energy by Interconnection Customer commensurate with that allowed for Energy Resource Interconnection Service. Interconnection Customer requested Transmission Provider to provide a provisional GIA for limited operation at the discretion of Transmission Provider based upon the results of available studies (by Interconnection Customer and by Transmission Provider).

A Provisional Interconnection Study, the results of which are posted on the confidential portion of the Transmission Provider's internet website, was performed by Transmission Provider in order to confirm the facilities that are required for provisional Interconnection Service and to require them to be in place prior to commencement of service under the GIA.

Interconnection Customer represents that the Interconnection Customer facilities (including Network Upgrades, Interconnection Facilities, Distribution Upgrades, System Protection Upgrades and/or Generator Upgrades) that are necessary to commence provisional Interconnection Service and meet the requirements of NERC, or any applicable regional entity for the interconnection of a new generator are in place prior to the commencement of generation from the Generating Facility and will remain in place during the term of the service. The requisite Interconnection Studies were performed for the Generating Facility. Interconnection Customer shall meet any additional requirements (including reactive power requirements) pursuant to the results of applicable future Interconnection System Impact Studies. Until such time as the applicable Interconnection Studies and any identified facilities are completed, the output of the Generating Facility will operate within the output limit prescribed in a future, if applicable, operating guide.

The maximum permissible output of the Generating Facility under Appendix A will be updated by Transmission Provider on a quarterly basis, determined in accordance with Section 11.5 of the GIP, by finding the transfer limit of energy commensurate with the analysis for Energy Resource Interconnection Service ("ERIS"). This study shall be performed assuming the system topology represented by the base cases used to calculate Available Flowgate Capability, as described in Attachment C of the Tariff, with dispatch and optimization algorithms posted on the MISO internet site and operation above those limits will be deemed as unauthorized use of the Transmission System and subject to provisions in the Tariff surrounding that use.

Use of interim operating guide

Implementation of interim operating guide, if applicable, will constitute an interim solution that will permit Interconnection Customer to operate the Generating Facility under conditional Interconnection Service until planned Network Upgrades are constructed. Any interim operating guide will be subject to the approval of Transmission Owner and Transmission Provider. Minimum requirements for an interim operating guide are as indicated below.

- * Transmission Operator will have control of breaker(s) dedicated to the Generating Facility and will be able to trip the Interconnection Customer's Generating Facility
- * Protection schemes must be tested and operative
- * Interconnection Customer will provide continuous communication capability with the Generator Operator
- * Interconnection Customer and the owner of the Existing Generating Facility will enter into an operating agreement or similar agreement which designates, among other things, the responsibilities and authorities of each of the parties and shall be subject to the acceptance of Transmission Provider and Transmission Owner.
- * A termination date consistent with completion of construction of Network Upgrades will be included as part of all operating guides accepted by Transmission Owner and Transmission Provider.

Interconnection Customer assumes all risks and liabilities with respect to changes, which may impact the Generator Interconnection Agreement including, but not limited to, change in output limits and responsibilities for future Network Upgrade and cost responsibilities that have not yet been identified on the direct connect Transmission System as well as all affected Transmission, Distribution or Generation System(s) including non-Transmission Provider Systems. Such upgrades will be determined pursuant to the Tariff and Policies in effect at the time of the Interconnection Studies.

Appendix I To GIA

Requirements Applicable to Surplus Interconnection Service

Not Applicable to This GIA

Where this GIA provides for Surplus Interconnection Service, Interconnection Customer acknowledges, agrees to, and will be required to operate under the following conditions:

- 1) The combined Real-Time Offers, including Energy and Operating Reserves, of the Generating Facility and the Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement must be less than or equal to Interconnection Service limit (MW, MVAR, MVA output) provided in Exhibit I-1 (Monitoring and Consent Agreement) (hereinafter, "Interconnection Service limit"). In the event that the sum of the simultaneous energy output of the Surplus Interconnection Service Generating Facility and the Existing Generating Facility exceeds such Interconnection Service limit, MISO reserves the right to curtail and/or disconnect the Generating Facility immediately.

In the event that the sum of the emergency and/or economic maximum offer limits of the Generating Facility and the Existing Generating Facility exceeds the Interconnection Service limit, MISO reserves the right to curtail and/or disconnect the Generating Facility immediately.

- 2) The total MW, MVAR, MVA output at the Point of Interconnection resulting from the combined output of the Generating Facility with Surplus Interconnection Service and the Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement shall not at any time exceed the Interconnection Service limit.
- 3) The Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement is not relieved of any applicable requirements under the RAR of the Tariff.
- 4) The Interconnection Customer shall submit to the Transmission Provider a report by the seventh Calendar Day of each month showing the prior month's output, by 15 minute increment, the combined real-time offers and cleared energy injection. The Existing Generating Facility and the Interconnection Customer shall cooperate consistent with other provisions in the Tariff to the extent necessary to ensure accuracy of the report. Transmission Provider shall provide a template for this report.

Exhibit I-1 (Completed Monitoring and Consent Agreement - Appendix 11 of the GIP)

Exhibit I-2 (Completed Energy Displacement Agreement - Appendix 12 of the GIP)

TAB B
PUBLIC

GENERATOR INTERCONNECTION AGREEMENT (GIA)

THIS AMENDED AND RESTATED GENERATOR INTERCONNECTION AGREEMENT (“GIA”) is made and entered into this 22nd day of July, 2022, by and among **Cass County Solar Project, LLC**, a limited liability company organized and existing under the laws of the State of Delaware (“Interconnection Customer” with a Generating Facility), **Ameren Services Company** as agent for **Ameren Illinois Company** d/b/a **Ameren Illinois**, a corporation organized and existing under the laws of the State of Illinois (“Transmission Owner”), and the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”). Interconnection Customer, Transmission Owner and Transmission Provider each may be referred to as a “Party,” or collectively as the “Parties.” This GIA replaces and supersedes the Generator Interconnection Agreement executed on August 4, 2021 by and between the Parties filed under FERC Docket No. ER21-2709-000.

RECITALS

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing Transmission Service and Interconnection Service on the transmission facilities under its control; and

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

WHEREAS, Transmission Owner owns or operates the Transmission System, whose operations are subject to the functional control of Transmission Provider, to which Interconnection Customer desires to connect the Generating Facility, and may therefore be required to construct certain Interconnection Facilities and Network Upgrades, as set forth in this GIA; and

WHEREAS, Interconnection Customer, Transmission Owner and Transmission Provider have agreed to enter into this GIA, and where applicable subject to Appendix H for a provisional GIA, for the purpose of interconnecting the Generating Facility with the Transmission System; and

WHEREAS, Interconnection Customer, Transmission Owner, and Transmission Provider agreed to modify certain Interconnection Customer and Transmission Owner milestones to bring the provision of security and reimbursement for Network Upgrades into compliance with the Transmission Provider's *pro forma* Facilities Service Agreement (Appendix 14 of Attachment X of the Tariff); and

WHEREAS, Interconnection Customer had requested a one-year delay of the Generating Facility's In-Service, Initial Synchronization, and Commercial Operation Dates, and Transmission Owner agreed to Interconnection Customer's request to delay the in-service date of its facilities to be constructed under this GIA accordingly, the delay having no effect on any other higher or lower queued project in the MISO queues or any other project in Transmission

Owner's construction program; and

WHEREAS, Interconnection Customer has determined that the Transmission Owner's Interconnection Facilities and Network Upgrades will not be required until after the specified In-Service Date and this GIA is now being amended to update Interconnection Customer and Transmission Owner milestones to facilitate the revised In-Service Date;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1. DEFINITIONS

When used in this GIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used. Those capitalized terms used in this GIA that are not otherwise defined in this GIA have the meaning set forth in the Tariff.

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 transmission or distribution system or the electric system associated with an Existing Generating Facility or of a higher queued Generating Facility, which is an electric system other than the Transmission Owner's Transmission System that is affected by the Interconnection Request. An Affected System may or may not be subject to FERC jurisdiction.

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 having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.

Applicable Reliability Council shall mean the Regional Entity of NERC applicable to the Local Balancing Authority of the Transmission System to which the Generating Facility is directly interconnected.

Applicable Reliability Standards shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under section 215 of the Federal Power Act, as applicable.

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

Breach shall mean the failure of a Party to perform or observe any material term or

condition of this GIA.

Breaching Party shall mean a Party that is in Breach of this GIA.

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 (COD) 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 this GIA.

Common Use Upgrade (CUU) shall mean an Interconnection Facility, Network Upgrade, System Protection Facility, or any other classified addition, alteration, or improvement on the Transmission System or the transmission system of an Affected System, not classified under Attachment FF as a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project, that is needed for the interconnection of multiple Interconnection Customers' Generating Facilities and which is the shared responsibility of such Interconnection Customers.

Confidential Information shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 22, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this GIA.

Definitive Planning Phase Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, in the Definitive Planning Phase. The Definitive Planning Phase Queue Position is established based upon the date Interconnection Customer satisfies all of the requirements of Section 7.2 to enter the Definitive Planning Phase.

Demonstrated Capability shall mean the continuous net real power output that the Generating Facility is required to demonstrate in compliance with Applicable Reliability Standards.

Dispute Resolution shall mean the procedure for resolution of a dispute between or among 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, or the Distribution System of another party that is interconnected with the Transmission Owner's Transmission System, if any, connected to the Transmission System, over which facilities Transmission Service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce and which are used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among Local Balancing Authorities and other entities owning distribution facilities interconnected to the Transmission System.

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 delivery service necessary to affect 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 this GIA becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the reasonable judgment of the Party making the claim is imminently likely to endanger, or is contributing to the endangerment of, life, property, or public health and safety; or (2) that, in the case of either Transmission Provider or 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 the Transmission System, Transmission Owner's Interconnection Facilities or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and blackstart shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by this GIA to possess blackstart capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one of the enumerated conditions or situations identified in this definition also exists.

Energy Displacement Agreement shall mean an agreement between an Interconnection Customer with an Existing Generating Facility on the Transmission Provider's Transmission System and an Interconnection Customer with a proposed Generating Facility seeking to interconnect with Surplus Interconnection Service. The Energy Displacement Agreement specifies the term of operation, the Generating Facility Interconnection Service limit, and the mode of operation for energy production (common or singular operation).

Energy Resource Interconnection Service (ER Interconnection Service) shall mean

an Interconnection Service that allows Interconnection Customer to connect its Generating Facility to the Transmission System or Distribution System, as applicable, to be eligible to deliver the Generating Facility's electric output using the existing firm or non-firm capacity of the Transmission System on an as available basis. Energy Resource Interconnection Service does not convey transmission service.

Engineering & Procurement (E&P) Agreement shall mean an agreement that authorizes 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.

Federal Holiday shall mean a Federal Reserve Bank holiday for a Party that has its principal place of business in the United States and a Canadian Federal or Provincial banking holiday for a Party that has its principal place of business located in Canada.

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, also known as Commission, or its successor.

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

Generating Facility shall mean Interconnection Customer's device(s) 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. 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 its equipment at the Existing Generating Facility.

Generating Facility Replacement shall mean replacement of one or more generating

units and/or storage devices at the Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as the generating units and/or storage devices that is/are being decommissioned and electrically disconnected.

Generator Interconnection Agreement (GIA) shall mean the form of interconnection agreement, set forth herein.

Generator Interconnection Procedures (GIP) shall mean the interconnection procedures set forth in Attachment X of the Tariff.

Generator Upgrades shall mean the additions, modifications, and upgrades to the electric system of an Existing Generating Facility or of a higher queued Generating Facility at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the Transmission Service necessary to affect Interconnection Customer's wholesale sale of electricity in interstate commerce.

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.

Group Study(ies) shall mean the process whereby more than one Interconnection Request is studied together, instead of serially, for the purpose of conducting one or more of the required Studies.

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.

HVDC Facilities shall mean the high voltage direct current transmission facilities,

including associated alternating current facilities, if any, that are subject to Section 27A of the Tariff and that are specifically identified in (i) any Agency Agreement pertaining to such facilities between Transmission Provider and Transmission Owner that owns or operates such facilities, or (ii) in any other arrangement that permits or will permit Transmission Provider to provide HVDC Service over such facilities as set forth in Section 27A of the Tariff.

HVDC Service shall mean Firm and Non-Firm Point-To-Point Transmission Service provided by Transmission Provider on HVDC Facilities pursuant to Section 27A of the Tariff.

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

In-Service Date (ISD) shall mean the date upon which Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Owner's Interconnection Facilities to obtain backfeed power.

Interconnection Customer shall mean any entity, including Transmission Provider, 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 (ICIF) shall mean all facilities and equipment, as identified in Appendix A of this GIA, 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 or Distribution System, as applicable. 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 shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Facilities Study shall mean a study conducted by Transmission Provider, or its agent, for Interconnection Customer to determine a list of facilities (including Transmission Owner's Interconnection Facilities, System Protection Facilities, and if such upgrades have been determined, Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and upgrades on Affected Systems, as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission System.

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

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

Interconnection Service shall mean the service provided by Transmission Provider associated with interconnecting the 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 this GIA and, if applicable, the Tariff.

Interconnection Study (or Study) shall mean any of the studies described in the Generator Interconnection Procedures.

Interconnection Study Agreement shall mean the form of agreement contained in Attachment B to Appendix 1 of the Generator Interconnection procedures for conducting all studies required by the Generator Interconnection Procedures.

Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission 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 to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Generator Interconnection Procedures.

IRS shall mean the Internal Revenue Service.

Local Balancing Authority shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) provided in the Balancing Authority Agreement.

Loss shall mean 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 performance, or non-performance of its obligations under this GIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified party.

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.

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

Monitoring and Consent Agreement shall mean an agreement that defines the terms and conditions applicable to a Generating Facility acquiring Surplus Interconnection Service. The Monitoring and Consent Agreement will list the roles and responsibilities of an Interconnection Customer seeking to interconnect with Surplus Interconnection Service and Transmission Owner to maintain the total output of the Generating Facility inside the parameters delineated in the GIA.

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

Network Customer shall have that meaning as provided in the Tariff.

Network Resource shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. Network Resource Interconnection Service does not convey transmission service. Network Resource Interconnection Service shall include any network resource interconnection service established under an agreement with, or the tariff of, a Transmission Owner prior to integration into MISO, that is determined to be deliverable through the integration deliverability study process.

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 or Distribution System, as applicable, to accommodate the interconnection of the Generating Facility to the Transmission System. Network Upgrade shall not include any HVDC Facility Upgrades.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with this GIA or its performance.

Operating Horizon Study shall mean an Interconnection System Impact Study that includes in service transmission and generation for an identified timeframe to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities

and/or Transmission System changes required for the requested Interconnection Service.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Generator Interconnection Procedures for conducting the Optional Interconnection Study.

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

Planning Horizon Study shall mean an Interconnection System Impact Study that includes a future year study to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

Point of Change of Ownership (PCO) 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 (POI) shall mean the point, as set forth in Appendix A of the GIA, where the Interconnection Facilities connect to the Transmission System.

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

Provisional Interconnection Study shall mean an engineering study, performed at Interconnection Customer's request, as a condition to entering into a provisional GIA, that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, any Affected System. The study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications.

Provisional Generator Interconnection Agreement shall mean the interconnection agreement for Provisional Interconnection Service established between the Transmission Provider and/or the Transmission Owner and the Interconnection Customer as set forth in Section 7.9 of this Attachment X. This agreement shall take the form of the Generator Interconnection Agreement modified for provisional purposes.

Queue Position shall mean the order of a valid Interconnection Request, relative to all

other pending valid Interconnection Requests. The Queue Position is established based upon the date and time of receipt of the valid Interconnection Request by Transmission Provider.

Reasonable Efforts shall have that meaning as provided in the Tariff.

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 3.7 of this Attachment X.

Scoping Meeting shall mean the meeting between representatives of Interconnection Customer, Transmission Owner, Affected System Operator(s) 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 or Common Use Upgrade that is funded by an Interconnection Customer(s) and also benefits other Interconnection Customer(s) that are later identified as beneficiaries.

Site Control shall mean a documented right for one or more parcels of land for the purpose of constructing a Generating Facility, Interconnection Customer's Interconnection Facilities, and, if applicable (*i.e.*, when the Interconnection Customer is providing the site for such facilities), the Transmission Owner's Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. Such documented right shall be one of the following: (1) ownership of a site; (2) a leasehold interest in a site; or (3) an option to purchase or acquire a leasehold interest in a site; or (4) any other contractual or legal right to possess or occupy a site.

Small Generating Facility shall mean a Generating Facility that has an aggregate net Generating Facility Capacity of no more than five MW and meets the requirements of Section 14 and Appendix 3 of the GIP.

Special Protection System (SPS) shall mean an automatic protection system or remedial action scheme designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components, to maintain system reliability. Such action may include changes in demand (MW and MVar), energy (MWh and MVarh), or system configuration to maintain system stability, acceptable voltage, or power flows. An SPS does not include (a) underfrequency or undervoltage load shedding, (b) fault conditions that must be isolated, (c) out-of-step relaying not designed as an integral part of an SPS, or (d) Transmission Control Devices.

Stand Alone Network Upgrades shall mean Network Upgrades, that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Interconnection Customer must agree as to what constitutes Stand

Alone Network Upgrades and identify them in Appendix A to this GIA. If the Transmission Provider or Transmission Owner and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the Transmission Provider or Transmission Owner that disagrees with the Interconnection Customer must provide the Interconnection Customer a written technical explanation outlining why the Transmission Provider or Transmission Owner does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

Surplus Interconnection Service shall mean any Interconnection Service that is derived from the unneeded portion of Interconnection Service established in a GIA or in agreement with, or under the tariff of, a Transmission Owner prior to integration into MISO, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other delivery systems or other generating systems 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 the Commission, and as amended or supplemented from time to time, or any successor tariff.

Transmission Control Devices shall mean a generally accepted transmission device that is planned and designed to provide dynamic control of electric system quantities, and are usually employed as solutions to specific system performance issues. Examples of such devices include fast valving, high response exciters, high voltage DC links, active or real power flow control and reactive compensation devices using power electronics (*e.g.*, unified power flow controllers), static var compensators, thyristor controlled series capacitors, braking resistors, and in some cases mechanically-switched capacitors and reactors. In general, such systems are not considered to be Special Protection Systems.

Transmission Owner shall mean that Transmission Owner as defined in the Tariff, which includes an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at which Interconnection Customer proposes to interconnect or otherwise integrate the operation of the Generating Facility. Transmission Owner should be read to include any Independent Transmission Company that manages the transmission facilities of Transmission Owner and shall include, as applicable, the owner and/or operator of distribution facilities interconnected to the Transmission System, over which facilities transmission service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer requests Interconnection Service and to which Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce.

Transmission Provider shall mean the Midcontinent Independent System Operator, Inc. (“MISO”), the Regional Transmission Organization that controls or operates the transmission facilities of its transmission-owning members used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff.

Transmission Owner’s Interconnection Facilities (TOIF) shall mean all facilities and equipment owned by Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this GIA, 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, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Transmission System shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service (including HVDC Service) or Wholesale Distribution 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.

Wholesale Distribution Service shall have that meaning as provided in the Tariff. Wherever the term “transmission delivery service” is used, Wholesale Distribution Service shall also be implied.

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 30 years from the Effective Date and shall be automatically renewed for each successive one-year period thereafter on the anniversary of the Effective Date.
- 2.3 Termination Procedures.** This GIA may be terminated as follows:
- 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. This GIA shall be terminated by Transmission Provider if the Generating Facility or a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Section 4.4.4 of Attachment X, including any extension provided thereunder, or has ceased Commercial Operation for three (3) consecutive years, beginning with the last date of Commercial Operation for the Generating Facility, after giving Interconnection Customer ninety (90) Calendar Days advance written notice. Where only a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Section 4.4.4 of Attachment X, including any extension provided thereunder, Transmission Provider shall only terminate that portion of the GIA. Notwithstanding the foregoing, in the limited circumstance that the Interconnection Request is served by a contingent Network Upgrade with an in-service date that is farther out than the Commercial Operation Date permitted under Section 4.4.4 of Attachment X, Transmission Provider shall only terminate this GIA for failure to achieve Commercial Operation by that later in-service date of the contingent Network Upgrade. The Generating Facility will not be deemed to have ceased Commercial Operation for purposes of this Article 2.3.1 if Interconnection Customer can document that it has taken other significant steps to maintain or restore operational readiness of the Generating Facility for the purpose of returning the Generating Facility to Commercial Operation as soon as possible.
- 2.3.1.1 Surplus Interconnection Service.** Where this GIA provides for Surplus Interconnection Service and the Energy Displacement Agreement or the Monitoring and Consent Agreement required for Surplus Interconnection Service are no longer in effect, Interconnection Customer shall immediately cease Commercial Operation of the Generating Facility and this GIA shall be deemed terminated. In the event that the Existing Generating Facility retires and/or permanently ceases commercial operation, the Surplus Interconnection Service provided under this GIA

shall terminate except as provided in Section 3.3.1.3 of the GIP.

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

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

2.4 Termination Costs. If a Party elects to terminate this GIA pursuant to Article 2.3 above, each Party shall pay all costs incurred for which that Party is responsible (including any cancellation costs relating to orders or contracts for Interconnection Facilities, applicable upgrades, and related equipment) or charges assessed by the other Parties, as of the date of the other Parties' receipt of such notice of termination, under this GIA. In the event of termination by a Party, the Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this GIA, unless otherwise ordered or approved by FERC:

2.4.1 With respect to any portion of the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades, Generator Upgrades, and if so determined and made a part of this GIA, upgrades on Affected Systems, that have not yet been constructed or installed, Transmission Owner shall to the extent possible and to the extent of Interconnection Customer's written notice under Article 2.3.1, 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 upgrades or related equipment for which Transmission Owner has incurred expenses and has not been reimbursed by Interconnection Customer.

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. If Transmission Owner does not so elect, then Interconnection Customer shall be responsible for such costs.

- 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, reconfiguration or other disposition or retirement of such materials, equipment, or facilities, and such other expenses actually incurred by Transmission Owner necessary to return the Transmission, Distribution or Generator System, as applicable, to safe and reliable operation.
- 2.5 Disconnection.** Upon termination of this GIA, the Parties will take all appropriate steps to disconnect the Generating Facility from the Transmission or Distribution System, as applicable. 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 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 the other 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. A Party may request that any information so provided be subject to the confidentiality provisions of Article 22. If that Party has executed this GIA, or any amendment thereto, the Party 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:

Check: _____ NZ or _____ ER and/or X NR (See Appendix A for details)

4.1.1 Energy Resource Interconnection Service (ER Interconnection Service).

4.1.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission or Distribution System, as applicable, and be eligible to deliver the Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. To the extent Interconnection Customer wants to receive ER Interconnection Service, Transmission Owner shall construct facilities consistent with the studies identified in Appendix A.

An Interconnection Customer seeking ER Interconnection Service for new or added capacity at a Generating Facility may be granted conditional ER Interconnection Service status to the extent there is such capacity available on the Transmission System to accommodate the Interconnection Customer's Generating Facility. At the request of Interconnection Customer, conditional ER Interconnection Service status may be granted subject to the system being able to accommodate the interconnection without upgrades, until such time as a higher queued project(s) with a later service date affecting the same common elements is placed into service. The conditional ER Interconnection Service shall be terminated in the event Interconnection Customer fails to fund the necessary studies and the Network Upgrades necessary to grant the Interconnection Customer's ER Interconnection Service upon the completion of higher queued projects involving the same common elements.

4.1.1.2 Transmission Delivery Service Implications. Under ER 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 up to the amount of MW identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for ER Interconnection Service have been constructed. After that date FERC makes effective MISO's Energy Market Tariff filed in Docket No. ER04-691-000, Interconnection Customer may place a bid to sell into the market up to the maximum identified Generating Facility output, subject to any conditions specified in the Interconnection Service approval, and the Generating Facility will be dispatched to the extent the Interconnection Customer's bid clears. In all other instances, no transmission or other delivery service from the Generating Facility is assured, but Interconnection Customer may obtain Point-To-Point Transmission Service, Network Integration Transmission Service or be used for secondary network transmission service, pursuant to the Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Point of Interconnection or to improve its ability to do so, transmission delivery

service must be obtained pursuant to the provisions of the Tariff. 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 or Distribution System as applicable, 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 or Distribution Upgrades.

4.1.2 Network Resource Interconnection Service (NR Interconnection Service).

4.1.2.1 The Product. Transmission Provider must conduct the necessary studies and Transmission Owner shall construct the facilities identified in Appendix A of this GIA, subject to the approval of Governmental Authorities, needed to integrate the Generating Facility in the same manner as for any Generating Facility being designated as a Network Resource.

4.1.2.2 Transmission Delivery Service Implications. NR Interconnection Service allows the 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 output, on the same basis as existing Network Resources that are interconnected to the Transmission or Distribution System, as applicable, and to be studied as a Network Resource on the assumption that such a designation will occur. Although NR Interconnection Service does not convey a reservation of Transmission Service, any Network Customer can utilize Network Integration Transmission Service under the Tariff to obtain delivery of energy from the Generating Facility in the same manner as it accesses Network Resources. A Generating Facility receiving NR Interconnection Service may also be used to provide Ancillary Services after technical studies and/or periodic analyses are performed with respect to the 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 the Generating Facility has not been designated as a Network Resource by any Network Customer, 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.

NR 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 or distribution constraints on the Transmission or Distribution System, as applicable, the Generating Facility shall be subject to the applicable congestion management procedures in the 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 the Generating Facility be designated as a Network Resource by a Network Customer 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 the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining NR 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 such Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the Generating Facility. To the extent Interconnection Customer enters into an arrangement for long term Transmission Service for deliveries from the Generating Facility to customers other than the studied Network Customers, or for any Point-To-Point Transmission Service, such request may require additional studies and upgrades in order for Transmission Provider to grant such request. 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.

4.1.2.3 Conditional NR Interconnection Service. An Interconnection Customer seeking NR Interconnection Service for new or added capacity at a Generating Facility may be granted conditional NR Interconnection Service status to the extent there is such capacity available on the Transmission System to accommodate the Interconnection Customer's Generating Facility. At the request of Interconnection Customer, conditional NR Interconnection Service status may be granted subject to

the system being able to accommodate the interconnection without upgrades, until such time as higher queued project(s) with a later service date affecting the same common elements is placed into service. The conditional NR Interconnection Service status may be converted to ER Interconnection Service if either of the following occurs:

- 1) Interconnection Customer fails to fund necessary studies and Network Upgrades required to allow the Interconnection Customer's Generating Facility to receive NR Interconnection Service upon the completion of higher queued projects involving the same common elements; or
- 2) The higher queued project(s) or planned and required Network Upgrades are placed in service and the Network Upgrades required to provide NR Interconnection Service status to the Interconnection Customer's Generating Facility are not in service.

In the event Interconnection Customer fails to fund the necessary studies and Network Upgrades for NR Interconnection Service, the Interconnection Customer's conditional NR Interconnection Service status shall be converted to ER Interconnection Service status unless Interconnection Customer makes a new Interconnection Request. Such new Interconnection Request shall be evaluated in accordance with the GIP and its new queue position.

Some or all of the conditional NR Interconnection Service status may be temporarily revoked if the Network Upgrades are not in service when the higher queued project(s) are placed in service. The availability of conditional NR Interconnection Service status will be determined by Transmission Provider's studies. Upon funding and completion of the Network Upgrades required to establish the Generating Facility's NR Interconnection Service status, the Generating Facility will be granted NR Interconnection Service status.

The Parties agree that the portion of the Generating Facility classified as NR Interconnection Service is the first portion of the output of the combined output of all the units at the Generating Facility except in circumstances where Interconnection Customer otherwise elects this GIA, as amended, to allocate that portion to the output of specific unit(s) at the Generating Facility, the total of which will not exceed the output eligible for NR Interconnection Service as shown by the additional studies. To the extent Interconnection Customer desires to obtain NR Interconnection Service for any portion of the Generating Facility in addition to that supported by such additional studies, Interconnection Customer will be required to request such additional NR Interconnection Service through a separate Interconnection Request in accordance with the GIP.

4.1.3 Surplus Interconnection Service.

4.1.3.1 The Product. Surplus Interconnection Service is restricted Interconnection Service that allows an Interconnection Customer to increase the gross generating capability at the same Point of Interconnection of an Existing Generating Facility without increasing the total amount of Interconnection Service at the Point of Interconnection.

4.1.3.2 Transmission Delivery Service Implications. Surplus Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.

- 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. To the extent a Party is required or prevented or limited in taking any action by such regulations and standards, or if the obligations of any Party may become limited by a change in Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice after the execution of this GIA, that Party shall not be deemed to be in Breach of this GIA for its compliance therewith. The Party so limited shall notify the other Parties whereupon Transmission Provider shall amend this GIA in concurrence with the other Parties and submit the amendment to the Commission for approval.
- 4.4 No Transmission Delivery Service.** The execution of this GIA does not constitute a request for, or the provision of, any transmission delivery service under the 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 13.4.1. Interconnection Customer shall be paid for such services in accordance with Article 11.7.

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

- 5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall select: 1) the In-Service Date, Initial Synchronization Date, and Commercial Operation Date based on a reasonable construction schedule that will allow sufficient time for design, construction, equipment procurement, and permit acquisition of Transmission System equipment or right-of-way; and 2) either the Standard Option or Alternate Option set forth below and such dates and selected option shall be set forth in Appendix B. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 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 the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades, and Generator Upgrades using Reasonable Efforts to complete the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades and Generator Upgrades by the dates set forth in Appendix B, Milestones, subject to the receipt of all approvals required from Governmental Authorities and the receipt of all land rights necessary to commence construction of such facilities, and such other permits or authorizations as may be required. Transmission Provider or 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, Applicable Laws and Regulations and Good Utility Practice. In the event Transmission Owner reasonably expects that it will not be able to complete the Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities, Distribution Upgrades and Generator Upgrades by the specified dates, Transmission Owner shall promptly provide written notice to Interconnection Customer and Transmission Provider and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

5.1.2 Alternate Option. If the dates designated by Interconnection Customer are acceptable to Transmission Provider and Transmission Owner, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and Transmission Owner shall assume responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities by the designated dates.

If Transmission Owner subsequently fails to complete the Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each Calendar Day that Transmission Provider refuses to grant clearances to install equipment.

Transmission Owner and Interconnection Customer may adopt an incentive payment schedule that is mutually agreeable to encourage Transmission Owner to meet specified accelerated dates. Such payment by Interconnection Customer is not subject to refund.

5.1.3 Option to Build. Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades by the dates originally designated by Interconnection Customer under Article 5.1.2. The Parties must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

5.1.4 Negotiated Option. If the dates designated by Interconnection Customer pursuant to Article 5.1 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 5.1.3). 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 to exercise the Option to Build.

Transmission Owner and Interconnection Customer may adopt an incentive payment schedule that is mutually agreeable to encourage Transmission Owner to meet specified accelerated dates. Such payment by Interconnection Customer is not subject to refund.

5.2 General Conditions Applicable to Option to Build. If Interconnection Customer assumes responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades after receipt of all required approvals from Governmental Authorities necessary to commence construction,

(1) Interconnection Customer shall engineer, procure equipment, and construct the 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, or as required by any Governmental Authority;

(2) Interconnection Customer's engineering, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law or Governmental Authority to which Transmission Owner would be subject in the engineering, procurement or construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(3) Transmission Provider, at Transmission Provider's option, and Transmission Owner shall be entitled to review and approve the engineering design, equipment acceptance tests(including witnessing of acceptance tests), and the construction (including monitoring of construction) of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, and shall have the right to reject any design, procurement, construction or acceptance test of any equipment that does not meet the standards and specifications of Transmission Provider, Transmission Owner and any Governmental Authority;

(4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider and Transmission Owner a schedule for construction of the Transmission Owner'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 Provider and Transmission Owner shall have unrestricted access to the construction site for the 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 the Transmission Owner'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 the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to meet the standards and specifications provided by Transmission Provider and Transmission Owner;

(7) Interconnection Customer shall indemnify Transmission Provider and Transmission Owner for claims arising from the Interconnection Customer's construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1, Indemnity;

(8) Interconnection Customer shall transfer control of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner in accordance with Appendix B;

(10) Transmission Provider, at Transmission Provider's option, and Transmission Owner shall approve and accept for operation and maintenance the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2 only if the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades meet the standards and specifications of Transmission Provider, Transmission Owner and any Governmental Authority.

(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 Owner.

(12) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, 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.

(13) If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, and the Transmission Owner has elected to fund the costs of Network Upgrades pursuant to Article 11.3, then prior to Interconnection Customer incurring any construction costs relating to the Option to Build and by the date specified in Appendix B, Interconnection Customer shall invoice the Transmission Owner for the estimated amount to be expended by the Interconnection Customer to construct any Stand Alone Network Upgrades for which the Interconnection Customer has exercised its Option to Build in accordance with Appendix B. The Transmission Owner shall be required to reimburse Interconnection Customer for the full amount of such invoiced costs by the date specified in Appendix B, which shall be prior to the date by which Interconnection Customer must make any construction payment for such Stand Alone Network Upgrades. After completion of the construction of Stand Alone Network Upgrades by the Interconnection Customer and by the date specified in Appendix B for the Interconnection Customer to transfer such Stand Alone Network Upgrades to the Transmission Owner, Interconnection Customer shall provide an invoice of the final cost of the construction of Stand Alone Upgrades and shall set forth such costs in sufficient detail to enable the Transmission Owner to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. In the event that the actual costs exceed the estimated

costs previously invoiced by Interconnection Customer and paid by Transmission Owner, Transmission Owner shall pay to Interconnection Customer the difference between the amount previously paid and the actual costs within thirty (30) Calendar Days after receipt of a final construction invoice from Interconnection Customer. In the event that the actual costs are less than the estimated costs previously invoiced by Interconnection Customer and paid by Transmission Owner, Interconnection Customer shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Transmission Owner any amount by which the actual payment by Transmission Owner for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Following the transfer of the Stand Alone Network Upgrades from the Interconnection Customer to the Transmission Owner, the Interconnection Customer shall make payments for such facilities to the Transmission Owner pursuant to an agreement between and among the Parties.

5.3 Liquidated Damages. The actual damages to Interconnection Customer, in the event the Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Provider and Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by Transmission Owner to Interconnection Customer in the event that Transmission Owner does not complete any portion of the Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to $\frac{1}{2}$ of 1 percent per day of the actual cost of the 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 the 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 the 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 the 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) the Transmission Owner's failure to meet the specified dates is the result of the action or inaction of Transmission Provider, Interconnection Customer or any other earlier queued Interconnection Customer who has entered into an earlier GIA with Transmission Provider and/or a Transmission Owner or with an Affected System Operator, or any cause beyond Transmission Owner's reasonable control or reasonable ability to cure; (3) Interconnection Customer has assumed responsibility for the design, procurement and construction of the Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; (4) the delay is due to the inability of Transmission Owner to obtain all required approvals from Governmental Authorities in a timely manner for the construction of any element of the Interconnection Facilities, Network Upgrades or Stand Alone Network Upgrades, or any other permit or authorization required, or any land rights or other private authorizations that may be required, and Transmission Owner has exercised Reasonable Efforts in procuring such approvals, permits, rights or authorizations; or (5) the Parties have otherwise agreed.

- 5.4 Power System Stabilizers.** 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 and Transmission Owner reserve 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 are not capable of automatic operation, Interconnection Customer shall immediately notify the Transmission Provider's system operator, or its designated representative. The requirements of this paragraph shall not apply to induction generators.
- 5.5 Equipment Procurement.** If responsibility for construction of the Transmission Owner's Interconnection Facilities, Network Upgrades and/or Distribution Upgrades is to be borne by Transmission Owner, then Transmission Owner shall commence design of the Transmission Owner's Interconnection Facilities, Network Upgrades and/or Distribution 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 Interconnection Facilities Study Agreement; and
- 5.5.2** Where applicable, Interconnection Customer has provided security to Transmission Owner in accordance with Article 11.6 by the dates specified in Appendix B, Milestones.
- 5.6 Construction Commencement.** Transmission Owner shall commence construction of the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades, and Generator 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; and
- 5.6.2** Where applicable, Interconnection Customer has provided security to Transmission Owner in accordance with Article 11.6 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress.** Transmission Owner and Interconnection Customer will keep each other and Transmission Provider advised periodically as to the progress of their respective design, procurement and construction efforts. Either Transmission Owner or Interconnection Customer may, at any time, request a progress report from the other, with a copy to be provided to the other Parties. If, at any time, Interconnection Customer determines that the completion of the Transmission Owner's Interconnection Facilities, Network Upgrades, or Transmission Owner's System Protection Facilities 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 the Transmission Owner's Interconnection Facilities, Network Upgrades or Transmission Owner's System Protection Facilities will be required. Transmission Owner may delay the In-Service Date of its facilities accordingly.
- 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 Interconnection Facilities and compatibility of the Interconnection Facilities with the Transmission System or Distribution System, as applicable, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Other Interconnection Options.**
- 5.9.1 Limited Operation.** If any of the Transmission Owner's Interconnection Facilities, Network Upgrades, or Transmission Owner's System Protection Facilities, Distribution Upgrades or Generator 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 the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades or Generator Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this GIA. Transmission Provider and Transmission Owner shall permit Interconnection Customer to operate the Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies; provided, however, such studies reveal that such operation may occur without detriment to

the Transmission System as then configured and in accordance with the safety requirements of Transmission Owner and any Governmental Authority.

The maximum permissible output of the Generating Facility will be updated on a quarterly basis if the Network Upgrades necessary for the interconnection of the Generating Facility pursuant to this GIA are not in service within six (6) months following the Commercial Operation Date of the Generating Facility as specified in Appendix B of this GIA. These quarterly studies will be performed using the same methodology set forth in Section 11.5 of the GIP. These quarterly updates will end when all Network Upgrades necessary for the interconnection of the Generating Facility pursuant to this GIA are in service.

5.9.2 Provisional Interconnection Service.

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities Transmission Provider may execute a Provisional Generator Interconnection Agreement or Interconnection Customer may request the filing of an unexecuted Provisional Generator Interconnection Agreement with the Interconnection Customer for limited interconnection service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission Provider's system. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of interconnection service from the Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility in the Provisional Generator Interconnection Agreement shall be studied and updated on a quarterly basis. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Generator Interconnection Agreement and the Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

5.10 Interconnection Customer's Interconnection Facilities. Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in

Appendix A.

5.10.1 Interconnection Customer's Interconnection Facility Specifications.

Interconnection Customer shall submit initial design and specifications for the ICIF, including Interconnection Customer's System Protection Facilities, to Transmission Provider and Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final design and specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Transmission Provider at Transmission Provider's option, and Transmission Owner shall review such specifications to ensure that the ICIF are compatible with their respective technical specifications, operational control, and safety requirements and comment on such design and specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

5.10.2 Transmission Provider's and Transmission Owner's Review. Transmission Provider's and 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 Provider and 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 Provider and 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 Provider and 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 the 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. Interconnection Customer shall provide Transmission Provider and Transmission Owner with Interconnection Customer's specifications for the excitation system, automatic voltage regulator, Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

5.11 Transmission Owner's Interconnection Facilities Construction. The Transmission Owner's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually

acceptable deadline, Transmission Owner shall deliver to Transmission Provider (if requested) and Interconnection Customer the “as-built” drawings, information and documents for the Transmission Owner’s Interconnection Facilities specified in Appendix C to this GIA.

Such drawings, information and documents shall be deemed Confidential Information.

Upon completion, the Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades shall be under the control of Transmission Provider or its designated representative.

- 5.12 Access Rights.** Upon reasonable notice by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish *at no cost* to the other Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the 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 the Transmission Owner’s Interconnection Facilities, Network Upgrades, and/or Distribution 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 to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner’s Interconnection Facilities, Network Upgrades and/or Distribution 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 Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to the Transmission Owner’s own, or an Affiliate’s, generation to the extent that

Transmission Owner or its Affiliate owns generation.

5.15 Early Construction of Base Case Facilities. (Includes facilities required for all queued projects with interconnection agreements). 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, Transmission Owner's System Protection Facilities or Distribution Upgrades required for Interconnection Customer to be interconnected to the Transmission or Distribution System, as applicable, which are included in the Base Case of the Interconnection Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer with a prior GIA, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. Any such Network Upgrades, System Protection Facilities or Distribution Upgrades are included in the facilities to be constructed and as set forth in Appendix A to this GIA to the extent they are reasonably known.

5.16 Suspension.

5.16.1 Interconnection Customer's Right to Suspend for Force Majeure Event; Obligations. Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of such Interconnection Facilities, Network Upgrades or Stand Alone Network Upgrades, Interconnection Customer will not suspend unless a Force Majeure event occurs.

Interconnection Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Interconnection Customer milestones and Interconnection Facilities described in the Appendices of this GIA. Prior to suspension, Interconnection Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's System Protection Facilities, and Distribution Upgrades listed in Appendix A of this GIA. Network Upgrades and Transmission Owner's Interconnection Facilities will be constructed on the schedule described in the Appendices of this GIA unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades will no longer be constructed.

If suspension occurs, the Transmission or Distribution System, as applicable, shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Transmission Provider's and Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all

reasonable and necessary costs which Transmission Provider and Transmission Owner (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 or Distribution System, as applicable, during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider and Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider and Transmission Owner shall obtain Interconnection Customer's authorization to do so.

Transmission Provider and Transmission Owner shall each invoice Interconnection Customer for such costs pursuant to Article 12 and shall use Reasonable Efforts to minimize its costs. 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 recommence the work required under this GIA on or before the expiration of three (3) years following commencement of such suspension, this GIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Transmission Provider, if no effective date is specified.

5.16.2 Effect of Missed Interconnection Customer Milestones. If Interconnection Customer fails to provide notice of suspension pursuant to Article 5.16, and Interconnection Customer fails to fulfill or complete any Interconnection Customer Milestone provided in Appendix B ("Milestone"), this constitutes a Breach under this GIA. Depending upon the consequences of the Breach and effectiveness of the cure pursuant to Article 17, the Transmission Owners' Milestones may be revised, following consultation with Interconnection Customer, consistent with Reasonable Efforts, and in consideration of all relevant circumstances. Parties shall employ Reasonable Efforts to maintain their remaining respective Milestones.

5.16.3 Effect of Suspension; Parties Obligations. In the event that Interconnection Customer suspends work pursuant to this Article 5.16, no construction duration, timelines and schedules set forth in Appendix B shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension. Should Interconnection Customer request that work be recommenced, Transmission Owner shall be obligated to proceed with Reasonable Efforts and in consideration of all relevant circumstances including regional outage schedules, construction availability and material procurement in performing the work as described in Appendix A and Appendix B. Transmission Owner will provide Interconnection Customer with a revised schedule for the design, procurement, construction, installation and testing of the Transmission Owner's Interconnection Facilities and Network Upgrades. Upon any suspension by Interconnection Customer

pursuant to Article 5.16, Interconnection Customer shall be responsible for only those costs specified in this Article 5.16.

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 the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades and Generator 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. To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Interconnection Customer to Transmission Owner for Network Upgrades is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the parties that any amounts paid by Interconnection Customer to Transmission Owner for Network Upgrades will be reimbursed to Interconnection Customer in accordance with the terms of this GIA, provided Interconnection Customer fulfills its obligations under this GIA.

5.17.2 Representations and Covenants. In accordance with IRS Notice 2016-36, 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 the 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 the Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 2016-36, 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 2016-36. 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, with a copy to Transmission Provider. Transmission Owner represents and covenants that the cost of the 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 Upon Transmission Owner. Notwithstanding Article 5.17.1 and to the extent permitted by law, Interconnection Customer shall protect, indemnify and hold harmless Transmission Owner from the cost consequences of any 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 or 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, Network Upgrades, Transmission Owner's System Protection Facilities, and/or Distribution 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 covenant 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, Network Upgrades, Transmission Owner’s System Protection Facilities, and/or Distribution 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 shall file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission 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 amounts 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 18 C.F.R. Section 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 the Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave both parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

5.17.9 Taxes Other Than Income Taxes. Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Owner shall 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. Each Party shall cooperate with the other Parties to maintain each Party's 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. Either 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 Information 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 Provider shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission or Distribution System as applicable, Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System

Protection Facilities, and/or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof which shall be the responsibility of Interconnection Customer.

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 the costs of any additions, modifications, or replacements that Transmission Owner makes to the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities, Distribution Upgrades, or the Transmission or Distribution System, as applicable, to facilitate the interconnection of a third party to the Transmission Owner's Interconnection Facilities or the Transmission or Distribution System, as applicable, or to provide transmission service to a third party under the Tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

ARTICLE 6. TESTING AND INSPECTION

6.1 Pre-Commercial Operation Date Testing and Modifications. Prior to the Commercial Operation Date, Transmission Owner shall test the Transmission Owner's Interconnection Facilities, Network Upgrades, Transmission Owner's System Protection Facilities and Distribution Upgrades, and Interconnection Customer shall test each electric production device at the Generating Facility, Interconnection Customer's System Protection Facilities, including control equipment to limit injection at the POI to the level of Interconnection Service set forth in Appendix A and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Transmission Owner and Interconnection Customer shall make any modifications to their respective 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 or Distribution System, as applicable, in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the Interconnection 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 shall each 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 Transmission Owner's and Interconnection Customer's tests and/or inspection of any of their respective System Protection Facilities and other protective equipment, including power system stabilizers and control equipment;
 - (ii) review the settings of the System Protection Facilities and other protective equipment; and
 - (iii) review the maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment.
- A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this 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, at its election, or otherwise Interconnection Customer, shall install Metering Equipment (the "Metering Party") at the Point of Interconnection prior to any operation of the Generating Facility and Transmission Owner, at its election, or otherwise Interconnection Customer shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Generating Facility shall be measured at or, at the Metering Party's option, compensated to, the Point of Interconnection. In addition to the Metering Equipment installed at the Point of Interconnection, if Interconnection Customer will share Interconnection Facilities with any other projects, Interconnection Customer shall install Metering Equipment either on its own Generating Facility or its own non-shared facilities sufficient to measure the output of such Interconnection Customer's Generating Facility separately from any other Generating Facilities with which it will share Interconnection Facilities. The Metering Party shall provide metering quantities, in analog and/or digital form, to the other Parties upon request. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the Metering Equipment owned by the Metering Party. 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 Provider, Transmission Owner or their designees. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.

- 7.3 Standards.** The Metering Party shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.
- 7.4 Testing of Metering Equipment.** The Metering Party shall inspect and test Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by a Party, the Metering Party shall, at the requesting Party's expense, inspect or test Metering Equipment more frequently than every two (2) years. The Metering Party shall give reasonable notice to the other Parties of the time when any inspection or test shall take place, and the other Parties 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 the Metering Party's failure to maintain, then the Metering Party 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 (2%) from the measurement made by the standard meter used in the test, the Metering Party 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 previous test of the Metering Equipment.
- 7.5 Metering Data.** At Interconnection Customer's expense, the metered data shall be telemetered to one or more locations designated by Transmission Provider and 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 Provider's Transmission System dispatcher or representative designated by Transmission Provider. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to Transmission Provider as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Generating Facility to the location(s) specified by Transmission Provider. Any required maintenance of such communications

equipment shall be performed by and at the cost of 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.

Unless the Generating Facility is an Intermittent Resource not relying on wind as a fuel source, Interconnection Customer shall install communication and control equipment such that the Generating Facility can receive and respond to the appropriate dispatch signals while operating under the Tariff. Where applicable, the requirements of the communication and control equipment will be enumerated in Appendix C to this GIA.

- 8.2 Remote Terminal Unit (RTU).** Prior to the Initial Synchronization Date of the Generating Facility, a remote terminal unit, or equivalent data collection and transfer equipment acceptable to both Parties, shall be installed 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 and Transmission Provider through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1. The communication protocol for the data circuit(s) shall be specified by Transmission Owner and Transmission Provider. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider and Transmission Owner.

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. 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 will, upon request by the Transmission Provider, be required to provide the Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. The Interconnection Customer with a Variable Energy Resource having solar as the energy source will, upon request by the Transmission Provider, be required to provide the Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. The Transmission Provider and Interconnection Customer whose Generating Facility is a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for

the development and deployment of a power production forecast. The Interconnection Customer whose Generating Facility is a Variable Energy Resource also shall submit data to the Transmission Provider regarding all forced outages to the extent necessary for the Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by the Interconnection Customer to the Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Data requirements for meteorological and forced outage data will be negotiated by the Transmission Provider and the Interconnection Customer, and will be set forth in Appendix C, Interconnection Details, of this GIA.

ARTICLE 9. OPERATIONS

- 9.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to any Party all information that may reasonably be required by that Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Local Balancing Authority Notification.** At least three (3) months before Initial Synchronization Date, Interconnection Customer shall notify Transmission Provider and Transmission Owner in writing of the Local Balancing Authority in which the Generating Facility will be located. If Interconnection Customer elects to locate the Generating Facility through dynamic metering/scheduling in a Local Balancing Authority other than the Local Balancing Authority 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 Local Balancing Authority 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 Local Balancing Authority.
- 9.3 Transmission Provider and Transmission Owner Obligations.** Transmission Provider shall cause the Transmission System and the Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner in accordance with this GIA. Transmission Provider, or its designee, may provide operating instructions to Interconnection Customer consistent with this GIA and the Tariff and, if applicable, Transmission Owner's operating protocols and procedures as they may change from time to time. Transmission Provider will consider changes to its operating protocols and procedures proposed by Interconnection Customer.
- 9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Generating Facility and the Interconnection

Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA. The Generating Facility must be operated in accordance with the operating limits, if any, in the Interconnection Facilities Study and specified in Appendix C of this GIA. Interconnection Customer shall operate the Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of Transmission Provider or its designated Local Balancing Authority Operator of which the Generating Facility 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 a 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, Interconnection Customer is responsible for the proper synchronization of the Generating Facility to the Transmission or Distribution System, as applicable.

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 be capable of maintaining a composite power delivery at continuous rated power output at the Point of Interconnection at all power factors over 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all synchronous generators in the Local Balancing Authority on a comparable basis. The applicable Local Balancing Authority power factor requirements are listed on the Transmission Provider's website at

https://cdn.misoenergy.org/Reactive_Generator_Requirements108137.pdf

and may be referenced in the Appendices to this GIA. The Generating Facility shall be capable of continuous dynamic operation throughout the power factor design range as measured at the Point of Interconnection. Such operation shall account for the net effect of all energy production devices on the Interconnection Customer's side of the Point of Interconnection.

9.6.1.2 Non-Synchronous Generation. Interconnection Customer shall design the Generating Facility to be capable of maintaining a composite power delivery at continuous rated power output at the high-side of the generator substation at all power factors over 0.95 leading to 0.95 lagging, unless the Transmission Provider has established different requirements that apply to all non-synchronous generators in the Local Balancing Authority on a comparable basis. The applicable Local Balancing Authority power factor requirements are listed on the Transmission Provider's website at

https://cdn.misoenergy.org/Reactive_Generator_Requirements108137.pdf

and may be referenced in the Appendices to this GIA. 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 have not yet completed a System Impact Study as of the effective date of the Final Rule establishing this requirement (Order No. 827). These requirements apply to existing non-synchronous generators making upgrades that require a new Generator Interconnection Agreement only where the Transmission Provider's System Impact Study shows the need for reactive power as a result of an upgrade. If applicable, these requirements will be memorialized in Appendix C to this GIA.

9.6.2 Voltage Schedules. Once Interconnection Customer has synchronized the Generating Facility with the Transmission System, Transmission Provider 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), to maintain the output voltage or power factor at the Point of Interconnection as specified by Transmission Provider. Transmission Provider's voltage schedules shall treat all sources of reactive power in the Local Balancing Authority in an equitable and not unduly discriminatory manner. Transmission Provider shall exercise Reasonable Efforts to provide Interconnection Customer with such schedules at least one (1) Calendar Day in advance, and may make changes to such schedules as necessary to maintain the reliability of the Transmission or Distribution System as applicable. 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 Transmission Provider's system operator, or its designated representative.

9.6.2.1 Voltage Regulators. Whenever the Generating Facility is operated in parallel with the Transmission or Distribution System as applicable and voltage regulators are capable of operation, Interconnection Customer shall operate the Generating Facility with its speed governors and voltage regulators in automatic operation. If the Generating Facility's voltage regulators are not capable of such automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative, and ensure that such 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 or Distribution System, as applicable, or trip any generating unit comprising the Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Local Balancing Authority on a comparable basis.

9.6.3 Payment for Reactive Power. Payments for reactive power shall be pursuant to any tariff or rate schedule filed by Transmission Provider and approved by the FERC.

9.6.4 Primary Frequency Response. This Section 9.6.4 shall only apply in the event that the Interconnection Request for the Generating Facility completed Definitive Planning Phase Interconnection Customer Decision Point 2 after May 15, 2018.

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 ± 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 GIA. 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: (a) a maximum of ± 0.036 Hz and set the droop parameter to a maximum of 5 percent; or (b) 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 GIA. 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 GIA.

9.6.4.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Appendix C 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 GIA. 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 GIA 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. Interconnection Customer and Transmission Owner may each in accordance with Good Utility Practice in coordination with the other Party and Transmission Provider remove from service any of its respective Interconnection Facilities, System Protection Facilities, Network Upgrades, System Protection Facilities or Distribution 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 notify one another and schedule such removal on a date and time mutually acceptable to the Parties. In all circumstances, any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

9.7.1.2 Outage Schedules. Transmission Provider shall post scheduled outages of transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the Generating Facility to Transmission Provider and Transmission Owner for a minimum of a rolling twenty-four (24) month period in accordance with the Transmission Provider's procedures. 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, pursuant to applicable Transmission Provider tariff or rate schedule, 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 the Transmission Provider's request to reschedule maintenance. Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled

maintenance, Interconnection Customer had modified its schedule of maintenance activities.

Costs shall be determined by negotiation between Transmission Provider and Interconnection Customer prior to implementation of the voluntary change in outage schedules, or if such request is made by or on behalf of a Transmission Customer requesting firm service, costs and recovery of costs shall be determined through a bilateral agreement between the Transmission Customer and Interconnection Customer. Voluntary changes to outage schedules under this Article 9.7.1.2 are separate from actions and compensation required under Article 13 and for which costs are recovered in accordance with Transmission Provider's applicable tariff or rate schedule.

9.7.1.3 Outage Restoration. If an outage on either the Interconnection Customer's or Transmission Owner's Interconnection Facilities, Network Upgrades, System Protection Facilities or Distribution Upgrades adversely affects a 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 to the other Parties explaining the nature of the outage.

9.7.2 Interruption of Service. If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

9.7.2.1 The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the Transmission or Distribution System, as applicable;

9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its

expected duration. Telephone notification shall be followed by written notification as soon as practicable;

9.7.2.4 Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to Interconnection Customer, Transmission Owner and Transmission Provider;

9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Generating Facility, Interconnection Facilities, and the Transmission or Distribution System, as applicable to their normal operating state, consistent with system conditions and Good Utility Practice.

9.7.3 Under-Frequency, Over-Frequency, Under-Voltage, and Over-Voltage 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 or under-voltage system disturbance. Interconnection Customer shall implement under-frequency, over-frequency, under-voltage, and over-voltage relay set points for the Generating Facility as required by the Applicable Reliability Council to ensure “ride through” capability of the Transmission System. Generating Facilities that are not required to implement under-frequency, over-frequency, under-voltage, and over-voltage relays as directed by the Applicable Reliability Council shall implement such relays with set points according to guidelines published by the Applicable Reliability Council. Generating Facility response to frequency and/or voltage deviations of pre-determined magnitudes, including under-frequency, over-frequency, under-voltage, and over-voltage, 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, over-frequency, under-voltage, and over-voltage conditions, in accordance with Good Utility Practice.

9.7.4 System Protection and Other Control Requirements.

9.7.4.1 System Protection Facilities. Interconnection Customer shall, at its expense, install, operate and maintain its System Protection Facilities as a part of the Generating Facility or the Interconnection Customer’s Interconnection Facilities. Transmission Owner shall install at Interconnection Customer’s expense any Transmission Owner’s System

Protection Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the interconnection of the Generating Facility and the Interconnection Customer's Interconnection Facilities.

9.7.4.2 Interconnection Customer's and Transmission Owner's System Protection Facilities shall be designed and coordinated with Affected Systems in accordance with Good Utility Practice.

9.7.4.3 Each Party shall be responsible for protection of its facilities consistent with Good Utility Practice.

9.7.4.4 Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Generating Facility.

9.7.4.5 Each Party will test, operate and maintain their respective 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, Interconnection Customer or Transmission Owner, or their respective agents, 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, Interconnection Customer or Transmission Owner shall each perform both calibration and functional trip tests of their respective System Protection Facilities. These tests do not require the tripping of any in-service generating 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 or Distribution System, as applicable, 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 or Distribution System, as applicable. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Generating Facility and the Transmission or Distribution System, as applicable, 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 or Distribution System, as applicable, could adversely affect the Generating Facility.

- 9.7.6 Power Quality.** Neither Party's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard. In the event of a conflict between ANSI Standard C84.1-1989, and any applicable superseding electric industry standard, the applicable superseding electric industry standard shall control.
- 9.8 Switching and Tagging Rules.** Prior to the Initial Synchronization Date, each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' 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 Other 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 or Distribution System, as applicable, and shall be used for no other purpose.
- 9.9.2 Other Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld or delayed, to allow one or more Parties to use the 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 non-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 non-Party users based upon the pro rata use of the Interconnection Facilities by Transmission Owner, all non-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

Dispute Resolution pursuant to Section 12 of the Tariff.

- 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 Owner's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA and all Applicable Laws and Regulations.
- 10.2 Interconnection Customer Obligations.** Interconnection Customer shall maintain the Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this GIA and all Applicable Laws and Regulations.
- 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 other in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact 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 Service or Transmission Service to a non-Party and such non-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 to the extent required by Transmission Owner on a comparable basis.

ARTICLE 11. PERFORMANCE OBLIGATION

11.1 Interconnection Customer's Interconnection Facilities. Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.

11.2 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 at the sole expense of Interconnection Customer.

11.3 Network Upgrades, System Protection Facilities and Distribution Upgrades. Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, Transmission Owner's System Protection Facilities and Distribution Upgrades described in Appendix A. Interconnection Customer shall be responsible for all costs related to Distribution Upgrades and/or Generator Upgrades. Transmission Owner shall provide Transmission Provider and Interconnection Customer with written notice pursuant to Article 15 if Transmission Owner elects to fund the capital for the Network Upgrades and Transmission Owner's System Protection Facilities; otherwise, such facilities, if any, shall be solely funded by Interconnection Customer.

11.3.1 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 (1) a higher queued interconnection request withdrew or was deemed to have withdrawn, (2) the interconnection agreement associated with a higher queued interconnection request was terminated prior to the project's In-Service Date, (3) the Commercial Operation Date for a higher queued interconnection request is delayed, or the project itself is delayed (including due to suspension) such that facilities required to accommodate lower queued projects or the project itself may be altered, (4) the queue position is reinstated for a higher-queued interconnection request whose queue position was subject to dispute resolution, (5) changes occur in Transmission Provider or Transmission Owner equipment design standards or reliability criteria giving rise to the need for restudy, (6) the facilities required to accommodate a higher queued Interconnection Request were modified constituting a Material Modification pursuant to Section 4.4 of the GIP, (7) a GIA with an effective date prior to this GIA is terminated, or (8) when ordered to restudy by FERC. 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, are provided in Appendix A.

11.3.2 Agreement to Restudy and Cost Reallocation. In the event that one of the contingencies listed in Article 11.3.1 occurs, at any time before the Network Upgrades, Common Use Upgrades, Shared Network Upgrades, System Protection

Facilities and/or Distribution Upgrades associated with higher queued Interconnection Requests with GIA in effect prior to this GIA are completed, Transmission Provider may determine, in its discretion, that a restudy is required. If a restudy is required, Transmission Provider will provide notice to Interconnection Customer and Interconnection Customer agrees to enter into an Interconnection Study Agreement for such restudy. Transmission Provider will reevaluate the need for any Common Use Upgrade(s) and/or Shared Network Upgrade(s), and if still required, reallocate the cost and responsibility for any Common Use Upgrade and/or Shared Network Upgrade, without a restudy when possible, or with a restudy if the Transmission Provider deems it necessary in order to ensure reliability of the Transmission System. The Parties agree to amend Appendix A to this GIA in accordance with Article 30.10 to reflect the results of any cost reallocation required under this Article 11.3.2.

11.3.3 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 funded the Shared Network Upgrades in accordance with Attachment X and Attachment FF 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 Transmission Credits.

11.4.1 Repayment of Amounts Advanced for Network Upgrades. Interconnection Customer shall be entitled to a cash repayment by Transmission Owner(s) and the Affected System Owner(s) that own the Network Upgrades, of the amount paid respectively to Transmission Owner and Affected System Operator, if any, for the Network Upgrades, as provided under Attachment FF of this Tariff and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Interconnection Customer pursuant to Article 5.17.8 or otherwise, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff and Affected System's Tariff for Transmission Services with respect to the Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 (a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Interconnection Customer has suspended construction pursuant to Article 11 or the Network Upgrades have been determined not to be needed pursuant to this Article 11.4.1. Interconnection Customer may assign such repayment rights to any person.

If the Generating Facility is designated a Network Resource under the Tariff, or if there are otherwise no incremental payments for Transmission Service resulting from the use of the Generating Facility by Transmission Customer, and in the absence of another mutually agreeable payment schedule any repayments provided under Attachment FF shall be established equal to the applicable rate for Firm Point-To-Point Transmission Service for the pricing zone where the Network Load is located multiplied by the portion of the demonstrated output of the Generating Facility designated as a Network Resource by the Network Customer(s) or in the absence of such designation, equal to the monthly firm single system-wide rate defined under Schedule 7 of the Tariff multiplied by the portion of the demonstrated output of the Generating Facility under contract to Network Customer(s) and consistent with studies pursuant to Section 3.2.2.2 of the GIP.

Notwithstanding the foregoing, as applicable and consistent with the provisions of Attachment FF of this Tariff, Interconnection Customer, Transmission Provider, Transmission Owner, and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Owner and Affected System Operator take one of the following actions no later than five (5) years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Owner or Affected System Operator will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.

If the Generating Facility is installed in phases, the amount eligible for refund as each phase achieves Commercial Operation will be reduced by the proportional amount of generation capacity not yet installed. However, all facilities in Appendix A other than the Generating Facility shall be built without consideration for the phasing of the Generating Facility as though the entire Generating Facility will be placed in Commercial Operation for the full output or increased output of the Generating Facility constructed by Interconnection Customer under this GIA.

If the Generating Facility fails to achieve Commercial Operation, but it or another generating facility is later constructed and makes use of the Network Upgrades, Transmission Owner and Affected System Operator shall at that time reimburse Interconnection Customer for the remaining applicable amounts that may be refundable pursuant to Attachment FF of this Tariff that were advanced for the Network Upgrades on their respective systems as described above. Before any such reimbursement can occur, Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for

identifying the entity to which the reimbursement must be made.

- 11.4.2** Special Provisions for Transmission Provider as an Affected System to be covered under Separate Agreements. When the Transmission Owner's Transmission or Distribution System (including for this Article 11.4.2 independent distribution systems connected to the Transmission System) is an Affected System for an interconnection in another electric system, Transmission Provider will coordinate the performance of Interconnection Studies with the other system. Transmission Provider will determine if any Network Upgrades or Distribution Upgrades, which may be required on the Transmission System as a result of the interconnection, would not have been needed but for the interconnection. Unless Transmission Owner provides, under the interconnection agreement between Interconnection Customer and the other system, for the repayment of amounts advanced to Transmission Provider or an impacted Transmission Owner for Network Upgrades, Interconnection Customer, Transmission Provider, and the impacted Transmission Owner(s) shall enter into an agreement that provides for such repayment by Transmission Owner(s) as directed by Transmission Provider. The agreement shall specify the terms governing payments to be made by Interconnection Customer to the Affected System Operator as well as the payment of refunds by the Affected System Operator.
- 11.4.3** 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 cash reimbursement or transmission credits for transmission service that is not associated with the Generating Facility.
- 11.5 Initial Payment.** Interconnection Customer shall elect (and provide its election to the Transmission Provider within five days of the commencement of negotiation of the GIA pursuant to Section 11.2 of the GIP) to make either 1) an initial payment equal to twenty (20) percent of the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades (if the In-Service Date is less than or equal to five (5) years of the initial payment date); or 2) an initial payment equal to ten (10) percent of the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades (if the In-Service Date exceeds the initial payment date by more than five (5) years); or 3) the total cost of Network Upgrades, Transmission Owner Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and/or Generator Upgrades in the form of security pursuant to Article 11.6. The initial payment shall be provided to Transmission Owner by Interconnection Customer pursuant to this Article 11.5 within the later of a) forty-five (45) Calendar Days of the execution of the

GIA by all Parties, or b) forty-five (45) Calendar Days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer, or c) forty-five (45) Calendar Days of the filing if the GIA is filed unexecuted and the initial payment is not being protested by Interconnection Customer. If the Interconnection Customer made its milestone payments in the form of cash and the Interconnection Customer elects a cash initial payment, then the Transmission Provider shall transfer those funds to the Transmission Owner on the Interconnection Customer's behalf.

11.6 Provision of Security. Unless otherwise provided in Appendix B, at least forty-five (45) Calendar Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of an element, not otherwise funded under Article 11.5, of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Network Upgrades, Distribution Upgrades or Stand-Alone Network Upgrades, or at the request of Transmission Owner if regulatory approvals are required for the construction of such facilities, Interconnection Customer shall provide Transmission Owner, at Interconnection Customer's selection, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Owner 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 applicable costs and cost commitments, in addition to those funded under Article 11.5, required of the Party responsible for building the facilities pursuant to the construction schedule developed in Appendix B for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the applicable portion of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Network Upgrades, Distribution Upgrades or Stand-Alone Network Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes.

In addition:

- 11.6.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Owner, 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.
- 11.6.2** The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Owner and must specify a reasonable expiration date.
- 11.6.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner and must specify a reasonable expiration date.
- 11.6.4** If the Shared Network Upgrade is not in service, Interconnection Customer will provide, as applicable, an Irrevocable Letter of Credit to fund any Shared Network Upgrade pursuant to Attachment FF of the Tariff. The Irrevocable Letter of Credit shall be in an amount sufficient to cover the Interconnection Customer's share of the applicable costs and cost commitments associated with

the Shared Network Upgrades. Transmission Provider may periodically adjust the Interconnection Customer's share of the applicable costs and cost commitment of Shared Network Upgrades and may require Interconnection Customer to adjust the amount of the Irrevocable Letter of Credit accordingly.

- 11.7 Interconnection Customer Compensation.** If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Article 13.4 of this GIA, Transmission Provider shall compensate Interconnection Customer in accordance with any tariff or rate schedule filed by Transmission Provider and approved by the FERC.

ARTICLE 12. INVOICE

- 12.1 General.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, 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 (6) months after completion of the construction of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and the Network Upgrades, Transmission Owner shall provide an invoice of the final cost of the construction of the Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this GIA.
- 12.4 Disputes.** In the event of a billing dispute among the Parties, 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 Provider or 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 Provider may or, at Transmission Owner's request upon Interconnection Customer's failure to pay, Transmission Owner, shall 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 another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 13. EMERGENCIES

- 13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of Transmission Provider, NERC, the Applicable Reliability Council, and Applicable Laws and Regulations.
- 13.2 Notice.** Transmission Provider or Transmission Owner shall notify the other Parties promptly when it becomes aware of an Emergency Condition that affects the Transmission Owner's Interconnection Facilities or the Transmission or Distribution System, as applicable, that may reasonably be expected to affect Interconnection Customer's operation of the Generating Facility or the Interconnection Customer's Interconnection Facilities.

Interconnection Customer shall notify Transmission Provider and Transmission Owner, which includes by definition if applicable, the operator of a Distribution System, promptly when it becomes aware of an Emergency Condition that affects the Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission or Distribution System, as applicable, or the 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 Provider'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.

- 13.3 Immediate Action.** Unless, in a Party's reasonable judgment, immediate action is required, the Party exercising such judgment shall notify and obtain the consent of the other Parties, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or otherwise regarding the Transmission or Distribution System, as applicable.
- 13.4 Transmission Provider and Transmission Owner Authority.**
- 13.4.1 General.** Transmission Provider or Transmission Owner may take whatever actions or inactions with regard to the Transmission System or the 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 the Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider or Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Generating Facility or the Interconnection Customer's Interconnection Facilities. Transmission Provider 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 13.4.2; directing Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's or 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.

13.4.2 Reduction and Disconnection. Transmission Provider or Transmission Owner may reduce Interconnection Service or disconnect the Generating Facility or the 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 the Tariff. When Transmission Provider can schedule the reduction or disconnection in advance, Transmission Provider shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider shall coordinate with Interconnection Customer and Transmission Owner using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer, Transmission Owner and Transmission Provider. Any reduction or disconnection shall continue only for so long as reasonably necessary pursuant to 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.

13.5 Interconnection Customer Authority. Consistent with Good Utility Practice and this GIA and the GIP, Interconnection Customer may take whatever actions or inactions with regard to the Generating Facility or the 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 the 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 the Transmission Owner's Interconnection Facilities. Transmission Provider and Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

- 13.6 Limited Liability.** Except as otherwise provided in Article 11.6 of this GIA, no Party shall be liable to any other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.
- 13.7 Audit.** In accordance with Article 25.3, any Party may audit the performance of another Party when that Party declared an Emergency Condition.

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 if necessary assist the other Party 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, as amended, or the Public Utility Regulatory Policies Act of 1978.

14.2 Governing Law.

14.2.1 The validity, interpretation and performance of this 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 the other Parties and any instrument required or permitted to be tendered or delivered by a Party in writing to the other Parties shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with

postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Either Party may change the notice information in this 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 the other and not required by this GIA 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 A Party shall not be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4 and 5), 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, facsimile or email 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 Reasonable Efforts 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 or Parties shall give written notice of such Breach to the Breaching Party with a copy to the other Party if one Party gives notice of such Breach. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach 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 Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

17.1.2 Termination. 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 or Parties shall terminate this GIA, subject to Article 2.3.2 of this GIA, by written notice to the Breaching Party, with a copy to the other Party if one Party gives notice of termination, and be relieved of any further obligation hereunder and, whether or not that Party(ies) terminates this GIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is (they are) entitled at law or in equity. The provisions of this Article will survive termination of this GIA.

ARTICLE 18. LIMITATION OF LIABILITY, INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

18.1 Limitation of Liability. A Party shall not be liable to another Party or to any third party or other person for any damages arising out of actions under this GIA, including, but not limited to, any act or omission that results in an interruption, deficiency or imperfection of Interconnection Service, except as provided in this Tariff. The provisions set forth in the Tariff shall be additionally applicable to any Party acting in good faith to implement or comply with its obligations under this GIA, regardless of whether the obligation is preceded by a specific directive.

18.2 Indemnity. To the extent permitted by law, an Indemnifying Party shall at all times indemnify, defend and hold the other Parties harmless from Loss.

18.2.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a non-Party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.2, to assume the defense of such claim, such Indemnified Party 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.

18.2.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss,

net of any insurance or other recovery.

18.2.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party 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 18.2 may apply, the Indemnified Party 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 Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party 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 Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party 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 Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, 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 Party, which shall not be reasonably withheld, conditioned or delayed.

18.3 Consequential Damages. Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this GIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided; however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

- 18.4 Insurance.** Transmission Owner and Interconnection Customer shall, at their own expense, maintain in force throughout the period of this GIA pursuant to 18.4.9, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business or an approved surplus lines carrier in the state where the Point of Interconnection is located:
- 18.4.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.
- 18.4.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- 18.4.3** Comprehensive Automobile Liability Insurance, for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers licensed for travel on public roads, with a minimum combined single limit of One Million Dollars (\$1,000,000) each occurrence for bodily injury, including death, and property damage.
- 18.4.4** Excess Public Liability Insurance over and above the Employer's Liability, Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.4.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, 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 Groups and provide thirty (30) Calendar Days' advance written notice to the Other Party Groups prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.4.6** 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.

- 18.4.7** 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 by Transmission Owner and Interconnection Customer.
- 18.4.8** The requirements contained herein as to the types and limits of all insurance to be maintained by Transmission Owner and Interconnection Customer are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by Transmission Owner and Interconnection Customer under this GIA.
- 18.4.9** As of the date set forth in Appendix B, Milestones, 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) Calendar Days thereafter, Interconnection Customer and Transmission Owner shall provide the other Party with certification of all insurance required in this GIA, executed by each insurer or by an authorized representative of each insurer.
- 18.4.10** Notwithstanding the foregoing, Transmission Owner or Interconnection Customer may self-insure to meet the minimum insurance requirements of Articles 18.4.1 through 18.4.8, to the extent it maintains a self-insurance program; provided that, Transmission Owner's or Interconnection Customer's senior secured debt is rated at investment grade, or better, by Standard & Poor's and that its self-insurance program meets minimum insurance requirements under Articles 18.4.1 through 18.4.8. For any period of time that a Transmission Owner's or 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 Party shall comply with the insurance requirements applicable to it under Articles 18.4.1 through 18.4.9. In the event that Transmission Owner or 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 18.4.9.
- 18.4.11** Transmission Owner and Interconnection Customer 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 a 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 either 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 of any such assignment. Any financing arrangement entered into by Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 11.5 and 18.4. 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 non-Party, but only if such non-Party is not acting at the direction of either Transmission Provider or Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

ARTICLE 21. COMPARABILITY

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations including such laws, rules and regulations of Governmental Authorities establishing standards of conduct, 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 a Party to another Party 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. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c). Such confidentiality will be maintained in accordance with this Article 22.

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

22.1.1 Term. During the term of this 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 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policy and regulations.

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 non-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 this 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 receiving 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, agents, consultants, or to non-parties who may be or are 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 it discloses to the receiving Party. The disclosure by a Party to the receiving 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 Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party 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 requesting Party) or return to the requesting Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the requesting Party, except

that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 22 shall survive such termination.

- 22.1.9 Remedies.** 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 disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving 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 Breaching 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 CFR § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party 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 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this GIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to this 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 CFR § 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 disclosing Party claims is competitively sensitive, commercial or financial information under this GIA shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the receiving 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 disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this GIA or as the Regional Transmission Organization or a

Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 23. ENVIRONMENTAL RELEASES

- 23.1** Each Party shall notify the other Parties, 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 another 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 Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

ARTICLE 24. INFORMATION REQUIREMENTS

- 24.1 Information Acquisition.** Transmission Provider, Transmission Owner 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 and Transmission Owner** The initial information submission by Transmission Provider to Interconnection Customer, with copy provided to Transmission Owner, shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission or Distribution System information, as applicable and available, necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis, Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Transmission Owner's Interconnection Facilities, Transmission Owner's System Protection Facilities, Distribution Upgrades and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.** The updated

information submission by Interconnection Customer to Transmission Provider, with copy to Transmission Owner, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation.

Interconnection Customer shall submit to Transmission Provider and Transmission Owner a completed copy of the Generating Facility data requirements contained in Appendix 1 to the GIP. It shall also include any additional information provided to Transmission Provider for the Interconnection Facilities Study. 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, Interconnection Customer will work with a consultant mutually agreed to by Transmission Provider and Interconnection Customer to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission System based on the actual data submitted pursuant to this Article 24.3. Interconnection Customer shall not begin Trial Operation until such studies are completed.

24.4 Information Supplementation. Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 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. 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 %) 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 in 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 Transmission Provider and Transmission Owner for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, Interconnection Customer shall provide Transmission Provider and Transmission Owner any information changes due to equipment replacement, repair, or adjustment. Transmission Owner shall provide

Interconnection Customer, with copy to Transmission Provider, any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Owner 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.

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 another Party is 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.** A 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 any Party 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 the other Parties, to audit at its own expense the other Parties' accounts and records pertaining to the Parties' performance or the Parties' satisfaction of obligations under this GIA. Such audit rights shall include audits of the other Parties' costs, calculation of invoiced amounts, the Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission or Distribution System, as applicable, the Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation, 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 the Transmission Owner's Interconnection Facilities,

Transmission Owner's System Protection Facilities, Distribution Upgrades 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 a 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 (24) 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 (24) 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 Party or from whom the overpayment or underpayment is owed 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 Provider or 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, such Party (the "disputing Party") shall provide the other Parties with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of

each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the non-disputing Parties. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the non-disputing Parties' receipt of the Notice of Dispute, such claim or dispute shall be submitted for resolution in accordance with the dispute resolution procedures of the Tariff.

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. {RESERVED}

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.
- 30.1.1 Reversion.** If offered pursuant to an Agency Agreement under which this GIA is executed by Transmission Provider as agent for the relevant Transmission Owner, in the event that the relevant Agency Agreement terminates, any HVDC Service offered by Transmission Provider under this GIA shall revert to the relevant Transmission Owner and Transmission Provider shall be released from all obligations and responsibilities under this GIA.
- 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 the GIP or such Appendix to the GIP, 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 attachments 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 GIA. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any 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 any 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 the Interconnection Customer's legal rights to obtain Interconnection Service 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 two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 30.9 Amendment.** The Parties may by mutual agreement amend this GIA by a written instrument duly executed by all 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 all of 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 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 or between 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, the other Parties.

IN WITNESS WHEREOF, the Parties have executed this GIA in multiple originals; each of which shall constitute and be an original GIA among the Parties.

Transmission Provider
Midcontinent Independent System Operator, Inc.

By: _____
Name: _____
Title: _____

Transmission Owner
Ameren Services Company, as agent for
Ameren Illinois Company d/b/a Ameren Illinois

By: _____
Name: _____
Title: _____

Interconnection Customer
Cass County Solar Project, LLC

By: _____
Name: _____
Title: _____

APPENDICES TO GIA

- Appendix A** Interconnection Customer's Project No. J859, which includes a Generating Facility, Interconnection Facilities, and Network Upgrades, and may include System Protection Facilities, Distribution Upgrades, Generator Upgrades, Affected System Upgrades and Common Use Upgrades
- Appendix B** Milestones
- Appendix B-1** Pre-Certification Generation Test Notification Form
- 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** Interconnection Requirements for a Wind Generating Plant
- Appendix H** Interconnection Requirements for Provisional GIA
- Appendix I** Requirements Applicable to Surplus Interconnection Service

Appendix A To GIA

Interconnection Customer's Project No. J859, which includes a Generating Facility, Interconnection Facilities, and Network Upgrades, and may include System Protection Facilities, Distribution Upgrades, Generator Upgrades, Affected System Upgrades and Common Use Upgrades

1. Description of Generating Facility

Interconnection Customer shall install a 160 MVA facility, rated at 149.94 MW gross and 149.94 MW net, with all studies performed at or below these outputs. The Generating Facility is composed of fifty (50) TMEIC PVH-L3200GR solar inverter units rated at 3.2 MVA each. Interconnection Service provided under this agreement is 149.94 MW of conditional ERIS that will become 149.94 MW of ERIS and/or NRIS upon completion of all Network Upgrades, Common Use Upgrades, and Affected System Upgrades under this GIA, and the transmission assumptions listed in Table A10-1 of Exhibit A10.

Interconnection Customer shall install a collector substation with the appropriate protection equipment coordinated per Appendix C to this GIA. The Interconnection Customer's collector substation shall contain one (1) main step-up transformer 34.5/138 kV, 105/140/175 MVA, Z=7 %, X/R=34.1, MVA Base One Hundred and Five (105), one (1) 138 kV, 1200 A circuit breaker, associated line surge arrestors and disconnect switches, nine (9) 34.5 kV feeders with associated circuit breakers, disconnect switches, and associated auxiliary systems, instrument transformers, and electric relay protection. The collector substation will include a SCADA system and a data concentrator as required to manage the project and to send the required status and output data to the Transmission Owner and the Transmission Provider. The collector substation will include an 18 MVAR capacitor bank at the 34.5 kV bus, or as required to meet FERC Order 827.

These facilities are shown in Exhibit A1-1.

2. Interconnection Facilities

The J859 Generating Facility will interconnect with the Transmission System via an estimated 0.094 mile-long 138 kV leadline running from the Interconnection Customer's collector substation to the Transmission Owner's Flanigan switching station in Cass County, Illinois.

(a) Point of Interconnection

- i. The Point of Interconnection shall be at the point where the Transmission Owner Interconnection Facilities connect to the bus at the Flanigan switching station.
- ii. The Point of Change of Ownership between the Interconnection Customer and Transmission Owner occurs at the arbor connection for hardware and shield wire, the 4-hole pad for conductor, and the splice point at the base of

the arbor for OPGW. Transmission Owner will provide hardware to secure OPGW to the arbor leg and splicing of fiber optic cables inside the Transmission Owner's substation.

- iii. The metering point will be at the 138 kV leadline terminal in the new Flanigan switching station.

(b) Interconnection Customer Interconnection Facilities to be constructed by Interconnection Customer

Interconnection Customer shall construct, own, and maintain the Interconnection Customer Interconnection Facilities. These facilities shall include

- Approximately 0.094 miles of 954 kcmil ACSR 138 kV generator lead line.
- Interconnection Customer shall provide all connection hardware up to the arbor, OPGW, shield wire, and conductor, including a downward pointing NEMA four-hole terminal pad(s) (finished on both sides) for Transmission Owner connections at the Point of Change of Ownership.
- The Interconnection Customer OPGW shall comply with the Transmission Owner's requirements during the design phase of the work.
- Customer shall install and maintain conductor, hardware, shield wire, and OPGW with prearranged escorted substation access provided by the Transmission Owner.

Interconnection Customer shall coordinate with Transmission Owner on final physical connection logistics following GIA execution. In accordance with Section 5.12 of the GIA, Transmission Owner grants Interconnection Customer a license or easement to construct, operate, maintain, repair, test (or witness testing), inspect, replace, or remove facilities and equipment within or upon the lands of the Transmission Owner as may be required under the terms of this GIA. Interconnection Customer agrees to coordinate and meet all security and safety requirements of the Transmission Owner prior to access inside the fence line of any Transmission Owner facility. All Interconnection Customer transmission structures must be at least 70 feet from the station fence.

(c) Transmission Owner Interconnection Facilities (including metering equipment) to be constructed by Transmission Owner

The Transmission Owner Interconnection Facilities will consist of one 138 kV terminal in the Flanigan switching station. The terminal will consist of all necessary terminal equipment to connect the J859 leadline to the Flanigan switching station bus. See Exhibit A2.

Major Items

- One (1) 138 kV steel dead-end arbor structure
- One (1) 138kV Motor Operated Disconnect Switch, 2000A
- Three (3) 138 kV Surge Arresters

- Three (3) 138 kV Potential/Voltage Transformers
- Three (3) 138 kV Current Transformers
- One (1) Line Relay panel (SEL 411L and SEL 311C)
- One Fiber Patch Panel Housing, fiber splice box, and fiber termination in the control house
- Revenue Metering
- Bus and Fittings: five inch aluminum tube and portions of 1590 AAC (2) wire conductor with bolted aluminum bus connectors, fittings, and terminals
- Insulators: High strength porcelain station post insulators
- Foundations: Designed per Transmission Owner standard design criteria
- Structures: Steel tapered tube style

Total Estimated Cost: **\$ 775,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$. The J859 project may be required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

3. Network Upgrades

(a) Stand-Alone Network Upgrades to be installed by Transmission Owner Flanigan Switching Station

The new Flanigan switching station will be located in Cass County, Illinois. It will be on the south side of Edgewood Drive adjacent to the west side of the Meredosia East – Frederick North segment of the Ipava-Meredosia East 138 kV transmission line right-of-way. The approximate GPS coordinates are 39°58'41" North, 90°27'55" West.

The switching station will be a ring bus arrangement with three line terminal positions and provisions for one additional future terminal position. The future terminal position is not included in the scope or cost listed in this GIA, will be funded by whatever entity drives the need for the future installation. The existing Ipava-Meredosia East 138 kV transmission line will be cut and the new ends terminated at two line terminal positions in the switching station. The J859 Generating Facility will interconnect at the third terminal position.

The Flanigan switching station will be constructed adjacent to and on the west side of the Meredosia East – Frederick North segment of the Ipava Meredosia East 138 kV transmission line. The property for the site will be purchased by the Interconnection Customer and quit claimed to the Transmission Owner. The Interconnection Customer will bear the full cost and responsibility for property acquisition, site grading to Transmission Owner specifications, constructing and

furnishing an access road, permitting, right of way, and all other costs associated with acquiring the necessary real estate for the station.

An estimated 9 acres must be provided to the Transmission Owner. All Interconnection Customer facilities must be constructed outside of this area.

Major Items:

- Two (2) 138 kV steel dead-end arbor structures
- Three (3) 138 kV Gas Circuit Breakers, 3000A, 40kA interrupting capability
- Two (2) 138 kV Motor Operated Disconnect Switches, 2000A
- Seven (7) 138 kV Disconnect Switches, 3000A
- Six (6) 138 kV Coupling Capacitor Voltage Transformers
- Nine (9) 138 kV Surge Arresters
- One (1) Breaker Control and Relay Panel (SEL 351S)
 - AC Station Service: Two (2) station service voltage transformers
- Bus and Fittings: Five inch aluminum tube with portions of 2500AAC (2) wire and 1590AAC (2) wire conductor with bolted aluminum bus connectors, fittings, and terminals
- Insulators: High strength porcelain station post insulators
- Ground Grid: Designed per Transmission Owner standards utilizing buried copper wire and exothermic welds
- Fence: Standard chain link fencing with seven foot fabric, three strands of barbed wire, and reinforcement cables
- Prefabricated Steel Control Enclosure containing:
 - Relaying and Control: Two (2) line protection relay panels, three (3) breaker control panels, one (1) RTU panel, one (1) communications panel, one (1) fiber panel, and one (1) network panel
 - DC Station Service: One (1) 125 volt battery, two (2) battery chargers, and two (2) DC distribution panels
 - AC Station Service Equipment: One (1) automatic AC transfer switch and three (3) AC distribution panels

Total Estimated Cost: **\$ 6,441,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

(b) Network Upgrades to be installed by Transmission Owner

Transmission Owner shall construct the following Network Upgrades:

i. Split and Terminate the Ipava-Meredosia East 138 kV Transmission Line

Split the existing Ipava-Meredosia East 138 kV transmission line and terminate at the new Flanigan switching station.

Transmission Owner will install two wood heavy angle transmission structures in-line with the existing line. The existing conductor will be dead-ended on these structures and new conductor will be run from these structures to Flanigan switching station arbor structures. Jumpers will be installed at the dead-end structures to connect the existing line conductor to the new tapping conductor.

Major Items:

- Two (2) 138 kV wood heavy-angle structures
- Conductor, shield wire, and OPGW
- Typical 138 kV insulators
- Compression type connectors

Total Estimated Cost: **\$ 266,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

ii. Upgrade Relaying at Meredosia East Substation

Replace incompatible equipment with new equipment that will protect the new line created between the new Flanigan switching station and the Meredosia East substation. Transmission Owner will install a new 138 kV relay and control panel at the Meredosia East substation for the line to the Flannigan Switching Station.

Major Items:

- One (1) Relay and Control Panel

Total Estimated Cost: **\$ 261,000 ***

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

(c) Shared Network Upgrade(s) to be funded by Interconnection Customer

None

4. System Protection Facilities

(a) System Protection Facilities not listed in Section 2 or 3 to be constructed by Interconnection Customer

None

(b) System Protection Facilities not listed in 2 or 3 to be constructed by Transmission Owner

None

5. Distribution Upgrades

None

6. Generator Upgrades

None

7. Contingency List

See Exhibit A10.

8. Affected System Upgrades

Interconnection Customer is responsible to enter into Facilities Construction Agreement(s) and/or Multi-Party Facilities Construction Agreement(s) with Affected System Owner(s) for the following upgrades:

Ameren Transmission Company of Illinois (ATXI)

- ATXI will install a new 138 kV relay and control panel at the Ipava substation for the line to the Flanigan switching station.

9. Common Use Upgrades

None

10. Additional Approvals

Construction of the Transmission Owner's Interconnection Facilities is conditioned on receipt by Transmission Owner of approval from any jurisdiction having authority over the construction. No approvals, except approvals for outages, are contemplated at this time.

11. Cost Responsibility:

Interconnection Customer and Transmission Owner hereby acknowledge and agree that the costs listed in this appendix are only estimates. Interconnection Customer shall pay Transmission Owner for all actual costs associated with Transmission Owner's installation of Transmission Owner's Interconnection Facilities, including any applicable direct or indirect taxes or tax-related gross-up.

11.1 Cost Estimates

11.1.1 Interconnection Customer's total estimated cost for the installation of Interconnection Customer's Interconnection Facilities under this GIA has not been provided by the Interconnection Customer.

11.1.2 Interconnection Customer's total estimated cost for the installation of Transmission Owner's Interconnection Facilities under this GIA is \$775,000.

11.1.3 Interconnection Customer's total estimated cost for the installation of Network Upgrades and Stand Alone Network Upgrades under this GIA is \$ 6,968,000.

11.1.4 Interconnection Customer's total estimated cost for the installation of System Protection Facilities under this GIA is \$0.

11.1.5 Interconnection Customer's total estimated cost for the installation of Distribution Upgrades under this GIA is \$0.

11.1.6 Interconnection Customer's total estimated cost for the installation of Generator Upgrades under this GIA is \$0.

11.2 Transmission Owner Election to Fund the Capital for the Network Upgrades.

As provided under Article 11.3 of this GIA, Transmission Owner has elected to fund the capital for the Network Upgrades to be constructed under this GIA. Pursuant to the Tariff, Interconnection Customer remains ultimately responsible for the costs of Network Upgrades and pursuant to Article 11.6 of the GIA, Interconnection Customer remains responsible for providing security to Transmission Owner.

In accordance with the milestones set forth in Appendix B, Transmission Owner and Interconnection Customer will establish a service agreement between the Interconnection Customer and the Transmission Owner, pursuant to which the Interconnection Customer will pay the Transmission Owner's revenue requirement associated with Network Upgrades as identified in Exhibit A9 to this

GIA (the “Revenue Requirement”). The service agreement shall be filed with FERC for FERC’s acceptance, either on an executed or unexecuted basis, as set forth in the milestones.

12. Exhibits

The following exhibits are included:

- A1 Interconnection Customer One-Line Diagram and Site-Map
 - A1-1: Interconnection Customer One-Line Diagram
 - A1-2: Interconnection Customer Generating Facility Site Map
- A2 Transmission Owner Flanigan Switching Station One-Line Diagram
- A3 Transmission Owner Flanigan Switching Station Arrangement Drawing
- A4 {Reserved}
- A5 Cost of Facilities to be Constructed by Transmission Owner
- A6 Detailed Cost of Facilities to be Constructed by Transmission Owner
- A7 Cost of Facilities to be Constructed by Interconnection Customer
- A8 Detailed Cost of Facilities to be Constructed by Interconnection Customer
- A9 Network Upgrades to be Financed by Transmission Owner
- A10 Contingent Facilities
- A11 Interconnection Customer Milestones
- A12 Construction and Coordination Schedules
- A13 Permits, Licenses, Regulatory Approvals and Authorization
- A14 Interconnection and Operating Guidelines

Exhibit A1: Interconnection Customer One-Line Diagram and Site Map

A1-1: Interconnection Customer One-Line Diagram

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A1-2: Interconnection Customer Generating Facility Site Map

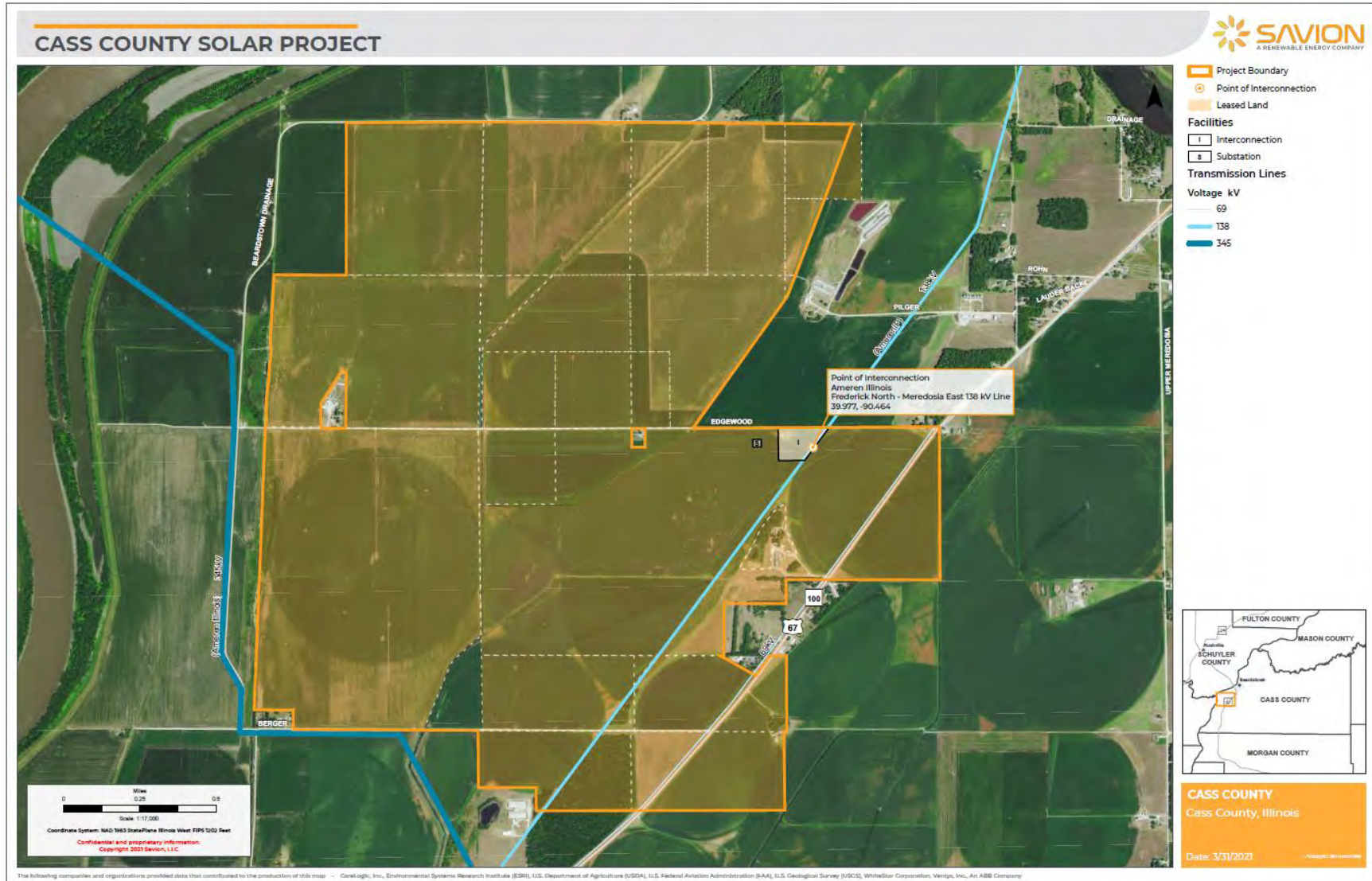


Exhibit A2: Transmission Owner Flanigan Switching Station One Line Diagram

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Exhibit A3: Transmission Owner Flanigan Switching Station Arrangement Drawing

CUI//CEII MATERIAL – DO NOT RELEASE

Exhibit A4: {Reserved}

Exhibit A5: Cost of Facilities to be Constructed by Transmission Owner

Type	Facilities to be Constructed by the Transmission Owner	Cost Estimate *
Interconnection Facilities	Construct Transmission Owner's Interconnection Facilities at the Flanigan switching station.	\$ 775,000**
Stand Alone Network Upgrade	Construct the Flanigan switching station.	\$ 6,441,000
Network Upgrade	Split the Ipava-Meredosia East 138 kV transmission line to connect the Flanigan switching station.	\$ 266,000
Network Upgrade	Upgrade relaying at the Meredosia East substation.	\$ 261,000
TOTAL		\$ 7,743,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

** The J859 project may be required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

Exhibit A6: Detailed Cost of Facilities to be Constructed by Transmission Owner**Table A6-1: Construct Transmission Owner's Interconnection Facilities ***

Engineering, Drafting, & Project Management	\$ 196,000
Material	\$ 223,000
Construction & Construction Oversight	\$ 267,000
Indirect Overheads	\$ 89,000
Total	\$ 775,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$. The J859 project is required to document that it satisfies the 'safe harbor' requirements for tax gross-up under IRS Notice 2016-36.

Table A6-2: Construct the Flanigan Switching Station **

Engineering, Drafting, & Project Management	\$ 744,000
Material	\$ 2,468,000
Construction & Construction Oversight	\$ 2,315,000
Indirect Overheads	\$ 914,000
Total	\$ 6,441,000

Table A6-3: Split the Ipava-Meredosia East 138 kV line to connect the Flanigan Switching Station **

Engineering, Drafting, & Project Management	\$ 58,000
Material	\$ 71,000
Construction & Construction Oversight	\$ 98,000
Indirect Overheads	\$ 39,000
Total	\$ 266,000

Table A6-4: Upgrade Relaying at Meredosia East Substation **

Engineering, Drafting, & Project Management	\$ 18,000
Material	\$ 132,000
Construction & Construction Oversight	\$ 83,000
Indirect Overheads	\$ 28,000
Total	\$ 261,000

** Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

Exhibit A7: Cost of Facilities to be Constructed by Interconnection Customer

Type	Facilities to be Constructed by Interconnection Customer	Cost Estimate
Interconnection Customer Interconnection Facilities	No information about Interconnection Customer's Interconnection Facilities have been provided by the Interconnection Customer.	Not Available
Generating Facility Collector Substation	New 34.5/138 kV collector substation for collection of solar farm generation.	Not Available
Network Upgrades	No Network Upgrades are to be constructed by the Interconnection Customer.	Not Applicable
Stand Alone Network Upgrades	No Stand Alone Network Upgrades are to be constructed by the Interconnection Customer.	Not Applicable

Exhibit A8: Detailed Cost of Facilities to be Constructed by Interconnection Customer

The Interconnection Customer has not provided cost estimates for Interconnection Facilities to be constructed by the Interconnection Customer for inclusion in this report.

No Network Upgrades or Stand Alone Network Upgrades are to be constructed by the Interconnection Customer.

Exhibit A9: Network Upgrades to be Financed by Transmission Owner

Type	Facilities to be Constructed by the Transmission Owner	Cost Estimate *
Stand Alone Network Upgrade	Construct the Flanigan switching station.	\$ 6,441,000
Network Upgrade	Split the Ipava-Meredosia East 138 kV transmission line to connect the Flanigan switching station.	\$ 266,000
Network Upgrade	Upgrade relaying at Meredosia East substation.	\$ 261,000
TOTAL		\$ 6,968,000

* Estimated costs are in 2019 dollars, do not include tax gross-up or escalation, and are accurate to $\pm 20\%$.

Exhibit A10: Contingent Facilities

Higher queue and/or same DPP group study Interconnection Requests that may create contingencies pursuant to Article 11.3.1 are listed in tables below. Table A10-1 describes transmission assumptions modeled in the studies that were deemed necessary to allow for the Interconnection Service as described in Appendix A of this GIA and is not related to Article 11.3.1, i.e., does not describe projects associated with a higher queued and/or same DPP group study Interconnection Request. Nevertheless, if the transmission assumptions are not completed or are significantly modified, the Interconnection Service granted under this GIA may be restricted until such time as the Interconnection Customer funds a study to determine the applicable ERIS and NRIS level that results due to the changes in Table A10-1.

The list of higher-queued and/or same DPP group study projects in Tables A10-2 and A10-3, not yet in service, were included in the interconnection study for queue project J859. However, a project's inclusion in the System Impact Study does not necessarily mean that these facilities would be contingencies for the Interconnection Customer's Generating Facility. In the event that any of the higher queued and/or same DPP group study generators were to drop out, then the Interconnection Customer may be subject to restudy pursuant to Article 11.3.2.

Table A10-1 Transmission Assumptions

None

Table A10-2 Higher Queued Projects

DPP Cycle	Current Status	Project	Fuel	Request	Capacity MW
DPP-2016-FEB-Central	Under Construction	J351	Gas	NRIS	715
DPP-2016-AUG-Central	Under Construction	J446	Wind	NRIS	200
DPP-2016-AUG-Central	Under Construction	J456	Wind	NRIS	150
DPP-2016-FEB-Central	Under Construction	J468	Wind	NRIS	202
DPP-2016-AUG-Central	Under Construction	J474	Wind	NRIS	144
DPP-2016-AUG-Central	Under Construction	J513	Wind	NRIS	100.05
DPP-2016-FEB-Central	Under Construction	J515	Wind	ERIS	400
DPP-2016-AUG-Central	Under Construction	J641	Solar	NRIS	140
DPP-2016-AUG-Central	Under Construction	J643	Solar	NRIS	175
DPP-2016-AUG-Central	Under Construction	J644	Solar	NRIS	110
DPP-2017-FEB-Central	Under Construction	J740	Wind	NRIS	200
DPP-2017-FEB-Central	Under Construction	J753	Solar	NRIS	100
DPP-2017-FEB-Central	Under Construction	J754	Wind	NRIS	303.6
DPP-2017-FEB-Central	Under Construction	J756	Wind	NRIS	202.4
DPP-2017-FEB-Central	Under Construction	J757	Wind	NRIS	303.6
DPP-2017-FEB-Central	Under Construction	J759	Solar	NRIS	70

DPP Cycle	Current Status	Project	Fuel	Request	Capacity MW
DPP-2017-FEB-Central	Under Construction	J762	Solar	NRIS	200
DPP-2017-FEB-Central	Under Construction	J783	Solar	NRIS	70

Table A10-3 Similar Queued Projects

DPP Cycle	Current Status	Project	Fuel	Request	Capacity (MW)	ERIS/NRIS (MW)
DPP-2017-AUG-Central	Phase 3	J715	Wind	NRIS	98	98
DPP-2017-AUG-Central	Phase 3	J750	Wind	NRIS	150	150
DPP-2017-AUG-Central	Phase 3	J800	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J805	Solar	NRIS	199	199
DPP-2017-AUG-Central	Phase 3	J808	Solar	NRIS	99	99
DPP-2017-AUG-Central	Phase 3	J811	Solar	NRIS	99	99
DPP-2017-AUG-Central	Phase 3	J813	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J815	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J817	Solar	NRIS	139	139
DPP-2017-AUG-Central	Phase 3	J826	Wind	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J829	Solar	NRIS	250	250
DPP-2017-AUG-Central	Phase 3	J837	Wind	NRIS	200.1	200.1/80
DPP-2017-AUG-Central	Phase 3	J838	Wind	NRIS	100	100/40
DPP-2017-AUG-Central	Phase 3	J842	Wind	NRIS	200	200
DPP-2017-AUG-Central	Phase 3	J843	Wind	NRIS	200	200
DPP-2017-AUG-Central	Phase 3	J844	Wind	ERIS	147	147/0
DPP-2017-AUG-Central	Phase 3	J845	Wind	NRIS	120	120/52
DPP-2017-AUG-Central	Phase 3	J847	Solar	NRIS	90	90

DPP Cycle	Current Status	Project	Fuel	Request	Capacity (MW)	ERIS/NRIS (MW)
DPP-2017-AUG-Central	Phase 3	J848	Wind	NRIS	235	235
DPP-2017-AUG-Central	Phase 3	J853	Solar	NRIS	149	149
DPP-2017-AUG-Central	Phase 3	J856	Solar	NRIS	80	80
DPP-2017-AUG-Central	Phase 3	J883	Wind	NRIS	80	80
DPP-2017-AUG-Central	Phase 3	J884	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J903	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J912	Solar	NRIS	100	100
DPP-2017-AUG-Central	Phase 3	J913	Solar	NRIS	200	200/160
DPP-2017-AUG-Central	Phase 3	J949	Solar	NRIS	200	200/170

Exhibit A11: Interconnection Customer Milestones

See Appendix B.

Exhibit A12: Construction and Coordination Schedules

See Appendix B.

Exhibit A13: Permits, Licenses, Regulatory Approvals and Authorization

Permits required for the construction of the Flanigan switching station shall be the responsibility of the Interconnection Customer. This includes, but is not limited to, building permits, roadway access, wetlands permit, storm water run-off permit, Department of Transportation permits, and county zoning permits.

Permits required for the transmission line and remote terminal Network Upgrades shall be the responsibility of the Transmission Owner.

Exhibit A14: Interconnection and Operating Guidelines

Power Factor Range

FERC requires that an interconnecting generator must be able to operate over a power factor range of 0.95 lagging (supplying VARs to the system) to 0.95 leading (absorbing VARs from the system) at the high-voltage side of the Generating Facility step-up transformer.

Low Voltage Ride Through

All Solar PV generators must conform to the IEEE 1547 standard for Low Voltage Ride Through.

Dynamic Reactive Power Capability

The solar PV generators chosen for the J859 project are expected to provide dynamic reactive capability. The reactive capability of a solar PV generator is a function of the active power and terminal voltage.

Operating to a Specified Voltage or VAR Schedule

The J859 solar generation facility will be required to operate to a voltage schedule estimated to be 142 kV to 145 kV (1.029 to 1.05 PU) at the POI. The specific voltage schedule applicable to J859 will be provided at the time of startup by the Transmission Owner's Transmission Operations group.

NERC Reporting Standards

Complete and accurate modeling data is essential to the planning process. The following items are critical for the accuracy of data and are addressed by these requirements:

- field verifications of modeling parameters
- clear statement of data requirements
- protection system settings that impact system studies

In accordance with the periodicity established within the current NERC standards, the J859 solar generating facility will ensure that compliance with all applicable NERC Modelling Standards has been met. Applicability of these standards to the J859 solar generating facility will be determined based on the applicability criteria in the current version of the NERC standards. These standards are subject to change. For reference, at the time of signing, the current System Modelling Standards that may be applicable to the J859 solar generating facility include:

- MOD-025 Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability
- MOD-026 Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions
- MOD-027 Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions
- MOD-032 Data for Power System Modeling and Analysis
- PRC-024 Generator Frequency and Voltage Protective Relay Settings

Harmonic Requirements

The harmonic content of the voltage and current waveforms injected into the Transmission Owner's electric system by the Interconnection Customer's Generating Facility shall be limited to levels that are in accordance with the latest version of IEEE Standard 519 or its replacement, and which will not cause excessive distortion of Transmission Owner's waveform, telephone interference, carrier interference, or equipment operating problems for Transmission Owner or other users of the transmission system. Interconnection Customer will, if required by Transmission Owner and/or Good Utility Practice, reduce or eliminate, at Interconnection Customer's expense, the existence of any excessive harmonics caused by the operation of the Interconnection Customer's Generating Facility.

Operating Guidelines

None required

Appendix B To GIA

Milestones

1. Resolution of Conflicts:

The Parties acknowledge that Section 30.2 provides that conflicts between the Appendices and the body of the GIA are to be resolved in favor of the body of the GIA. The Parties acknowledge that the items set forth below are intended to explain the provisions of the GIA and to set forth the specific agreement of the Interconnection Customer and Transmission Owner relating to certain aspects of the agreement that are not resolved by the terms of the GIA.

2. Selected Option pursuant to Article 5.1:

Interconnection Customer selects the Standard Option as described in Article 5.1.1. Articles 5.1.2, 5.1.3, and 5.1.4 shall not apply to this GIA.

3. Milestones:

The description and date entries listed in the following tables are provided solely for the convenience of the Parties in establishing their applicable Milestones consistent with the provisions of this GIA and the GIP. The failure of Transmission Owner to meet any date on this milestone schedule shall not result in any liability on the part of Transmission Owner if such failure is not the result of the negligence or willful misconduct of Transmission Owner.

4. Commercial Operation Date:

The Interconnection Customer's desired Commercial Operation Date for the Generating Facility is December 31, 2024, based on a desired In-Service Date of September 1, 2024, which is achievable for a GIA executed in the Definitive Planning Phase 3 completion window.

Ameren (Transmission Owner) is not able to complete construction of the Transmission Owner's Interconnection Facilities and Network Upgrades by the dates originally specified in the Milestones table. As provided in Section 5.1.1 of the GIA, Ameren commits to take Reasonable Efforts to meet the earliest dates thereafter, which Ameren and the Interconnection Customer intended to agree-upon and memorialize in a revised Milestones Table in this GIA.

Interconnection Customer announced an additional delay of In-Service Date and Commercial Operation Date to June 1, 2024, and December 31, 2024, respectively. Transmission Owner will accordingly delay the in-service date of its facilities to be constructed under this GIA to June 1, 2024.

A. Interconnection Customer and Transmission Owner Milestones

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
1	Anticipated Effective Date of the GIA.	Estimated to be January 10, 2020. COMPLETED		
2	Transmission Owner to enter Network Upgrade information into Transmission Provider's MOD and MTEP databases.	Within ten (10) Business Days of the Effective Date of the GIA. COMPLETED		
3	Interconnection Customer to provide to Transmission Provider (a) evidence of continued Site Control after execution of this GIA (GIP 7.2.2) at Interconnection Customer's collection substation or (b) post \$250,000 non-refundable additional security. (GIP Article 11.3).	As may be agreed to by the Parties. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
4	Interconnection Customer to provide to Transmission Provider evidence of one or more of the following milestones being achieved: (a) execution of contract for fuel supply transport, (b) execution of contract for cooling water supply, (c) execution of contract for engineering procurement of major equipment or construction, (d) execution of contract for sale of electric energy or capacity; or (e) documentation of application for air, water or land use permits. (GIP 11.3).	Within one hundred eighty (180) Calendar Days of the Effective Date of the GIA. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
5	<p>Interconnection Customer will coordinate with the Transmission Provider to provide Transmission Owner an Initial Payment equal to 20% of the estimated cost of Transmission Owner Interconnection Facilities and Network Upgrades to be constructed under this GIA. The amount of the Initial Payment will be \$1,548,600. Interconnection Customer to make payment of \$461,770 and MISO to transfer milestone deposit balance of \$1,086,830 to cover payment and security obligation of this milestone. (GIA Article 11.5, Option 1)</p> <p>Ameren will allocate \$775,000 to the estimated cost of the Transmission Owner Interconnection Facilities and \$773,600 to security for the Network Upgrades.</p> <p>Security provided will be in the form of cash, letter of credit acceptable to Transmission Owner, or acceptable guarantee from an investment grade guarantor. (GIA Article 11.6).</p>	<p>Within the later of:</p> <p>(i) forty-five (45) Calendar Days of the execution of the GIA by all Parties, or</p> <p>(ii) forty-five (45) Calendar Days of acceptance by FERC if the GIA is filed unexecuted and the payment is being protested by Interconnection Customer.</p> <p>Estimated to be February 12, 2020.</p> <p>COMPLETED</p>	\$ 775,000	\$ 773,600

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
6	Interconnection Customer to provide to Transmission Owner relaying design and specifications for the Interconnection Customer's Interconnection Facilities for review.	At least thirty (30) Calendar Days prior to Transmission Owner's start of engineering and design, Milestone 10. Estimated to be August 31, 2020. COMPLETED		
7	Transmission Owner to review and comment on Interconnection Customer's relaying design and specifications for Interconnection Customer's Interconnection Facilities.	Within twenty (20) Business Days of receipt of the Interconnection Customer's relaying design and specifications, Milestone 6. COMPLETED		
8	Transmission Owner to provide to Interconnection Customer a specification package for site preparation for the Flanigan switching station.	Provided in the J859 Interconnection Facilities Study report, Exhibit A16.		
9	Interconnection Customer to provide notification to Transmission Owner on desire to proceed with current Point of Interconnection or switch to alternative Ameren proposed Point of Interconnection.	August 31, 2020 COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
10	Interconnection Customer to provide to Transmission Owner additional security for the engineering and design, drafting, and project support (including associated overheads) of the Network Upgrades to be constructed by Transmission Owner under the GIA.	No later than five (5) Business Days prior to Transmission Owner's start of engineering and design, Milestone 12. Estimated to be no later than September 18, 2020, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		\$ 181,600
11	Interconnection Customer to provide to Transmission Owner a property survey showing physical benchmarks, a topographic survey, a grading package and civil design for the Flanigan switching station site for review, and access rights and a truck access route to the Flanigan switching station property for soil borings and ground resistance testing.	Prior to or concurrent with Transmission Owner's start of engineering and design, Milestone 12. Estimated to be no later than September 21, 2020, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
12	Transmission Owner to begin engineering and design of Transmission Owner's Interconnection Facilities and Network Upgrades to be constructed by Transmission Owner under this GIA.	<p>Upon receipt of the additional security, Milestone 9, or the Flanigan switching station site boundary and topographic surveys, grading package and civil design, and access rights and a truck access route, Milestone 11, whichever occurs later.</p> <p>Estimated to be no later than September 28, 2022, in order to meet the June 1, 2024 In Service Date, Milestone 30.</p>		
13	Transmission Owner to review and comment on Interconnection Customer's grading package and civil design for the Flanigan switching station.	<p>Within twenty (20) Business Days of receipt of Interconnection Customer's grading package and civil design, Milestone 11.</p> <p>COMPLETED</p>		
14	Interconnection Customer to provide to Transmission Owner initial design and specifications for Interconnection Customer's Interconnection Facilities for comment. (GIA Article 5.10.1).	At least one hundred eighty (180) Calendar Days prior to Initial Synchronization Date, Milestone 31.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
15	Transmission Owner to provide to Interconnection Customer comments on the initial design and specifications for Interconnection Customer's Interconnection Facilities. (GIA Article 5.10.1).	Within thirty (30) Calendar Days after submission of Interconnection Customer's initial design and specifications, Milestone 14.		
16	Interconnection Customer to provide to Transmission Owner additional security for long lead material and equipment procurement (including associated overheads) for the Network Upgrades constructed by Transmission Owner under this GIA.	No later than five (5) Business Days prior to Transmission Owner's start of procurement, Milestone 17. Estimated to be no later than February 19, 2021, in order to meet the June 1, 2024, In Service Date, Milestone 30. COMPLETED		\$ 3,107,200
17	Transmission Owner to begin procurement for long lead material and equipment for the facilities to be constructed by Transmission Owner under the GIA. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1.)	Upon receipt of the additional security from Interconnection Customer, Milestone 16. Estimated to be no later than February 26, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
18	<p>Interconnection Customer and Transmission Owner to each provide the other with all Certificates of Insurance required by the GIA. (GIA Article 18.4.9).</p>	<p>Initially thirty (30) Calendar Days prior to the start of construction of the facilities to be installed or modified under this GIA, Milestone 19 for Interconnection Customer and Milestone 22 for Transmission Owner, and thereafter within ninety (90) Calendar Days of end of fiscal year or insurance renewal date.</p>		
19	<p>Interconnection Customer to begin grading and site preparation for the Flanigan switching station.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Estimated to be June 1, 2023, in order to meet the site turnover date, Milestone 20.</p>		
20	<p>Interconnection Customer to furnish to Transmission Owner a fully graded site, the deed to the property, a usable entrance road, permits, and permit approvals for the construction of the Flanigan switching station.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Prior to or concurrent with Transmission Owner's start of construction, Milestone 22.</p> <p>Estimated to be no later than September 3, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
21	<p>Interconnection Customer to provide to Transmission Owner additional security for construction (including associated overheads) of the Network Upgrades to be constructed under this GIA.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>No later than five (5) Business Days prior to Transmission Owner's start of construction, Milestone 22.</p> <p>Estimated to be no later than September 3, 2023, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		\$ 2,905,600
22	<p>Transmission Owner to begin construction of the facilities to be constructed by Transmission Owner under the GIA.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>Upon transfer of the site, Milestone 19, or receipt of Interconnection Customer's additional security, Milestone 20, whichever occurs later.</p> <p>Estimated to be no later than September 10, 2023, in order to meet the June 1, 20232024, In Service Date, Milestone 30.</p>		
23	<p>Interconnection Customer to install its 138 kV leadline connection to the Flanigan switching station arbor.</p> <p>Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).</p>	<p>No later than May 13, 2024, in order to meet the June 1, 2024, In Service Date, Milestone 30.</p>		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
24	Interconnection Customer to provide to Transmission Owner final design and specifications for Interconnection Customer's Interconnection Facilities, protection design, SCADA, and communication equipment for comment. (GIA Article 5.10.1).	Not later than ninety (90) Calendar Days prior to the Initial Synchronization Date, Milestone 31.		
25	Transmission Owner to provide to Interconnection Customer comments on the final design and specifications for Interconnection Customer's Interconnection Facilities, protection scheme, SCADA, and communication equipment. (GIA Article 5.10.1).	Within thirty (30) Calendar Days of receipt of Interconnection Customer's final design and specifications, Milestone 24.		
26	Interconnection Customer to provide to Transmission Owner and Transmission Provider updated Generating Facility information. (GIA Article 24.3).	Not later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date, Milestone 32.		
27	Interconnection Customer to provide to Transmission Owner and Transmission Provider notification in writing of the Local Balancing Authority where Generating Facility is located. (GIA Article 9.2).	Not later than three (3) months prior to the Initial Synchronization Date, Milestone 31.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
28	Interconnection Customer to enter into an agreement with the applicable Local Balancing Authority for control area metering.	Not later than one hundred eighty (180) Calendar Days prior to Commercial Operation Date, Milestone 33. Not applicable if the Local Balancing Authority is Ameren Illinois.		
29	Transmission Owner to connect the Flanigan switching station to the existing Ipava-Meredosia East 138 kV transmission line. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1).	No later than May 2, 2024, in order to meet the June 1, 2024, In Service Date, Milestone 30.		
30	In Service Date Transmission Owner to complete Transmission Owner's Interconnection Facilities and commission the Flanigan switching station. Interconnection Customer to complete the J859 solar farm facilities to the extent required to take backfeed from the Flanigan switching station. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Articles 5.7 and 5.1.1).	Estimated to be June 1, 2024. Interconnection Customer requests June 1, 2024.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
31	Initial Synchronization Date. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the In Service Date, Milestone 30. Interconnection Customer requests September 1, 2024.		
32	Trial Operation Date. Delayed eighteen months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the Initial Synchronization Date, Milestone 31. Interconnection Customer requests September 1, 2024.		
33	Commercial Operation Date. Delayed twenty four months in accordance with Interconnection Customer's delay of In-Service Date. (GIA Article 5.7).	Not earlier than the Trial Operation Date, Milestone 32. Interconnection Customer requests December 31, 2022.*		
34	Interconnection Customer to provide Transmission Owner and Transmission Provider "as built" drawings, information, and documents regarding Interconnection Customer's Interconnection Facilities. (GIA Article 5.10.3).	Not later than one hundred twenty (120) Calendar Days following the Commercial Operation Date, Milestone 33.		
35	Transmission Owner to provide to Interconnection Customer and Transmission Provider "as built" drawings, information, and documents regarding Transmission Owner's Interconnection Facilities. (GIA Article 5.11).	Not later than one hundred twenty (120) Calendar Days following the Commercial Operation Date, Milestone 33.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
36	Transmission Owner to provide to Interconnection Customer final cost invoices. (GIA Article 12.2 et seq.).	Not later than six (6) months following the completion of all facilities to be constructed under the GIA, Milestone 30.		
37	In the event the Interconnection Customer makes any modifications to the design of the site layouts or interconnection facility routes after execution of this GIA, Interconnection Customer shall notify the Parties of such changes immediately upon identifying the need for such changes. After providing such notification, the Interconnection Customer shall provide to Transmission Provider evidence of continued Site Control for land sufficient to accommodate the changes in site layouts and/or interconnection facility routes (GIP 7.2.2).	90 Calendar Days after Interconnection Customer provides notice to Parties.		
38	Transmission Owner and Interconnection Customer to enter into a Facilities Service Agreement under which Transmission Owner will recover from Interconnection the revenue requirement for its investment in the Network Upgrades to be constructed under the GIA.	No later sixty (60) days prior to the estimated In Service Date of the Network Upgrades to be constructed under this GIA, Milestone 30.		
39	Transmission Owner to release Interconnection Customer's security for the estimated cost of the Network Upgrades to be constructed under the GIA.	Simultaneous with Transmission Owner's receipt of security from Interconnection Customer for the Network Upgrades under the Facilities Service Agreement.		

NO.	MILESTONES	SCHEDULE DATE	PAYMENT AMOUNT	SECURITY AMOUNT
		TOTAL	\$ 775,000	\$ 6,968,000

* Modified from the original Commercial Operation Date of September 1, 2020, contained in the Interconnection Request. Interconnection Customer expects that it will need to utilize a portion of the three-year maximum extension allowed past the December 31, 2022, Commercial Operation Date listed in this GIA to achieve commercial operation. Interim milestones therefore have been calculated based on such later anticipated Commercial Operation Date of December 31, 2024.

The schedule:

- is estimated and is not guaranteed.
- may be impacted by poor weather.
- is based on five business days per week instead of seven business days used for the milestone calendar.
- assumes Transmission Provider and Transmission Owner conditions allow transmission outages as required and without delay.
- assumes the Interconnection Customer will provide the necessary information to the Transmission Owner in a timely manner such that it does not cause delays. This information includes details concerning the incoming line to the switching station pull off structure, details on the fiber optics and terminations, relay coordination, and other information that maybe necessary.
- assumes material lead times will be similar to recent purchases of similar equipment.
- assumes the Interconnection Customer and the Transmission Owner, as appropriate, have resolved permit, jurisdictional and regulatory issues prior to the scheduled start of construction.
- assumes the Interconnection Customer will furnish a completed and Transmission Owner approved access road to the interconnection switching station site prior to the start of Transmission Owner field activities.
- assumes the Interconnection Customer will furnish the interconnection switching station site fully prepared to Transmission Owner specifications in accordance with the milestones. Any delay in meeting this milestone will lead to a corresponding delay in meeting the In Service Date milestone.
- assumes the Interconnection Customer will provide to the Transmission Owner all necessary funding and information in accordance with the milestones so as to prevent delays in the schedule. This information may include details concerning the incoming line to the substation pull-off structure, details on the fiber optics and terminations, relay coordination, and other required information

B. Affected System Owner Milestones

Interconnection Customer is responsible to enter into Facilities Construction Agreement(s) and/or Multi-Party Facilities Construction Agreement(s) with Affected System Owner(s) for the following upgrades:

Ameren Transmission Company of Illinois (ATXI)

- ATXI will install a new 138 kV relay and control panel at the Ipava substation for the line to the Flanigan switching station.

C. Transmission Provider Milestones

No.	Description	Date
1	Transmission Provider to determine conditional limit for interconnection service.	Prior to Commercial Operation
2	Transmission Provider to provide Notice to the Parties when unconditional interconnection service is achieved. Unconditional Service requires completion of MTEP Contingent Facilities listed in Exhibit A10 and all Interconnection Studies.	Within 30 Calendar days of unconditional service being achieved.
3	Provide initial payment to Transmission Owner (GIA 11.5) in the amount of \$1,086,830 (Interconnection Customer to pay the remaining balance of \$461,770 to Transmission Owner).	Within 45 Calendar Days of the execution of the GIA. COMPLETED

Appendix C To GIA

Interconnection Details

1. The unique requirements of each generation interconnection will dictate the establishment of mutually agreeable Interconnection and/or Operating Guidelines that further define the requirements of this GIA. The Interconnection and/or Operating Guidelines applicable to this GIA consist of the following information. Additional detail may be provided through attachment to this Appendix C or through electronic means via the web address specified.

- (a) System Protection Facilities

The Transmission Owner along with the Interconnection Customer will construct a protective relaying scheme to protect the Transmission System from faults on the Interconnection Customer's Interconnection Facilities and faults on the Transmission Owner's Interconnection Facilities. The Interconnection Customer will be responsible for providing appropriate System Protection Facilities for the Interconnection Customer's Interconnection Facilities compatible with System Protection Facilities to be provided by the Transmission Owner at the Point of Interconnection. This scheme will be coordinated with and approved by Transmission Owner prior to implementation.

The 138 kV line position that will be connecting to the Interconnection Customer's leadline will have its own set of line protection relays. The line relay protection will consist of a SEL-411L and a SEL-311C both utilizing fiber optic communications for a line differential and permissive overreaching transfer trip scheme, respectively. Breaker failure relaying and reclosing will be accomplished with a SEL-351S.

The fiber optic cable required for the relaying will need to directly connect from the Transmission Owner's relays in the Flanigan Switching Station to identical Interconnection Customer owned relays at the Interconnection Customer's collector substation. The Interconnection Customer will supply and install the fiber optic cable.

One new remote terminal unit (RTU) will be installed to provide the Transmission Owner with supervisory control and remote indication of the Interconnection Customer's collector substation.

- (b) Communication requirements

- i. The Interconnection Customer is responsible to install all necessary equipment to transfer all required SCADA points to the Transmission Owner system control center(s) for equipment installed at the Interconnection Customer's Generating Facility substation upon specification of such communication protocol to the Interconnection Customer by the Transmission Owner. The Interconnection Customer will be responsible to install all necessary equipment to transfer all

required data for the required telemetry information to the Transmission Owner's system control center(s).

- ii. The Interconnection Customer is responsible for all operations and maintenance costs of all the required communications equipment located at the Interconnection Customer's Generating Facility substation required to transmit the required data to the Transmission Owner.

(c) Metering requirements

Interconnection revenue class metering equipment is installed for the Generation Facility by the Transmission Owner at the Transmission Owner's substation. Metering will be telemetered to the Interconnection Customer, Transmission Owner and Transmission Provider control centers via the SCADA system.

(d) Grounding requirements

Not used.

(e) Transmission Line and Substation Connection configurations

The Parties agree that the connections between the Interconnection Customer's Interconnection Facilities and Transmission Owner's Interconnection Facilities will be made in accordance with Transmission Owner's specifications.

(f) Unit Stability requirements

Not used;

(g) Equipment ratings

Transmission Owner will determine the individual equipment ratings for specific Transmission Owner's Interconnection Facilities. Interconnection Customer shall size the Interconnection Customer's Interconnection Facilities using Applicable Standards, Good Utility Practice and the information provided in the Transmission Owner design guide information, Interconnection Evaluation Study, or its equivalent, in order that the Interconnection Customer's Interconnection Facilities appropriately coordinates with the Transmission Owner's Interconnection Facilities.

(h) Short Circuit requirements

Transmission Owner will determine the required short circuit ratings for all Transmission Owner's Interconnection Facilities. Interconnection Customer agrees to provide appropriately sized or short circuit-rated Interconnection Customer's Interconnection Facilities comparable to those required by Transmission Owner using Applicable Standards, Good Utility Practice and the information provided in the

Transmission Owner design guide information document Interconnection Evaluation Study, or its equivalent.

(i) Synchronizing requirements

The Interconnection Customer's Interconnection Facilities will be backfed from the Transmission Owner's Interconnection Facilities utilizing the 138 kV breakers at the Interconnection Customer's Generating Facility substation. Transmission Owner may furnish transmission system bus potentials and bus voltage that may be used by the Interconnection Customer for synchronizing the Facility to Transmission Owner's transmission system. These potentials will be provided to the Interconnection Customer at the Transmission Owner's signal demarcation point.

(j) Generation and Operation Control requirements

The Interconnection Customer will install all necessary potential devices on its system to allow voltage control override to prevent high voltage conditions from occurring. Voltage control will override power factor in order to maintain safe and proper operation of the Transmission Owner's Transmission System as required by the standards of Transmission Owner, the Applicable Reliability Council and NERC, Good Utility Practice and documented in the Transmission Owner design guide information.

(k) Data provisions

Interconnection Customer will install all necessary equipment to monitor and send the required telemetry information to the Transmission Owner's and Transmission Provider's system control centers. The required data includes, but is not limited to: meter kW, kVAR, kWh, kVARh, breaker status. The Transmission Owner will provide detailed specifications to the Interconnection Customer for the appropriate communications protocol in the Transmission Owner design guide information.

(l) Energization inspection and testing requirements

Interconnection Customer will provide Transmission Owner with checkout records to document that Interconnection Customer has tested all protection systems and equipment for correct operation.

(m) Harmonic requirements

See Appendix A, Exhibit A14.

(n) Control equipment, if any

Appendix D To GIA

Security Arrangements Details

Infrastructure security of Transmission or Distribution System equipment and operations, as applicable, and control hardware and software is essential to ensure day-to-day Transmission and Distribution System reliability and operational security. The Commission will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission or Distribution System, as applicable, to comply with the recommendations provided by Governmental Authorities regarding Critical Energy Infrastructure Information (“CEII”) as that term is defined in 18 C.F.R. Section 388.113(c) and 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]

Midcontinent Independent System Operator, Inc.
Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

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 Calendar Day]**.

Thank you.

[Signature]

[Interconnection Customer Representative]

cc: Transmission Owner

Appendix F To GIA

Addresses for Delivery of Notices and Billings

Notices:

Transmission Provider:

MISO

Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

Transmission Owner:

Senior Vice President – Transmission
Ameren Services Company
1901 Chouteau Avenue, MC 04
PO Box 66149
St. Louis, MO 63166-6149

Interconnection Customer:

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

And

Director of Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa, KS 66219
Phone: 816-604-8458
Email: ccraven@savionenergy.com

Billings and Payments:

Transmission Provider:

MISO

Attn: Director, Transmission Access Planning
720 City Center Drive
Carmel, IN 46032

Transmission Owner:

Senior Vice President – Transmission
Ameren Services Company
1901 Chouteau Avenue, MC 04
PO Box 66149
St. Louis, MO 63166-6149

Interconnection Customer:

Accounts Payable
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 816-213-3561
Email: malexander@savionenergy.com

And

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission Provider:

Phone: (317) 249-5700
Email: misotap@misoenergy.org or
MISOTransmissionAccessPlanning@misoenergy.org

Transmission Owner:

Voice telephone – (314) 554-2981
Facsimile telephone – (314) 554-3066
Email address – SSchukar@ameren.com

Interconnection Customer:

Vice President Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa KS, 66219
Phone: 785-766-7613
Email: dsunderman@savionenergy.com

And

Director of Transmission
Cass County Solar Project, LLC
c/o Savion, LLC.
16105 West 113th Street, Suite 108
Lenexa, KS 66219
Phone: 816-604-8458
Email: ccraven@savionenergy.com

Appendix G To GIA

Interconnection Requirements for a Wind Generating Plant

Not Applicable to This GIA

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

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4-9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (*e.g.* Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

The following reactive power requirements apply only to a newly interconnecting wind generating plant that has completed a System Impact Study as of the effective date of the Final Rule establishing the reactive power requirements for non-synchronous generators in section 9.6.1 of this GIA (Order No. 827). A wind generating plant to which this provision applies shall maintain a factor within the range of 0.95 leading to 0.95 lagging, unless Transmission Provider has established different requirements that apply to all Generating Facilities in the Local Balancing Authority on a comparable basis, 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 Transmission Provider, or a combination of the two. 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 Transmission Provider to protect system reliability. Transmission Provider and 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

Interconnection Requirements for Provisional GIA

Not Applicable to This GIA

Provisional Agreement

This GIA is being provided in accordance with Section 11.5 of the Transmission Provider's GIP, which provides among other things, that an Interconnection Customer may request that Transmission Provider provide Interconnection Customer with a provisional GIA that limits the transfer of energy by Interconnection Customer commensurate with that allowed for Energy Resource Interconnection Service. Interconnection Customer requested Transmission Provider to provide a provisional GIA for limited operation at the discretion of Transmission Provider based upon the results of available studies (by Interconnection Customer and by Transmission Provider).

A Provisional Interconnection Study, the results of which are posted on the confidential portion of the Transmission Provider's internet website, was performed by Transmission Provider in order to confirm the facilities that are required for provisional Interconnection Service and to require them to be in place prior to commencement of service under the GIA.

Interconnection Customer represents that the Interconnection Customer facilities (including Network Upgrades, Interconnection Facilities, Distribution Upgrades, System Protection Upgrades and/or Generator Upgrades) that are necessary to commence provisional Interconnection Service and meet the requirements of NERC, or any applicable regional entity for the interconnection of a new generator are in place prior to the commencement of generation from the Generating Facility and will remain in place during the term of the service. The requisite Interconnection Studies were performed for the Generating Facility. Interconnection Customer shall meet any additional requirements (including reactive power requirements) pursuant to the results of applicable future Interconnection System Impact Studies. Until such time as the applicable Interconnection Studies and any identified facilities are completed, the output of the Generating Facility will operate within the output limit prescribed in a future, if applicable, operating guide.

The maximum permissible output of the Generating Facility under Appendix A will be updated by Transmission Provider on a quarterly basis, determined in accordance with Section 11.5 of the GIP, by finding the transfer limit of energy commensurate with the analysis for Energy Resource Interconnection Service ("ERIS"). This study shall be performed assuming the system topology represented by the base cases used to calculate Available Flowgate Capability, as described in Attachment C of the Tariff, with dispatch and optimization algorithms posted on the MISO internet site and operation above those limits will be deemed as unauthorized use of the Transmission System and subject to provisions in the Tariff surrounding that use.

Use of interim operating guide

Implementation of interim operating guide, if applicable, will constitute an interim solution that will permit Interconnection Customer to operate the Generating Facility under conditional Interconnection Service until planned Network Upgrades are constructed. Any interim operating guide will be subject to the approval of Transmission Owner and Transmission Provider. Minimum requirements for an interim operating guide are as indicated below.

- * Transmission Operator will have control of breaker(s) dedicated to the Generating Facility and will be able to trip the Interconnection Customer's Generating Facility
- * Protection schemes must be tested and operative
- * Interconnection Customer will provide continuous communication capability with the Generator Operator
- * Interconnection Customer and the owner of the Existing Generating Facility will enter into an operating agreement or similar agreement which designates, among other things, the responsibilities and authorities of each of the parties and shall be subject to the acceptance of Transmission Provider and Transmission Owner.
- * A termination date consistent with completion of construction of Network Upgrades will be included as part of all operating guides accepted by Transmission Owner and Transmission Provider.

Interconnection Customer assumes all risks and liabilities with respect to changes, which may impact the Generator Interconnection Agreement including, but not limited to, change in output limits and responsibilities for future Network Upgrade and cost responsibilities that have not yet been identified on the direct connect Transmission System as well as all affected Transmission, Distribution or Generation System(s) including non-Transmission Provider Systems. Such upgrades will be determined pursuant to the Tariff and Policies in effect at the time of the Interconnection Studies.

Appendix I To GIA

Requirements Applicable to Surplus Interconnection Service

Not Applicable to This GIA

Where this GIA provides for Surplus Interconnection Service, Interconnection Customer acknowledges, agrees to, and will be required to operate under the following conditions:

- 1) The combined Real-Time Offers, including Energy and Operating Reserves, of the Generating Facility and the Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement must be less than or equal to Interconnection Service limit (MW, MVAR, MVA output) provided in Exhibit I-1 (Monitoring and Consent Agreement) (hereinafter, "Interconnection Service limit"). In the event that the sum of the simultaneous energy output of the Surplus Interconnection Service Generating Facility and the Existing Generating Facility exceeds such Interconnection Service limit, MISO reserves the right to curtail and/or disconnect the Generating Facility immediately.

In the event that the sum of the emergency and/or economic maximum offer limits of the Generating Facility and the Existing Generating Facility exceeds the Interconnection Service limit, MISO reserves the right to curtail and/or disconnect the Generating Facility immediately.

- 2) The total MW, MVAR, MVA output at the Point of Interconnection resulting from the combined output of the Generating Facility with Surplus Interconnection Service and the Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement shall not at any time exceed the Interconnection Service limit.
- 3) The Existing Generating Facility with which Interconnection Customer has an executed Energy Displacement Agreement is not relieved of any applicable requirements under the RAR of the Tariff.
- 4) The Interconnection Customer shall submit to the Transmission Provider a report by the seventh Calendar Day of each month showing the prior month's output, by 15 minute increment, the combined real-time offers and cleared energy injection. The Existing Generating Facility and the Interconnection Customer shall cooperate consistent with other provisions in the Tariff to the extent necessary to ensure accuracy of the report. Transmission Provider shall provide a template for this report.

Exhibit I-1 (Completed Monitoring and Consent Agreement - Appendix 11 of the GIP)

Exhibit I-2 (Completed Energy Displacement Agreement - Appendix 12 of the GIP)

TAB C

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Case Name) **Docket No.**

PROTECTIVE AGREEMENT

1. This Protective Agreement shall govern the access to, and use of all Privileged Materials and Critical Energy Infrastructure Information (“CEII”) produced by, or on behalf of, any Participant.
2. Notwithstanding any order terminating this proceeding, this Protective Agreement shall become effective as of the date the attached Non-Disclosure Certificate is executed and shall remain in effect until specifically modified or terminated by the Federal Energy Regulatory Commission (“Commission”).
3. Definitions – For purposes of this Protective Agreement:
 - (a) The meaning of the term “Participant” shall be as defined at 18 C.F.R. § 385.102(b).
 - (b) The term "Privileged Materials" includes those materials, and information contained therein, which customarily are treated as sensitive or proprietary, which are not available to the public, and which, if disclosed publicly, would subject the Participant or its customers to risk of competitive disadvantage or other business injury. Privileged Materials may include: (A) materials designated by a Participant as “Privileged Materials”; (B) any information contained in or obtained from such designated materials in (A); (C) any other materials which are made subject to this Protective Agreement by the Presiding Judge or the Chief Judge, by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Privileged Materials (notes means memorandum, summaries, or other documents produced by a Participant or Reviewing Representative as a part of their review of the Privileged Materials) (“Notes of Privileged Materials”); and (E) copies of Privileged Materials. The Participant producing the Privileged Materials shall physically mark them on each page as "PRIVILEGED MATERIALS" or with words of similar import as long as the term "Privileged" is included in that designation to indicate that they are Privileged Materials.

- (c) The meaning of the term “CEII” shall be as defined at 18 C.F.R. § 388.113(c). In producing a document that contains CEII, a Participant shall label the document in conformance with the requirements of this Protective Agreement, including but not limited to the requirements of Paragraphs 12 and 20 hereof. For the purposes of this Protective Agreement, documents that are labeled in conformance with the requirements of Paragraphs 12 and 20 are defined as “Designated CEII.”
- (d) The term “Non-Disclosure Certificate” shall mean the certificate annexed hereto by which Reviewing Representatives who have been granted access to Designated CEII or Privileged Materials shall certify their understanding that such access is provided pursuant to the terms and restrictions of this Protective Agreement, and that such Reviewing Representatives have read the Protective Agreement and agree to be bound by it. All executed Non-Disclosure Certificates shall be served on all Participants on the official service list maintained by the Secretary of the Commission in this proceeding.
- (e) The term “Reviewing Representative” shall mean a person who has signed a Non-Disclosure Certificate and who is:
 - (1) a member of the Commission Trial Staff;
 - (2) an attorney who has made an appearance in this proceeding for a Participant;
 - (3) attorneys, paralegals, and other employees associated for purposes of this proceeding with an attorney who has made an appearance in this proceeding for a Participant;
 - (4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for, submitting evidence, or testifying in this proceeding;
 - (5) a person designated as a Reviewing Representative by order of the Presiding Judge or the Chief Judge or the Commission; or
 - (6) employees or other representatives of Participants with significant responsibility for this docket.

4. All Privileged Materials and Designated CEII shall be made available under the terms of this Protective Agreement only to Participants and only through their Reviewing Representatives as provided in Paragraphs 6–10.

5. All Privileged Materials and Designated CEII shall remain available to Participants until an order terminating this proceeding becomes no longer subject to judicial review, or

another date specifically designated by the Commission or the Presiding Judge. If requested to do so in writing after that date, the Participants shall, within fifteen (15) days of such request, return the Privileged Materials and the Designated CEII to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Privileged Materials or Designated CEII, and Notes of Privileged Material may be retained, if they are maintained in accordance with Paragraph 6 below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Privileged Materials, Designated CEII and all Notes of Privileged Materials have been returned or have been destroyed or will be maintained in accordance with Paragraphs 6-7. To the extent Privileged Materials and Designated CEII are not returned or destroyed, they shall remain subject to the Protective Agreement or any superseding protective agreement or protective order.

6. All Privileged Materials and Designated CEII shall be maintained by the receiving Participant or Reviewing Representatives in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8–9. The Secretary shall place any Privileged Materials and Designated CEII filed with the Commission in a non-public file. By placing such documents in a non-public file, the Commission is not making a determination of any claim of privilege or whether the materials actually meet the definition of CEII. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Trial Staff (“Staff”), Staff shall follow the notification procedures of 18 C.F.R. § 388.112 before making public any Privileged Materials or Designated CEII.

7. All Privileged Materials and Designated CEII shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the Non-Disclosure Certificate executed pursuant to Paragraph 9 and shall be afforded the same protections that the Participant or Reviewing Representative affords to its own similarly situated confidential information. A Participant or Reviewing Representative shall promptly notify the other Participants if it has cause to believe that the Privileged Materials or Designated CEII have been disclosed, including if that disclosure was inadvertent or the result of a breach. All Privileged Materials and Designated CEII shall not be used except as necessary for the conduct of this proceeding, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding.

8. (a) If a Reviewing Representative’s scope of employment includes the marketing of energy, the direct supervision of any employee(s) whose duties include the marketing of energy, or the provision of consulting services to any person whose duties include the marketing of energy, such Reviewing Representative may not use information contained in any Privileged Materials or Designated CEII to give any Participant or any

competitor of any Participant a commercial advantage.

(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3(e) above, the Participant shall seek agreement from the Participant providing the Privileged Materials or Designated CEII. If an agreement is reached, that person shall be a Reviewing Representative pursuant to Paragraph 3(e) above with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.

9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Privileged Materials or Designated CEII pursuant to this Protective Agreement unless that person has first executed a Non-Disclosure Certificate; provided, that if an attorney is a Reviewing Representative, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not execute a Non-Disclosure Certificate. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant 3 days prior to disclosure of any Privileged Material or Designated CEII to that Reviewing Representative, thus providing an opportunity to object to the disclosure.

(b) Attorneys qualified as Reviewing Representatives shall be responsible for ensuring that persons under their supervision or control comply with this Protective Agreement.

10. Any Reviewing Representative may disclose Privileged Materials or Designated CEII to any other such person as long as the disclosing person and the receiving person both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Privileged Materials or Designated CEII is disclosed ceases to be engaged in this matter or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(e), access to Privileged Materials or Designated CEII by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Agreement and the certification.

11. Subject to Paragraphs 17-19, the Presiding Judge or the Chief Judge or the Commission shall resolve any disputes arising under this Protective Agreement. Prior to presenting any dispute under this Protective Agreement to the Presiding Judge or the Chief Judge or the Commission, the parties to the dispute shall use their best efforts to resolve it. Any Participant that contests the designation of materials as Privileged shall notify the Participant that provided the Privileged Materials by specifying in writing the basis for its objection. This Protective Agreement shall automatically cease to apply to such materials five (5) business days after the notification is made unless the designator, within said 5-day period, files a motion with the Presiding Judge or the Chief Judge or the Commission, with supporting affidavits, demonstrating that the materials should continue to be privileged. In any challenge to the designation of materials as Privileged, the burden of proof shall be on the Participant seeking protection. If the Presiding Judge or the Chief

Judge or the Commission finds that the materials at issue are not entitled to privilege, the procedures of Paragraphs 17-19 shall apply. The procedures described in this Paragraph shall not apply to materials designated by a Participant as CEII. Materials so designated shall remain privileged and subject to the provisions of this Protective Agreement, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain as Designated CEII.

12. All copies of all documents reflecting Privileged Materials, including the portion of the hearing testimony, exhibits, transcripts, briefs and other documents, which refer to Privileged Materials, shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Agreement. Such documents shall be marked "PRIVILEGED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. Such documents containing CEII shall be additionally marked "CONTAINS CUI//CEII MATERIAL – DO NOT RELEASE." For anything filed under seal, redacted versions or, where an entire document is privileged or confidential, a letter indicating such, will also be filed with the Commission and served on all Participants on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such materials. Counsel shall take all reasonable precautions necessary to assure that Privileged Materials and Designated CEII are not distributed to unauthorized persons.

13. If any Participant desires to include, utilize or refer to any Privileged Materials or Designated CEII or information derived therefrom in testimony or exhibits during the hearing in these proceedings in such a manner that might require disclosure of such material to persons other than Reviewing Representatives, such Participant shall first notify both counsel for the disclosing Participant and the Presiding Judge of such desire, identifying with particularity each of the Privileged Materials or Designated CEII. Thereafter, use of such Privileged Material or Designated CEII will be governed by procedures determined by the Presiding Judge.

14. Nothing in this Protective Agreement shall be construed as precluding any Participant from objecting to the use of Privileged Materials or Designated CEII on any legal grounds.

15. Nothing in this Protective Agreement shall preclude any Participant from requesting the Presiding Judge, the Chief Judge, the Commission, or any other body having appropriate authority, to find that this Protective Agreement should not apply to all or any materials previously designated as Privileged Materials or CEII pursuant to this Protective Agreement.

16. This Protective Agreement may be modified only by mutual agreement among Participants that have signed Non-Disclosure Certificates. This Protective Agreement may be replaced and superseded by a protective order issued by the Presiding Judge, the Chief

Judge, or the Commission.

17. Nothing in this Protective Agreement shall be deemed to preclude any Participant from independently seeking, through discovery in any other administrative or judicial proceeding, Privileged Materials or Designated CEII produced by any Participant under this Protective Agreement.

18. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Privileged Materials or Designated CEII.

19. The contents of Privileged Materials or Designated CEII or any other form of information that copies or discloses Privileged Materials or Designated CEII shall not be disclosed to anyone other than in accordance with this Protective Agreement and shall be used only in connection with the Participants' review of these proceedings. Any violation of this Protective Agreement and of any Non-Disclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

20. All Privileged Material or Designated CEII provided by Participants that is filed with the Commission, submitted to a Presiding Judge, or submitted to any Commission personnel or any other judicial or administrative body, must comply with the Commission's *Notice of Document Labelling Guidance for Documents Submitted to or Filed with the Commission or Commission Staff*, as issued on April 14, 2017 (82 Fed. Reg. 18632 (April 20, 2017)).

21. The provisions of 18 C.F.R. § 388.112 and 18 C.F.R. § 388.113 shall apply to any requests under the Freedom of Information Act (5 U.S.C. § 552) for Privileged Materials or Designated CEII in the files of the Commission.

IN WITNESS WHEREOF, Midcontinent Independent System Operator, Inc. has caused its authorized representative to execute this Protective Agreement.

Midcontinent Independent System Operator, Inc.

By: _____

Printed Name: _____

Title: _____

Date: _____

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Case Name _____) **Docket No.** _____

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Privileged Materials or Designated CEII is provided to me pursuant to the terms and restrictions of the Protective Agreement in this proceeding, that I have been given a copy of and have read the Protective Agreement, and that I agree to be bound by it. I understand that the contents of the Privileged Materials or Designated CEII, any notes or other memoranda, or any other form of information that copies or discloses Privileged Materials or Designated CEII shall not be disclosed to anyone other than in accordance with that Protective Agreement. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.

By: _____
Printed Name: _____
Title: _____
Representing: _____
Date: _____

Flanigan 138kV Substation Project
Illinois Chorus Frog Conservation Plan



Appendix F

Pollinator Friendly Native Seed Mix for Site Restoration



Site Specific Restoration and Planting Plan

Station Name / WO#

Site Plan:

Insert Marked-up Version of Site/grading plan with planting zones marked-up showing seeding type and rough acreages.

Seed Mixes:

A. Turf grass:

BROADCAST: Pollinator Friendly Native Species List		Bloom Time			Color	Height	Lbs/Ac
Grass Species		Spring	Summer	Fall			
Perennial Ryegrass							40 lbs PLS
Red Top							40 lbs PLS
Fine Leaf Turf-Type Fescue							80 lbs PLS
Creeping Red Fescue							80 lbs PLS
Total Broadcast Seed							200 lbs PLS

1-year Stewardship and Establishment Period

- A. Maintain and water seeded areas as requested. Reimbursement will be in accordance with the contract documents.
- B. Mow grass at regular intervals to maintain at a maximum height of 2 1/2 inches. Do not cut more than 1/3 of grass blade at any one mowing.
- C. Water to prevent grass and soil from drying out.
- D. Roll surface to remove minor depressions or irregularities.
- E. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- F. Immediately reseed areas which show bare spots.
- G. Protect seeded areas with warning signs during maintenance period.
- H. Seeded areas may only be turned over to Ameren for maintenance following successful completion of the Stewardship and Establishment Period and the completion of an inspection and acceptance by Ameren Vegetation Management.

B. Pollinator Friendly Native Seed Mix: 3-year Stewardship and Establishment Period

BROADCAST: Pollinator Friendly Native Species List		Bloom Time			Color	Height	Lbs/Ac
Forb Species		Spring	Summer	Fall			
Common Milkweed	Asclepias syriaca	X	X		Lt Pink	4-5 feet	9lbs PLS
Swamp Milkweed	Asclepias incarnata	X	X		Pink	4-5 feet	
Butterfly Milkweed	Asclepias tuberosa		X		Orange	1-3 feet	
Purple Coneflower	Echinacea purpurea		X	X	Purple	3-4 feet	
Foxglove Beardtongue	Penstemon digitalis	X	X		White	3-4 feet	
Wild Bergamot	Monarda fistulosa		X	X	Pink/Purple	3-4 feet	
Black-eyed Susan	Rudbeckia hirta	X	X	X	Yellow	2-3 feet	
Prairie Blazing Star	Liatris pycnostachya		X	X	Pink/Purple	3-4 feet	
Ashy Sunflower	Helianthus mollis		X	X	Yellow	2-4 feet	
Missouri Ironweed	Vernonia missurica		X	X	Purple	3-5 feet	
Aromatic Aster	Symphotrichum oblongifolium		X	X	Purple	2-3 feet	
Grayhead Coneflower	Ratibida pinnata	X	X	X	Yellow	2-3 feet	
Partridge Pea	Chamaecrista fasciculata		X	X	Yellow	1-3 feet	
White Prairie Clover	Dalea candida	X	X		White	1-3 feet	
Purple Prairie Clover	Dalea purpurea	X	X		Purple	1-2 feet	
Blue False Indigo	Baptisia australis	X	X		Blue	3-4 feet	
Rigid Goldenrod	Solidago rigida		X	X	Yellow	3-5 feet	
Culver's Root	Veronicastrum virginicum		X		White	3-4 feet	
Grass Species							
Sideoats Gramma	Elymus caput-medusae		X		Red/Purple	1.5-2.5 feet	2.5 lbs PLS
Little Bluestem	Schizachyrium scoparium		X	X	Purple/Bronze	2-4 feet	3.0 lbs PLS
Annual Blooming Cover Crop							
Plains Coreopsis	Coreopsis tinctoria		X	X	Red/Yellow	2-4 feet	1 lbs PLS



Site Specific Restoration and Planting Plan

Station Name / WO#

Total Broadcast Seed 15.5 lbs PLS

*If a milkweed species is not available double-up on another milkweed species
 **If non-milkweed species are not available double-up on another that blooms in same season if possible
 ***Can substitute w/other milkweed like tall green milkweed (A. hirtella) and purple milkweed (A. purpurascens) if available

DRILLED: Pollinator Friendly Native Species List		Bloom Time			Color	Height	Lbs/Ac
Forb Species		Spring	Summer	Fall			
Common Milkweed	Asclepias syriaca	X	X		Lt Pink	4.5 feet	5.5 lbs PLS
Swamp Milkweed	Asclepias incarnata	X	X		Pink	4.5 feet	
Butterfly Milkweed	Asclepias tuberosa		X		Orange	1.3 feet	
Purple Coneflower	Echinacea purpurea		X	X	Purple	3-4 feet	
Foxglove Beardtongue	Penstemon digitalis	X	X		White	3-4 feet	
Wild Bergamot	Monarda fistulosa		X	X	Pink/Purple	3-4 feet	
Black-eyed Susan	Rudbeckia hirta	X	X	X	Yellow	2-3 feet	
Prairie Blazing Star	Liatris pycnostachya		X	X	Pink/Purple	3-4 feet	
Ashy Sunflower	Helianthus mollis		X	X	Yellow	2-4 feet	
Missouri Ironweed	Vernonia missurica		X	X	Purple	3-5 feet	
Aromatic Aster	Symphotrichum oblongifolium		X	X	Purple	2-3 feet	
Grayhead Coneflower	Ratibida pinnata	X	X	X	Yellow	2-3 feet	
Partridge Pea	Chamaecrista fasciculata		X	X	Yellow	1-3 feet	
White Prairie Clover	Dalea candida	X	X		White	1-3 feet	
Purple Prairie Clover	Dalea purpurea	X	X		Purple	1-2 feet	
Blue False Indigo	Baptisia australis	X	X		Blue	3-4 feet	
Rigid Goldenrod	Solidago rigida		X	X	Yellow	3-5 feet	
Culver's Root	Veronicastrum virginicum		X		White	3-4 feet	
Grass Species							
Sideoats Gramma	Bouteloua curtipendula		X		Red/Purple	1.5-2.5 feet	1.4 lbs PLS
Little Bluestem	Schizachyrium scoparium		X	X	Purple/Bronze	2-4 feet	2.7 lbs PLS
Annual Blooming Cover Crop							
Plains Coreopsis	Coreopsis tinctoria		X	X	Red/Yellow	2-4 feet	1 lbs PLS
						Total Drilled Seed	10.6 lbs PLS

*If a milkweed species is not available double-up on another milkweed species
 **If non-milkweed species are not available double-up on another that blooms in same season if possible
 ***Can substitute w/other milkweed like tall green milkweed (A. hirtella) and purple milkweed (A. purpurascens) if available

3-year Stewardship and Establishment Period for Pollinator Friendly Native Species Seeding areas.

- A. Mow grass at regular intervals as necessary to keep annual weeds from producing flowering structures and/or going to seed. Do not cut vegetation shorter than 8" at any one mowing during the first growing season and 12 inches during the second growing season.
- B. Roll surface to remove minor depressions or irregularities.
- C. Over winter dead growth should be allowed to remain standing and should only be cut after the risk of frost has cleared in the spring.
- D. Control growth of any invasive, woody or non-desirable vegetation. This may be accomplished through any combination of High-mowing, hand-weeding, or spot application of herbicides. Apply herbicides in accordance with manufacturer's instructions. Contractor shall be responsible for remediating damage resulting from improper use of herbicides.
- E. Immediately reseed areas, which show bare spots.
- F. Protect seeded areas with warning signs during maintenance period.
- G. Seeded areas may only be turned over to Ameren for maintenance following successful completion of the Stewardship and Establishment Period and the completion of an inspection and acceptance by Ameren Vegetation Management.

