

# **Filing Receipt**

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AEP Texas Inc. 400 West 15<sup>th</sup> Street, Suite 1520 Austin, TX 78701-1677

November 29, 2023

Filing Clerk Public Utility Commission of Texas 1701 Congress Avenue P.O. Box 13326 Austin, TX 78711-3326

#### Re: Project No. 35077 - Filing Pursuant to 16 Tex. Admin. Code § 25.195(e) (TAC); First Amended and Restated ERCOT Standard Generation Interconnection Agreement between AEP Texas Inc. and Whirlwind Energy, LLC

To whom it may concern:

Enclosed for filing is the First Amended and Restated ERCOT Standard Generation Interconnection Agreement, dated November 3, 2023 between AEP Texas Inc. ("AEP") and Whirlwind Energy, LLC ("Generator") (the "Agreement"). AEP is subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC") with respect to transmission rates and service, including generation interconnections. This Agreement has been filed for acceptance with FERC. AEP is also filing this Agreement with the PUCT for informational purposes. Because the Agreement contains deviations from the Commission-approved ERCOT Standard Generation Interconnection Agreement (2007 version published by ERCOT) ("SGIA"), AEP has prepared this letter in accordance with 16 Tex. Admin. Code § 25.195(e) (TAC) identifying the deviations and requests that it be filed with the Agreement.

• The following revisions have been made to the list in the <u>Table of Contents</u>:

First Amended and Restated ERCOT Standard Generation Interconnection Agreement

*Exhibit "A" Terms and Conditions of the First Amended and Restated ERCOT Standard Generation Interconnection Agreement* 

*Exhibit "C-1" – Conceptual One-Line Drawing of Permanent Facilities/Permanent Point of Interconnection* 

*Exhibit "C-2" – Conceptual One-Line Drawing of Temporary Facilities/Temporary Point of Interconnection*  • The last sentence of the first paragraph of the recital has been revised as follows:

Pursuant to the terms and conditions of this Agreement, Transmission Service Provider shall interconnect Generator's Plant with Transmission Service Provider's System consistent with the results of the Full Interconnection Study that was prepared in response to generation interconnection request #07INR0003 to ERCOT from Texas Land Partners, LP.

• The second, third and fourth paragraph of the recital has been added as follows:

Transmission Service Provider and Generator, originally entered into an Interconnection Agreement dated August 31, 2006 (the "Original Agreement").

Transmission Service Provider's interconnecting station facilities and a portion of Generator's 69 kV transmission line was destroyed by the June 21, 2023, Tornado in Motley County. Prior to Transmission Service Provider rebuilding, completing, and energizing the permanent interconnecting station, Transmission Service Provider agreed to provide Generator a temporary interconnection from an existing 69 kV transmission line in the vicinity.

The above paragraph requires the Parties, which the Parties agree, to amend and restate the Original Agreement as set forth herein to: 1) amend and restate the general terms and conditions throughout the body of the Agreement; 2) update the definitions Section 1 of Exhibit A of this Agreement; 3) remove the system upgrades and language throughout the Agreement; 4) add the requirement for power system stabilizers; 5) update the requirement for notices that email replaces fax; 6) remove the lender security language provided by the Original Agreement; 7) update the time schedule to reflect the permanent and temporary in-service date; 8) identify the permanent and temporary point of interconnection; 9) identifying and locating the fiber optic PCO; 10) updating the type of generating units; 11) updating the metering and telemetry equipment terms and conditions in Section 6 of Exhibit C; 12) updating the Generator interconnecting facilities in Section 7 of Exhibit C; 13) updating the TSP interconnecting facilities in Section 8 of Exhibit *C*; 14) deleting the requirement for the voice dispatch and dial-up circuit; 15) adding the requirement for communication capabilities; 16) removed the requirement and equipment for the special protection scheme in the Substation; 17) adding the requirement for an access plan to Generator's substation; 18) identifying the devices and reason to isolate the Plant and Generator interconnecting facilities with TSP's interconnecting facilities; 19) adding the requirement where one Party notifies the other Party when its system protection equipment settings or equipment are changed; 20) updating the status and analog points list; 21) updating the requirement for Generator to submit certain types of drawings to TSP; 22) adding the requirement for Generator to supply voltage support service; 23) updating Generator's reactive power requirements; 24) adding the dynamic MVAR capability; 25) adding the excitation system and automatic voltage regulation requirement; 26) adding the governor system requirement; 27) adding the NERC Reliability Standards requirement; 28) adding the requirement that Generator must comply with TSP's "Requirements for

Connection of New Facilities or Changes to Existing Facilities Connected to the AEP Transmission System" when Generator materially modifies the generator interconnection facilities; 29) adding the requirement that Generator must provide information in accordance with TSP's "Data and Modeling Requirements for Conventional Resource Entities" or "Data and Modeling Requirements for Solar and Wind Resource Entities"; 30) adding the requirement that Generator notifies TSP of all non-auxiliary load tenant interconnection request; 31) adding the requirement that Generator is responsible for behind the meter load at its Plant and interconnecting facilities; 32) updating the terms and condition of the thermal, wind, solar and battery power requirements; 33) updating Exhibit C-1 permanent drawing; 34) adding Exhibit C-2 temporary drawing; 35) updating Exhibit D notification; 36) updating the Security arrangement section; 37) making certain other prudent changes throughout the Agreement to accommodate these changes.

• The fifth paragraph of the recital has been revised as follows:

*This Agreement applies only to the Plant and the Parties' interconnection facilities as identified in Exhibits "C" and "C-1".* 

• The sixth paragraph of the recital has been revised as follows:

This Agreement shall become effective on the Execution Date or upon such other date specified by FERC, subject to Governmental Authority approval, if required, and shall continue in full force and effect until terminated in accordance with Exhibit "A".

- Item A. of the seventh paragraph of the recital has been revised as follows:
  - A. The "Terms and Conditions of the First Amended and Restated ERCOT Standard Generation Interconnection Agreement" attached hereto as Exhibit "A";
- Item E. of the seventh paragraph of the recital has been revised as follows:
  - *E.* The Interconnection Details attached hereto as Exhibits "C" and "C-1";
- The testimonium clause has been revised as follows:

IN WITNESS WHEREOF, the Parties have executed this Agreement in one or more originals, each of which shall constitute and be an original effective agreement between the Parties.

• The Exhibit "A" title has been revised as follows:

TERMS AND CONDITIONS OF THE FIRST AMENDED AND RESTATED ERCOT STANDARD GENERATION INTERCONNECTION AGREEMENT

- The following definition in Section 1.1 of Article 1. <u>Definitions</u> of the Agreement has been added:
  - 1.1 "<u>Agreement</u>" shall mean this First Amended and Restated ERCOT Standard Generation Interconnection Agreement with all its Exhibits, as it may be amended, supplemented, or otherwise modified from time to time.
- Reference to the PUCT Rule in the following definition in Section 1.4 of Article 1. <u>Definitions</u> of the Agreement has been revised:
  - 1.4 "<u>Control Area</u>" shall have the meaning ascribed thereto in PUCT Rule 25.5 or its successor.
- The first sentence of the "ERCOT Requirements" definition in Section 1.6 of Article 1. <u>Definitions</u> of the Agreement has been revised as follows:
  - 1.6 "<u>ERCOT Requirements</u>" means the ERCOT Nodal Operating Guides, ERCOT Generation Interconnection Procedures, ERCOT Nodal Protocols as well as any other documents adopted by ERCOT relating to the interconnection and operation of generators and transmission systems in ERCOT as amended from time to time, and any successors thereto.
- Reference to the PUCT Rule in the following definition in Section 1.7 of Article 1. <u>Definitions</u> of the Agreement has been revised:
  - 1.7 "<u>Facilities Study</u>" shall have the meaning as described in PUCT Rule 25.198(d) or its successor.
- The following definition in Section 1.8 of Article 1. <u>Definitions</u> of the Agreement has been added:
  - 1.8 "FERC" shall mean the Federal Energy Regulatory Commission.
- The following definition in Section 1.9 of Article 1. <u>Definitions</u> of the Agreement has been added:
  - 1.9 "<u>Fiber Optic PCO</u>" shall mean the fiber optic point of change of ownership, where the GIF fiber optic cables connect to the TIF fiber optic cables, defined in Exhibit "C", and as shown on Exhibit "C-1" of this Agreement.
- A new definition of "Full Interconnection Study" has been added as Section 1.10 of Article 1. <u>Definitions</u> of the Agreement:
  - 1.10 "<u>Full Interconnection Study</u>" shall mean the set of studies conducted by the TSP under the Full Interconnection Study Agreement consisting of the Steady-State and Transfer Analysis; System Protection (Short-Circuit) Analysis; Dynamic and Transient Stability Analysis; and Facilities Study.

• The definition for "Facilities Study Agreement" has been deleted from Article 1. <u>Definitions</u> of the Agreement and replaced with the following:

1.11 "Full Interconnection Study Agreement" shall mean the agreement executed by the Parties relating to the performance of the Full Interconnection Study.

• The definition of "GIF" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

1.12 "<u>GIF</u>" shall mean Generator's interconnection facilities as described in Section 7 of Exhibit "C".

• Reference to the PUCT Rules in the following definition in Section 1.13 of Article 1. <u>Definitions</u> of the Agreement has been revised:

*1.13 "Good Utility Practice"* shall have the meaning described in PUCT Rule 25.5 or its successor.

- The following definition in Section 1.17 of Article 1. <u>Definitions</u> of the Agreement has been added:
  - 1.17 "<u>Permanent Facilities</u>" shall mean the permanent facilities required to provide for the permanent Point of Interconnection. Such permanent facilities are identified in Sections 8.1 of Exhibit "C".
- The definition of "Plant" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:
  - 1.18 "<u>Plant</u>" shall mean the electric generation facility owned and operated by the Generator, which is comprised of wind turbine-generators and the collection circuits that connect to the GIF, as specified in Exhibit "C".
- The definition of "<u>Point of Interconnection</u>" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:
  - 1.19 "Point of Interconnection" shall mean (i) the location where the GIF permanently connects to the TIF by means of the Permanent Facilities, as negotiated by the Parties, defined in Section 2.1 of Exhibit "C" and as shown on Exhibit "C-1" of this Agreement; (ii) the location where the GIF temporarily connects to the TIF by means of the Temporary Facilities, as negotiated by the Parties, defined in Section 2.2 of Exhibit "C" and as shown on Exhibit "C-2" of this Agreement. References in the Agreement to "Point of Interconnection" shall include both the temporary and permanent points of interconnection unless the context indicates otherwise.

• Reference to the PUCT Rules in the following definition in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

1.22 "<u>Reasonable Efforts</u>" shall mean the use of Good Utility Practice and the exercise of due diligence (pursuant to PUCT Rule 25.198(e) or its successor).

• The definition of "<u>System Protection Equipment</u>" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

1.23 "<u>System Protection Equipment</u>" shall mean those facilities located within the TIF and the GIF as described in Section 5.6 of Exhibit "A" and Section 10 of Exhibit "C".

• Reference to the PUCT Rules in the following definition in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

- The following definition in Section 1.26 of Article 1. <u>Definitions</u> of the Agreement has been added:
  - 1.26 "<u>Temporary Facilities</u>" shall mean the temporary facilities required to provide for the temporary Point of Interconnection. Such temporary facilities are identified in Section 8.2 of Exhibit "C".
- The definition of "<u>TIF</u>" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

*1.27 "<u>TIF</u>" shall mean the TSP's interconnection facilities as described in Section 8 of Exhibit "C" to this Agreement.* 

• The definition of "<u>Trial Operation</u>" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:

1.28 "<u>Trial Operation</u>" shall mean the process by which the Generator is engaged in on-site test operations and commissioning of the first turbine-generator of the Plant prior to Commercial Operation.

- The definition of "<u>TSP System</u>" in Article 1. <u>Definitions</u> of the Agreement has been revised as follows:
  - 1.30 "<u>TSP System</u>" shall mean the electric transmission facilities, including the TIF and System Upgrades, and all associated equipment and facilities owned and/or operated by the TSP.

<sup>1.24 &</sup>quot;<u>System Security Study</u>" shall have the meaning as described in PUCT Rule 25.198(c) or its successor.

• The first sentence of Section 3.1 of Article 3. <u>Regulatory Filings</u> has been revised as follows:

The TSP shall file this executed Agreement with FERC, and provide a copy of this Agreement to the PUCT. Each Party will reasonably cooperate with each other in connection with such filings.

- Paragraph A. of Section 4.2 of Article 4. <u>Interconnection Facilities Engineering</u>, <u>Procurement</u>, and <u>Construction</u> has been revised as follows:
  - *A.* The TSP has completed the Facilities Study pursuant to the Full Interconnection Study Agreement;
- Section 4.4 of Article 4. <u>Interconnection Facilities Engineering</u>, <u>Procurement</u>, and <u>Construction</u> the last sentence has been revised as follows:

If, at any time, the Generator becomes aware that the completion of the TIF will not be required until after the specified In-Service Date, the Generator will promptly provide written notice to the TSP of a new, later In-Service Date or System Upgrades In-Service Date.

• Section 4.7 of Article 4. <u>Interconnection Facilities Engineering</u>, <u>Procurement</u>, and <u>Construction</u> has been revised as follows:

To the extent this Agreement incorporates a specified In-Service Date and the Generator fails to satisfy conditions precedent under Sections 4.2 and, 4.3 so that the TSP may meet the In-Service Date, the Parties will negotiate in good faith to establish a new schedule for completion of the TIF, and the In-Service Date shall be extended accordingly.

• The following new sentence has been added to Section 5.2 of Article 5. <u>Facilities and</u> <u>Equipment</u>:

In addition, Generator agrees to design and construct the GIF in accordance with the National Electric Code.

• The last sentence of Section 5.2 of Article 5. <u>Facilities and Equipment</u> has been revised as follows:

Within one hundred and twenty (120) days after Commercial Operation . . . the Generator shall deliver to the TSP the following "as-built" drawings, information and documents for the GIF: . . . the facilities connecting the Plant to the main power transformers and the GIF, and the impedances (determined by factory tests) for the associated main power transformers and the generators and the impedance of any transmission voltage lines that are part of the GIF.

- Paragraph B. of Section 5.5 of Article 5. <u>Facilities and Equipment</u> has been revised as follows:
  - B. The metering and telemetry equipment shall be owned by the TSP. However, the TSP shall provide the Generator with metering and telemetry values in accordance with ERCOT Requirements.
- The first sentence of Paragraph E. of Section 5.5 of Article 5. <u>Facilities and Equipment</u> has been revised as follows:
  - *E.* Prior to the connection of the GIF to the TIF, acceptance tests will be performed by the owning Party . . . to verify the accuracy of data being received by the TSP, ERCOT and the Generator.
- The following new sentence has been added to Section 6.1 of Article 6. <u>Operation and</u> <u>Maintenance</u>:

In addition, Generator agrees to operate and maintain its system in accordance with the National Electric Code.

• The last sentence of Section 6.1 of Article 6. <u>Operation and Maintenance</u> has been revised as follows:

All testing of the Plant that affects the operation of the Point of Interconnection shall be coordinated between the TSP, ERCOT, and Generator and will be conducted in accordance with ERCOT Requirements.

- Section 6.2 of Article 6. <u>Operation and Maintenance</u> has been deleted and replaced with the following:
  - 6.2 <u>Control Area</u>. The Control Area within ERCOT is a single Control Area with ERCOT assuming authority as the Control Area operator in accordance with ERCOT Requirements.
- Section 6.8 of Article 6. <u>Operation and Maintenance</u> has been revised to align the spelling of black start with the spelling in the ERCOT protocols.
- The reference to "ISO" in Section 7.3 of Article 7. <u>Data Requirements</u> has been replaced with "ERCOT".
- The second and third sentences of Section 8.3 of Article 8. <u>Performance Obligation</u> have been revised as follows:

The required security arrangements are specified in Exhibit "E". Within five (5) business days after TSP has received notice from the Generator that the Plant has achieved Commercial Operation and TSP has verified the same, the TSP shall return the deposit(s) or security to the Generator.

• The last sentence of Paragraph E. of Section 9.1 of Article 9. <u>Insurance</u> has been revised as follows:

All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this Agreement against the Other Party Group. Each Party shall provide thirty (30) days advance written notice to Other Party Group prior to cancellation or any material change in coverage or condition.

• The first sentence of Paragraph F. of Section 9.1 of Article 9. <u>Insurance</u> has been revised as follows:

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 non-contributory for any liability arising out of that Party's negligence, 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.

• The first sentence of Section 10.3 of Article 10. Miscellaneous has been revised as follows:

This Agreement, including all Exhibits, Attachments and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement, including without limitation the Original Agreement.

• The last sentence of Section 10.3 of Article 10. Miscellaneous has been revised as follows:

Notwithstanding the other provisions of this Section, the Full Interconnection Study Agreement, if any, is unaffected by this Agreement.

• The first sentence of Section 10.4 of Article 10. Miscellaneous has been revised as follows:

Except as otherwise provided in Exhibit "D", any formal notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given or made if delivered in person, or sent by either registered or certified mail, postage prepaid, overnight mail or electronic mail with read receipt to the address identified on Exhibit "D" attached to this Agreement. • The last sentence of Section 10.6.A of Article 10. <u>Miscellaneous</u> has been revised as follows:

Except as provided in Section 10.6.B, the defaulting Party shall have thirty (30) days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within thirty (30) days, the defaulting Party shall commence such cure within thirty (30) days after Default notice and continuously and diligently complete such cure within ninety (90) days from receipt of the Default notice; and, if cured within such time, the Default specified in such Default notice shall cease to exist.

• The first sentence of Section 10.17 of Article 10. <u>Miscellaneous</u> has been revised as follows:

This Agreement may be assigned by either Party only with the written consent of the other Party; provided that either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Generator shall have the right to assign this Agreement, without the consent of the TSP, for collateral security purposes to aid in providing financing for the Plant, provided that the Generator will require any secured party, trustee or mortgagee to notify the TSP of any such assignment.

• The third paragraph of Exhibit "B" <u>Time Schedule</u> has been revised as follows:

Date by which Generator must provide written authorization to proceed with design and procurement and provide security, as specified in Section 4.2, so that TSP may maintain schedule to meet the In-Service Date:

• The fourth paragraph of Exhibit "B" <u>Time Schedule</u> has been revised as follows:

Date by which Generator must provide written authorization to commence construction and provide security as specified in Section 4.3, so that TSP may maintain schedule to meet the In-Service Date:

• The eighth paragraph of Exhibit "B" <u>Time Schedule</u> has been revised as follows:

Due to the nature of the subject of this Agreement, the Parties may mutually agree to change the date and time of this Exhibit "B". Generator acknowledges and agrees that if Generator requests that the In-Service Date, Scheduled Trial Operation Date, or the Scheduled Commercial Operation Date be extended by twelve (12) months or more, TSP must perform a new Full Interconnection Study at Generator's expense. Upon receiving such a request, TSP may suspend its work until the results of the new Full Interconnection Study are approved by ERCOT and the Parties amend this Agreement to reflect (a) changes in work to be performed by the Parties, (b) changes in costs, (c) changes to schedule, (d) changes in the Security requirements, or (e) changes to other provisions affected by the results of the new Full Interconnection Study. Generator shall be responsible for any costs associated with demobilization pending the new Full Interconnection Study; any costs incurred by TSP as part of the original scope and not used in the revised scope of work; and any additional costs identified as a result of the new Full Interconnection Study.

Please feel free to contact me at 918-599-2723 or <u>rlpennybaker@aep.com</u> and ERCOTrequest@AEP.com if there are any questions.

Sincerely,

<u>Robert L. Pennybaker</u> Robert L. Pennybaker, PE Director, System Interconnections American Electric Power Service Corporation

# FIRST AMENDED AND RESTATED

# **ERCOT STANDARD GENERATION INTERCONNECTION AGREEMENT**

# **BETWEEN**

# **AEP TEXAS INC.**

# AND

# WHIRLWIND ENERGY, LLC

(Whirlwind Wind Project)

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# First Amended and Restated ERCOT Standard Generation Interconnection Agreement Between AEP Texas Inc. And Whirlwind Energy, LLC

This First Amended and Restated ERCOT Standard Generation Interconnection Agreement is made and entered into as of <u>11/3/2023 | 9:42 AM EDT</u> (the "<u>Execution Date</u>") between **AEP Texas Inc.** (successor by merger to AEP Texas North Company) ("<u>Transmission Service Provider</u>") and **Whirlwind Energy, LLC** ("<u>Generator</u>"), hereinafter individually referred to as "<u>Party</u>", and collectively referred to as "<u>Parties</u>". In consideration of the mutual covenants and agreements herein contained, the Parties hereto agree as follows:

Transmission Service Provider represents that it is a public utility that owns and operates facilities for the transmission and distribution of electricity. Generator represents that it will own and operate the Plant. Pursuant to the terms and conditions of this Agreement, Transmission Service Provider shall interconnect Generator's Plant with Transmission Service Provider's System consistent with the results of the Full Interconnection Study that was prepared in response to a generation interconnection request #07INR0003 to ERCOT from Texas Land Partners, LP.

Transmission Service Provider and Generator, originally entered into an Interconnection Agreement dated August 31, 2006 (the "<u>Original Agreement</u>").

Transmission Service Provider's interconnecting station facilities and a portion of Generator's 69 kV transmission line was destroyed by the June 21, 2023, Tornado in Motley County. Prior to Transmission Service Provider rebuilding, completing, and energizing the permanent interconnecting station, Transmission Service Provider agreed to provide Generator a temporary interconnection from an existing 69 kV transmission line in the vicinity.

The above paragraph requires the Parties, which the Parties agree, to amend and restate the Original Agreement as set forth herein to: 1) amend and restate the general terms and conditions throughout the body of the Agreement; 2) update the definitions Section 1 of Exhibit A of this Agreement; 3) remove the system upgrades and language throughout the Agreement; 4) add the requirement for power system stabilizers; 5) update the requirement for notices that email replaces fax; 6) remove the lender security language provided by the Original Agreement; 7) update the time schedule to reflect the permanent and temporary in-service date; 8) identify the permanent and temporary point of interconnection; 9) identifying and locating the fiber optic PCO; 10) updating the type of generating units; 11) updating the metering and telemetry equipment terms and conditions in Section 6 of Exhibit C; 12) updating the Generator interconnecting facilities in Section 7 of Exhibit C; 13) updating the TSP interconnecting facilities in Section 8 of Exhibit C; 14) deleting the requirement for the voice dispatch and dial-up circuit; 15) adding the requirement for communication capabilities; 16) removed the requirement and equipment for the special

protection scheme in the Substation; 17) adding the requirement for an access plan to Generator's 18) identifying the devices and reason to isolate the Plant and Generator substation; interconnecting facilities with TSP's interconnecting facilities; 19) adding the requirement where one Party notifies the other Party when its system protection equipment settings or equipment are changed; 20) updating the status and analog points list; 21) updating the requirement for Generator to submit certain types of drawings to TSP; 22) adding the requirement for Generator to supply voltage support service; 23) updating Generator's reactive power requirements; 24) adding the dynamic MVAR capability; 25) adding the excitation system and automatic voltage regulation requirement; 26) adding the governor system requirement; 27) adding the NERC Reliability Standards requirement; 28) adding the requirement that Generator must comply with TSP's "Requirements for Connection of New Facilities or Changes to Existing Facilities Connected to the AEP Transmission System" when Generator materially modifies the generator interconnection facilities; 29) adding the requirement that Generator must provide information in accordance with TSP's "Data and Modeling Requirements for Conventional Resource Entities" or "Data and Modeling Requirements for Solar and Wind Resource Entities"; 30) adding the requirement that Generator notifies TSP of all non-auxiliary load tenant interconnection request; 31) adding the requirement that Generator is responsible for behind the meter load at its Plant and interconnecting facilities; 32) updating the terms and condition of the thermal, wind, solar and battery power requirements; 33) updating Exhibit C-1 permanent drawing; 34) adding Exhibit C-2 temporary drawing; 35) updating Exhibit D notification; 36) updating the Security arrangement section; 37) making certain other prudent changes throughout the Agreement to accommodate these changes.

This Agreement applies only to the Plant and the Parties' interconnection facilities as identified in Exhibits "C" and "C-1".

This Agreement shall become effective on the Execution Date or upon such other date specified by FERC, subject to Governmental Authority approval, if required, and shall continue in full force and effect until terminated in accordance with Exhibit "A".

This Agreement will be subject to the following, all of which are incorporated herein:

- A. The "Terms and Conditions of the First Amended and Restated ERCOT Standard Generation Interconnection Agreement" attached hereto as Exhibit "A";
- B. The ERCOT Requirements (unless expressly stated herein, where the ERCOT Requirements are in conflict with this Agreement, the ERCOT Requirements shall prevail);
- C. The PUCT Rules (where the PUCT Rules are in conflict with this Agreement, the PUCT Rules shall prevail);
- D. The Time Schedule attached hereto as Exhibit "B";
- E. The Interconnection Details attached hereto as Exhibits "C" and "C-1";
- F. The notice requirements attached hereto as Exhibit "D"; and
- G. The Security Arrangement Details attached hereto as Exhibit "E."

IN WITNESS WHEREOF, the Parties have executed this Agreement in one or more originals, each of which shall constitute and be an original effective agreement between the Parties.

**AEP Texas Inc.** 

\_os Aft Whirlwind Energy, LLC

DocuSigned by: Robert W Bradish By:

Name: Robert W. Bradish

Title: Vice President

Date: \_\_\_\_\_\_ 11/3/2023 | 9:42 AM EDT

By:

Name: Jason Benson

Title: Authorized Signatory

Date: October 23, 2023

# EXHIBIT "A"

# TERMS AND CONDITIONS OF THE FIRST AMENDED ERCOT STANDARD GENERATIONINTERCONNECTION AGREEMENT

## **ARTICLE 1. DEFINITIONS**

Capitalized terms shall have the meanings as set forth below, except as otherwise specified in the Agreement:

1.1 "<u>Agreement</u>" shall mean this First Amended and Restated ERCOT Standard Generation Interconnection Agreement with all its Exhibits, as it may be amended, supplemented, or otherwise modified from time to time.

1.2 "<u>CCN</u>" shall mean a Certificate of Convenience and Necessity issued by the PUCT.

1.3 "<u>Commercial Operation</u>" shall mean the date on which Generator declares that the construction of the Plant has been substantially completed, Trial Operation of the Plant has been completed, and the Plant is ready for dispatch.

1.4 "<u>Control Area</u>" shall have the meaning ascribed thereto in PUCT Rule 25.5 or its successor.

1.5 "ERCOT" shall mean the Electric Reliability Council of Texas, Inc.

1.6 "<u>ERCOT Requirements</u>" means the ERCOT Nodal Operating Guides, ERCOT Generation Interconnection Procedures, ERCOT Nodal Protocols as well as any other documents adopted by ERCOT relating to the interconnection and operation of generators and transmission systems in ERCOT as amended from time to time, and any successors thereto. Any requirement in the foregoing documents imposed upon generation entities or generation facilities shall become the responsibility of the Generator, and any requirements imposed on transmission providers or transmission facilities shall become the responsibility of the TSP.

1.7 "<u>Facilities Study</u>" shall have the meaning as described in PUCT Rule 25.198(d) or its successor.

1.8 "<u>FERC</u>" shall mean the Federal Energy Regulatory Commission.

1.9 "<u>Fiber Optic PCO</u>" shall mean the fiber optic point of change of ownership, where the GIF fiber optic cables connect to the TIF fiber optic cables, defined in Exhibit "C", and as shown on Exhibit "C-1" of this Agreement.

1.10 "<u>Full Interconnection Study</u>" shall mean the set of studies conducted by the TSP under the Full Interconnection Study Agreement consisting of the Steady-State and Transfer Analysis;

System Protection (Short-Circuit) Analysis; Dynamic and Transient Stability Analysis; and Facilities Study.

1.11 "<u>Full Interconnection Study Agreement</u>" shall mean the agreement executed by the Parties relating to the performance of the Full Interconnection Study.

1.12 "<u>GIF</u>" shall mean Generator's interconnection facilities as described in Section 7 of Exhibit "C."

1.13 "<u>Good Utility Practice</u>" shall have the meaning described in PUCT Rule 25.5 or its successor.

1.14 "<u>Governmental Authority(ies)</u>" shall mean any federal, state, local or municipal body having jurisdiction over a Party.

1.15 "<u>In-Service Date</u>" shall be the date, as reflected in Exhibit "B", that the TIF will be ready to connect to the GIF.

1.16 "<u>ISO</u>" shall mean the ERCOT Independent System Operator.

1.17 "<u>Permanent Facilities</u>" shall mean the permanent facilities required to provide for the permanent Point of Interconnection. Such permanent facilities are identified in Sections 8.1 of Exhibit "C".

1.18 "<u>Plant</u>" shall mean the electric generation facility owned and operated by the Generator, which is comprised of wind turbine-generators and the collection circuits that connect to the GIF, as specified in Exhibit "C."

1.19 "Point of Interconnection" shall mean (i) the location where the GIF permanently connects to the TIF by means of the Permanent Facilities, as negotiated by the Parties, defined in Section 2.1 of Exhibit "C" and as shown on Exhibit "C-1" of this Agreement; (ii) the location where the GIF temporarily connects to the TIF by means of the Temporary Facilities, as negotiated by the Parties, defined in Section 2.2 of Exhibit "C" and as shown on Exhibit "C-2" of this Agreement. References in the Agreement to "Point of Interconnection" shall include both the temporary and permanent points of interconnection unless the context indicates otherwise.

1.20 "<u>PUCT</u>" shall mean the Public Utility Commission of Texas.

1.21 "<u>PUCT Rules</u>" shall mean the Substantive Rules of the PUCT.

1.22 "<u>Reasonable Efforts</u>" shall mean the use of Good Utility Practice and the exercise of due diligence (pursuant to PUCT Rule 25. 198(e) or its successor).

1.23 "<u>System Protection Equipment</u>" shall mean those facilities located within the TIF and the GIF as described in Section 5.6 of Exhibit "A" and Section 10 of Exhibit "C".

1.24 "<u>System Security Study</u>" shall have the meaning as described in PUCT Rule 25.198(c) or its successor.

1.25 "<u>TCOS</u>" shall mean the TSP's transmission cost of service as allowed by the applicable Governmental Authority.

1.26 "<u>Temporary Facilities</u>" shall mean the temporary facilities required to provide for the temporary Point of Interconnection. Such temporary facilities are identified in Section 8.2 of Exhibit "C".

1.27 "<u>TIF</u>" shall mean the TSP's interconnection facilities as described in Section 8 of Exhibit "C" to this Agreement.

1.28 "<u>Trial Operation</u>" shall mean the process by which the Generator is engaged in on-site test operations and commissioning of the first turbine-generator of the Plant prior to Commercial Operation.

1.29 "<u>TSP</u>" shall mean the Transmission Service Provider.

1.30 "<u>TSP System</u>" shall mean the electric transmission facilities, including the TIF and System Upgrades, and all associated equipment and facilities owned and/or operated by the TSP.

## ARTICLE 2. TERMINATION

- 2.1 <u>Termination Procedures</u>. This Agreement may be terminated as follows:
  - A. the Generator may terminate this Agreement after giving the TSP thirty (30) days advance written notice; or
  - B. the TSP may terminate this Agreement (subject to Governmental Authority approval, if required) on written notice to the Generator if the Generator's Plant has not achieved Commercial Operation within one (1) year after the scheduled Commercial Operation date reflected in Exhibit "B"; or
  - C. either Party may terminate this Agreement in accordance with Section 10.6.

2.2 <u>Termination Costs</u>. If a Party elects to terminate the Agreement pursuant to Section 2.1 above, the Generator shall pay all costs incurred (or committed to be incurred) by TSP, as of the date of the other Party's receipt of such notice of termination, that are the responsibility of the Generator under this Agreement. In the event of termination by either Party, both Parties shall use commercially reasonable efforts to mitigate the damages and charges that they may incur as a consequence of termination. The provisions of the Sections 2.2 and 2.3 shall survive termination of the Agreement.

2.3 <u>Disconnection</u>. Upon termination of this Agreement, the Parties will disconnect the GIF from the TIF.

#### **ARTICLE 3. REGULATORY FILINGS**

3.1 <u>Filing</u>. The TSP shall file this executed Agreement with FERC (and provide a copy of this Agreement to the PUCT. Each Party will reasonably cooperate with each other in connection with such filings. Any portions of this Agreement asserted by Generator to contain competitively sensitive commercial or financial information shall be filed by the TSP identified as "<u>confidential</u>" under seal stating, for the TSP's showing of good cause that Generator asserts such information is confidential information and has requested such filing under seal. If requested by the TSP, Generator shall provide the TSP, in writing, with the Generator's basis for asserting that the information referred to in this Section 3.1 is competitively sensitive information, and the TSP may disclose such writing to the appropriate Governmental Authority.

3.2 <u>Regulatory Approvals</u>. Unless exempt, the TSP shall timely request ISO and all regulatory approvals necessary for it to carry out its responsibilities under this Agreement. Such approvals shall include any CCN required for the construction of the TIF.

#### ARTICLE 4. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

4.1 <u>Options</u>. The Generator shall select one (1) of the following options (subsection A or subsection B) and include the selected option in Exhibit "B" for completion of the TIF:

A. The TSP shall design, procure, and construct the TIF, using Reasonable Efforts to complete the TIF by the In-Service Date reflected in Exhibit "B". The TSP will utilize its own resources and will contract for additional resources, as reasonably necessary, to meet the In-Service Date. Such resources shall include, as the TSP believes is reasonable, use of other contractors, other equipment suppliers, other material suppliers, additional contract personnel, additional payments to contractors for expedited work, and premiums paid to equipment and material suppliers for expedited delivery. The TSP shall not be required to undertake any initiative 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 ERCOT Requirements. In the event the TSP reasonably expects that it will not be able to complete the TIF by the In-Service Date, the TSP will promptly provide written notice to the Generator and will undertake Reasonable Efforts to meet the earliest date thereafter.

B. (i) The TSP shall design, procure, and construct the TIF by the In-Service Date reflected in Exhibit "B". The Parties acknowledge that the In-Service Date was either agreed upon through good faith negotiations or designated by the Generator upon failure of the Parties to agree. In the process of negotiating the In-Service Date, Generator will request a date upon which it reasonably expects it will be ready to begin use of the TIF and upon which it reasonably expects to begin doing so. Any date designated by the Generator shall in no event be less than fifteen (15)

months from the date that all conditions of Sections 4.2 and 4.3 have been satisfied. The designated In-Service Date will be extended day for day for each day that the ISO refuses to grant clearances to install equipment. If the TSP fails to complete the TIF by the In-Service Date reflected in Exhibit "B", the TSP shall pay the Generator liquidated damages in accordance with this Section 4.1.B.

(ii) The Parties agree that actual damages to the Generator, in the event the TIF are not completed by the In-Service Date, may include Generator's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. The Parties agree that, because of such uncertainty, any liquidated damages paid by the TSP to the Generator shall be an amount equal to ½ of 1% of the actual cost of the TIF, per day. However, in no event shall the total liquidated damages are less than the Generator's actual damages. The Parties agree that such liquidated damages are less than the Generator's actual damages. The Parties agree that the foregoing payments will be made by the TSP to the Generator as just compensation for the damages caused to the Generator, 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 Agreement.

(iii) The TSP shall apply to have the full costs of the TIF included in TCOS. If the PUCT issues a final, appealable order excluding from TCOS any portion of the TIF costs, including higher contractor and vendor costs due to liquidated damage provisions in those contracts and insurance costs to cover liquidated damages, which costs may have been reasonably incurred but which the PUCT finds should not be recovered through TCOS, the Generator shall reimburse the TSP for such costs in an amount not to exceed the difference between the TSP's estimate of the cost of the TIF under Section 4.1.A and the TSP's estimate of the cost of the TIF under Section 4.1.B as reflected in Exhibit "C". Such costs shall be estimated using Good Utility Practice.

(iv) No liquidated damages shall be paid to Generator if the Generator is not ready to commence use of the TIF for the delivery of power to the Plant for Trial Operation or export of power from the Plant on the In-Service Date, unless the Generator would have been able to commence use of the TIF for the delivery of power to the Plant for Trial Operation or export of power from the Plant but for TSP's delay.

(v) If the In-Service Date has been designated by the Generator upon a failure of the Parties to agree on the In-Service Date, the TSP may, at its option, require the Generator to subcontract with the TSP for all or part of the design, procurement and construction of the TIF in accordance with the TSP's standard subcontractor agreements. In such event, the TSP shall be subject to the payment of liquidated damages to the Generator only if the In-Service Date is not met solely due to the TSP's failure to complete the portion of the TIF for which the TSP has retained responsibility. It is the intent of this subsection to give the TSP full control of the contents and quality of the TIF. To the extent the Generator acts as a subcontractor to the TSP, the following will apply: 1) The Generator shall engineer, procure equipment, and construct the TIF (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the TSP; 2) In its engineering, procurement and construction of the TIF, the Generator shall comply with all requirements of law to which the TSP would be subject in the engineering, procurement or construction of the TIF; 3) The TSP shall review and approve the engineering design, acceptance tests of equipment, and the construction of the TIF; 4) The TSP shall have the right to approve and accept for operation the TIF in accordance with the standards and specifications provided in advance by the TSP, such approval and acceptance shall not be unreasonably withheld, conditioned, or delayed; 5) Should any phase of the engineering, equipment procurement, or construction of the TIF, including selection of subcontractors, not meet the standards and specifications provided by the TSP, and therefore be deemed unacceptable, then the Generator shall be obligated to remedy that portion of the TIF or selection of subcontractors that is deemed unacceptable, the TSP's approval of the Generator's selection of subcontractors will not be unreasonably withheld, conditioned or delayed; and 6) Once the TIF are accepted for operation by the TSP, then the TSP shall reimburse the Generator for the reasonable and necessary costs incurred by the Generator to complete the TIF, not to exceed the amount specified in the subcontract. Such reimbursement shall be made within thirty (30) days after receipt of the invoice, unless otherwise agreed to by the Parties.

4.2 <u>Equipment Procurement</u>. If responsibility for construction of the TIF is borne by the TSP, then the TSP shall commence design of the TIF and procure necessary equipment within a reasonable time after all of the following conditions are satisfied:

A. The TSP has completed the Facilities Study pursuant to the Full Interconnection Study Agreement;

B. The TSP has received written authorization to proceed with design and procurement from the Generator by the date specified in Exhibit "B"; and

C. The Generator has provided security to the TSP in accordance with Section 8.3 by the dates specified in Exhibit "B."

4.3 <u>Construction Commencement</u>. The TSP shall commence construction of the TIF as soon as practicable after the following additional conditions are satisfied:

A. Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

B. Necessary real property rights, if any, have been obtained;

C. The TSP has received written authorization to proceed with construction from the Generator by the date specified in Exhibit "B"; and

D. The Generator has provided security to the TSP in accordance with Section 8.3 by the dates specified in Exhibit "B".

4.4 <u>Work Progress</u>. The Parties will keep each other advised periodically as to the progress of their respective design, procurement, and construction efforts. If, at any time, the Generator becomes aware that the completion of the TIF will not be required until after the specified In-

Service Date, the Generator will promptly provide written notice to the TSP of a new, later In-Service Date or System Upgrades In-Service Date.

4.7 <u>Conditions Precedent Delay</u>. To the extent this Agreement incorporates a specified In-Service Date and the Generator fails to satisfy conditions precedent under Sections 4.2 and 4.3 so that the TSP may meet the In-Service Date, the Parties will negotiate in good faith to establish a new schedule for completion of the TIF, and the In-Service Date shall be extended accordingly.

# ARTICLE 5. FACILITIES AND EQUIPMENT

5.1 <u>Information Exchange</u>. The Parties shall exchange information and mutually agree upon the design and compatibility of the Parties' interconnection facilities. The Parties shall work diligently and in good faith to make any necessary design changes to ensure compatibility of the GIF to the TSP System.

5.2 <u>GIF Construction</u>. Generator agrees to cause the GIF to be designed and constructed in accordance with Good Utility Practice, ERCOT Requirements and the National Electrical Safety Code in effect at the time of construction. In addition, Generator agrees to design and construct the GIF in accordance with the National Electric Code. Within one hundred and twenty (120) days after Commercial Operation, unless the Parties agree on another mutually acceptable deadline, the Generator shall deliver to the TSP the following "as-built" drawings, information and documents for the GIF: a one-line diagram, a site plan showing the Plant and the GIF, plan and elevation drawings showing the layout of the GIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Generator's main-power transformers, the facilities connecting the Plant to the main power transformers and the GIF, and the impedances (determined by factory tests) for the associated main power transformers and the GIF.

5.3 <u>TIF Construction</u>. The TSP agrees to cause the TIF to be designed and constructed in accordance with Good Utility Practice, ERCOT Requirements and the National Electrical Safety Code in effect at the time of construction.

5.4 <u>Equipment Changes</u>. For facilities not described in Exhibit "C", if either Party makes equipment changes to the Plant, the GIF, the TIF or the TSP System which it knows will affect the operation or performance of the other Party's interconnection facilities, the Parties agree to notify the other Party, in writing, of such changes. Such changes shall be made in accordance with ERCOT Requirements and coordinated between the Parties.

5.5 <u>Metering, Telemetry and Communications Requirements.</u>

A. Metering and telemetry of data will be accomplished in accordance with ERCOT Requirements. The specific metering, telemetry and communications equipment to be installed and data to be telemetered are described in Exhibit "C".

B. The metering and telemetry equipment shall be owned by the TSP. However, the TSP shall provide the Generator with metering and telemetry values in accordance with ERCOT Requirements.

C. A minimum set of inputs to the telemetry equipment is specified in Exhibit "C". Additional sets of inputs may be subsequently mutually agreed upon.

D. The TSP will notify the Generator at least five (5) working days in advance of any planned maintenance, inspection, testing, or calibration of the metering equipment, unless otherwise agreed to in writing. The Generator, or its designated representative, shall have the right to be present for these activities and to receive copies of any documents related to the procedures and results.

E. Prior to the connection of the GIF to the TIF, acceptance tests will be performed by the owning Party to ensure the proper functioning of all metering, telemetry and communications equipment associated with the Point of Interconnection and both Parties' interconnection facilities, and to verify the accuracy of data being received by the TSP, ERCOT and the Generator. All acceptance tests will be performed consistent with ERCOT Requirements.

F. The TSP shall, in accordance with Good Utility Practice and ERCOT Requirements, specify communications facilities, including those necessary to transmit data from the metering equipment to the TSP, that are necessary for the effective operation of the Plant and the GIF with the TSP System. Such communication facilities shall be included in Exhibit "C". The Generator shall make arrangements to procure and bear the cost of such facilities.

G. Any changes to the meters, telemetry equipment, voltage transformers, current transformers, and associated panels, hardware, conduit and cable, which will affect the data being received by the other Party must be mutually agreed to by the Parties.

H. Each Party will promptly advise the other Party if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible in accordance with ERCOT Requirements.

5.6 System Protection and Other Controls Requirements.

A. Each Party's facilities shall be designed to isolate any fault, or correct or isolate any abnormality that would negatively affect the other Party's system or other entities connected to the TSP System.

B. The Generator shall be responsible for protection of its facilities consistent with ERCOT Requirements.

C. Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Section 5.6.F. 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 tripping the Generator's units.

D. Recording equipment shall be installed to analyze all system disturbances in accordance with ERCOT Requirements.

E. Each Party will test, operate and maintain System Protection Equipment in accordance with ERCOT Requirements. Each Party will provide reasonable notice to the other Party of any testing of its System Protection Equipment allowing such other Party the opportunity to have representatives present during testing of its System Protection Equipment.

F. Prior to the In-Service Date, and again prior to Commercial Operation, each Party or its agent shall perform a complete calibration test and functional trip test of the System Protection Equipment. At intervals suggested by Good Utility Practice or at intervals described in the ERCOT Requirements if so defined therein, and following any apparent malfunction of the System Protection Equipment, each Party shall perform both calibration and functional trip tests of its System Protection Equipment. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

5.7 <u>No Annexation</u>. Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

# ARTICLE 6. OPERATION AND MAINTENANCE

6.1 Operation and Maintenance of Interconnection Facilities. The Parties agree to operate and maintain their systems in accordance with Good Utility Practice, National Electrical Safety Code, ERCOT Requirements, PUCT Rules and all applicable laws and regulations. In addition, Generator agrees to operate and maintain its system in accordance with the National Electric Code. Subject to any necessary ISO approval, each Party shall provide necessary equipment outages to allow the other Party to perform periodic maintenance, repair or replacement of its facilities. Such outages shall be scheduled at mutually agreeable times, unless conditions exist which a Party believes, in accordance with Good Utility Practice, may endanger persons or property. No changes will be made in the normal operation of the Point of Interconnection without the mutual agreement of the Parties except as otherwise provided herein. All testing of the Plant that affects the operation of the Point of Interconnection shall be coordinated between the TSP, ERCOT, and Generator and will be conducted in accordance with ERCOT Requirements.

6.2 <u>Control Area</u>. The Control Area within ERCOT is a single Control Area with ERCOT assuming authority as the Control Area operator in accordance with ERCOT Requirements.

6.3 <u>Land Rights and Easements.</u> Terms and conditions addressing the rights of the TSP and the Generator regarding any facilities located on the other Party's property shall be addressed in a

separate, duly executed and recorded easement agreement between the Parties. Prior to Commercial Operation, the Parties will mutually agree upon procedures to govern access to each other's property as necessary for the Parties to fulfill their obligations hereunder.

6.4 <u>Service Interruption</u>. The Parties recognize that the interruption of service provisions of the PUCT Rules give TSP the right to disconnect the TSP System from the Plant under the conditions specified therein. The Generator will promptly disconnect the Plant from the TSP System when required by and in accordance with the PUCT Rules and ERCOT Requirements.

#### 6.5 Switching and Clearance.

A. Any switching or clearances needed on the TIF or the GIF will be done in accordance with ERCOT Requirements.

B. Any switching and clearance procedure necessary to comply with Good Utility Practice or ERCOT Requirements that may have specific application to the Plant shall be addressed in Exhibit "C."

6.6 <u>Start-Up and Synchronization</u>. Consistent with ERCOT Requirements and the Parties' mutually acceptable procedure, the Generator is responsible for the proper synchronization of the Plant to the TSP System.

6.7 <u>Routine Operational Communications.</u> On a timely basis, the Parties shall exchange all information necessary to comply with ERCOT Requirements.

6.8 <u>Black Start Operations.</u> If the Plant is capable of black start operations, Generator will coordinate individual Plant start-up procedures consistent with ERCOT Requirements. Any black start operations shall be conducted in accordance with the black start criteria included in the ERCOT Requirements and the TSP's Black Start Plan on file with the ISO. Notwithstanding this Section, the Generator is not required to have black start capability by virtue of this Agreement. If the Generator will have black start capability, then Generator shall provide and maintain an emergency communication system that will interface with the TSP during a black start condition.

6.9 <u>Power System Stabilizers.</u> The Generator shall procure, install, maintain and operate power system stabilizers if required to meet ERCOT Requirements and as described in Exhibit "C."

## ARTICLE 7. DATA REQUIREMENTS

7.1 <u>Data Acquisition</u>. The acquisition of data to realistically simulate the electrical behavior of system components is a fundamental requirement for the development of a reliable interconnected transmission system. Therefore, the TSP and the Generator shall be required to submit specific information regarding the electrical characteristics of their respective facilities to each other as described below in accordance with ERCOT Requirements.

7.2 <u>Initial Data Submission by TSP</u>. The initial data submission by the TSP shall occur no later than one hundred twenty (120) days prior to Trial Operation and shall include transmission system data necessary to allow the Generator to select equipment and meet any system protection and stability requirements.

7.3 <u>Initial Data Submission by Generator</u>. The initial data submission by the Generator, including manufacturer data, shall occur no later than ninety (90) days prior to the Trial Operation and shall include a completed copy of the following forms contained in the ERCOT Generation Interconnection Procedure: (1) Plant Description/Data and (2) Generation Stability Data. It shall also include any additional data provided to the ISO for the System Security Study. Data in the initial submissions shall be the most current Plant design or expected performance data. Data submitted for stability models shall be compatible with the ISO standard models. If there is no compatible model, the Generator will work with an ISO designated consultant to develop and supply a standard model and associated data.

7.4 <u>Data Supplementation</u>. Prior to Commercial Operation, the Parties shall supplement their initial data submissions with any and all "as-built" Plant data or "as-tested" performance data which differs from the initial submissions or, alternatively, written confirmation that no such differences exist. Subsequent to Commercial Operation, the Generator shall provide the TSP any data changes due to equipment replacement, repair, or adjustment. The TSP shall provide the Generator any data changes due to equipment replacement, repair, or adjustment in the directly connected substation or any adjacent TSP-owned substation that may affect the GIF equipment ratings, protection or operating requirements. The Parties shall provide such data no later than thirty (30) days after the date of the actual change in equipment characteristics. Also, the Parties shall provide to each other a copy of any additional data later required by the ISO concerning these facilities.

7.5 <u>Data Exchange</u>. Each Party shall furnish to the other Party real-time and forecasted data as required by ERCOT Requirements. The Parties will cooperate with one another in the analysis of disturbances to either the Plant or the TSP's 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.

# ARTICLE 8. PERFORMANCE OBLIGATION

## 8.1 <u>Generator's Cost Responsibility.</u>

A. The Generator will acquire, construct, operate, test, maintain and own the Plant and GIF at its sole expense.

B. In addition, the Generator may be required to make a contribution in aid of construction in the amount set out in and for the facilities described in Exhibit "C", if any, in accordance with PUCT Rules.

8.2 <u>TSP's Cost Responsibility.</u> The TSP will acquire, own, operate, test, and maintain the TIF at its sole expense, subject to the provisions of Section 4.1.B and the contribution in aid of construction provisions of Section 8.1 of this Agreement.

8.3 Financial Security Arrangements. The TSP may require the Generator to pay a reasonable deposit or provide another means of security, to cover the costs of planning, licensing, procuring equipment and materials, and constructing the TIF. The required security arrangements are specified in Exhibit "E". Within five (5) business days after TSP has received notice from the Generator that the Plant has achieved Commercial Operation and TSP has verified the same, the TSP shall return the deposit(s) or security to the Generator. However, the TSP may retain an amount to cover the incremental difference between the TSP's actual out-of-pocket costs associated with the choice of Section 4.1.B over Section 4.1.A, pending a final PUCT Order as contemplated in Section 4.1.B(iii). If the Plant has not achieved Commercial Operation within one (1) year after the scheduled Commercial Operation date identified in Exhibit "B" or if the Generator terminates this Agreement in accordance with Section 2.1 and the TIF are not required, the TSP may, subject to the provisions of Section 2.2, retain as much of the deposit or security as is required to cover the costs it incurred in planning, licensing, procuring equipment and materials, and constructing the TIF. If a cash deposit is made pursuant to Exhibit "E", any repayment of such cash deposit shall include interest at a rate applicable to customer deposits as established from time to time by the PUCT or other Governmental Authority.

## **ARTICLE 9. INSURANCE**

9.1 Each Party shall, at its own expense, maintain in force throughout the period of this Agreement, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in Texas:

A. <u>Employers Liability and Worker's Compensation Insurance</u> providing statutory benefits in accordance with the laws and regulations of the State of Texas. The minimum limits for the Employer's Liability insurance shall be One Million Dollars (\$1,000,000) each accident bodily injury by accident, One Million Dollars (\$1,000,000) each employee bodily injury by disease, and One Million Dollars (\$1,000,000) policy limit bodily injury by disease.

B. <u>Commercial General Liability Insurance</u> 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.

C. <u>Comprehensive Automobile Liability Insurance</u> for coverage of owned, non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

D. <u>Excess Public Liability Insurance</u> 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.

E. The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance, and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and affiliated 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 Agreement against the Other Party Group. Each Party shall provide thirty (30) days advance written notice to Other Party Group prior to cancellation or any material change in coverage or condition.

F. 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 non-contributory for any liability arising out of that Party's negligence, 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.

G. 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 Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

H. The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

I. Within ten (10) days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.

J. Notwithstanding the foregoing, each Party may self-insure to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment

grade, or better, by Standard & Poor's. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Sections 9.1.A through 9.1.I. In the event that a Party is permitted to self-insure pursuant to this Section 9.1.J, it shall not be required to comply with the insurance requirements applicable to it under Sections 9.1.A through 9.1.I.

K. The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.

## ARTICLE 10. MISCELLANEOUS

10.1 <u>Governing Law and Applicable Tariffs.</u>

A. This Agreement for all purposes shall be construed in accordance with and governed by the laws of the State of Texas, excluding conflicts of law principles that would refer to the laws of another jurisdiction. The Parties submit to the jurisdiction of the federal and state courts in the State of Texas.

B. This Agreement is subject to all valid, applicable rules, regulations and orders of, and tariffs approved by, duly constituted Governmental Authorities.

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

10.2 <u>No Other Services.</u> This Agreement is applicable only to the interconnection of the Plant to the TSP System at the Point of Interconnection and does not obligate either Party to provide, or entitle either Party to receive, any service not expressly provided for herein. Each Party is responsible for making the arrangements necessary for it to receive any other service that it may desire from the other Party or any third party. This Agreement does not address the sale or purchase of any electric energy, transmission service or ancillary services by either Party, either before or after Commercial Operation.

10.3 <u>Entire Agreement</u>. This Agreement, including all Exhibits, Attachments and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement, including without limitation the Original Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement. Notwithstanding the other provisions of this Section, the Full Interconnection Study Agreement, if any, is unaffected by this Agreement.

10.4 <u>Notices</u>. Except as otherwise provided in Exhibit "D", any formal notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given or made if delivered in person, or sent by either registered or certified mail, postage prepaid, overnight mail or electronic mail with read receipt to the address identified on Exhibit "D" attached to this Agreement. Either Party may change the notice information on Exhibit "D" by giving five (5) business days written notice prior to the effective date of the change.

#### 10.5 <u>Force Majeure</u>.

A. The term "Force Majeure" as used herein shall mean any cause beyond the reasonable control of the Party claiming Force Majeure, and without the fault or negligence of such Party, which materially prevents or impairs the performance of such Party's obligations hereunder, including but not limited to, storm, flood, lightning, earthquake, fire, explosion, failure or imminent threat of failure of facilities, civil disturbance, strike or other labor disturbance, sabotage, war, national emergency, or restraint by any Governmental Authority.

B. Neither Party shall be considered to be in Default (as hereinafter defined) with respect to any obligation hereunder (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Section shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

#### 10.6 Default

A. The term "<u>Default</u>" shall mean the failure of either Party to perform any obligation in the time or manner provided in this Agreement. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the nondefaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in Section 10.6.B, the defaulting Party shall have thirty (30) days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within thirty (30) days, the defaulting Party shall commence such cure within thirty (30) days after Default notice and continuously and diligently complete such cure within ninety (90) days from receipt of the Default notice; and, if cured within such time, the Default specified in such Default notice shall cease to exist.

B. If a Default is not cured as provided in this Section, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any

further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Section will survive termination of this Agreement.

10.7 <u>Intrastate Operation</u>. The operation of the Plant by Generator shall not cause there to be a synchronous or an asynchronous interconnection between ERCOT and any other transmission facilities operated outside of ERCOT unless ordered by the Federal Energy Regulatory Commission under Section 210 of the Federal Power Act. The Parties recognize and agree that any such interconnection will constitute an adverse condition giving the TSP the right to immediately disconnect the TIF from the GIF, until such interconnection has been disconnected. The Generator will not be prohibited by this Section from interconnecting the Plant with facilities operated by the Comisión Federal de Electricidad of Mexico, unless such interconnection would cause ERCOT utilities that are not "public utilities" under the Federal Power Act to become subject to the plenary jurisdiction of the Federal Energy Regulatory Commission.

10.8 <u>No Third Party Beneficiaries</u>. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

10.9 <u>No Waiver</u>. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of obligations, rights, or duties imposed upon the Parties. Termination or Default of this Agreement for any reason by the Generator shall not constitute a waiver of the Generator's legal rights to obtain an interconnection from the TSP under a new interconnection agreement.

10.10 <u>Headings</u>. The descriptive headings of the various articles and sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

10.11 <u>Multiple Counterparts</u>. This Agreement may be executed in two (2) or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

10.12 <u>Amendment</u>. This Agreement may be amended only upon mutual agreement of the Parties, which amendment will not be effective until reduced to writing and executed by the Parties.

10.13 <u>No Partnership</u>. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

10.14 <u>Further Assurances</u>. The Parties agree to (i) furnish upon request to each other such further information, (ii) execute and deliver to each other such other documents, and (iii) do such other acts and things, all as the other Party may reasonably request for the purpose of carrying out the

intent of this Agreement and the documents referred to in this Agreement. Without limiting the generality of the foregoing, the TSP shall, at the Generator's expense, when reasonably requested to do so by the Generator at any time after the execution of this Agreement, prepare and provide such information in connection with this Agreement (including, if available, resolutions, certificates, opinions of counsel or other documents relating to the TSP's corporate authorization to enter into this Agreement and to undertake the obligations set out herein) as may be reasonably required by any potential lender to the Generator under a proposed loan agreement. The TSP will use commercially reasonable efforts to obtain any opinion of counsel reasonably requested by Generator, but the TSP shall not be in Default of any obligation under this Agreement if the TSP is unable to provide an opinion of counsel that will satisfy any potential lender to the Generator. Specifically, upon the written request of one Party, the other Party shall provide the requesting Party with a letter stating whether or not, up to the date of the letter, that Party is satisfied with the performance of the requesting Party under this Agreement.

10.15 <u>Indemnification and Liability</u>. The indemnification and liability provisions of the PUCT Rule 25.202(b)(2) or its successor shall govern this Agreement.

10.16 <u>Consequential Damages</u>. OTHER THAN THE LIQUIDATED DAMAGES HERETOFORE DESCRIBED, IN NO EVENT SHALL EITHER PARTY BE LIABLE UNDER ANY PROVISION OF THIS AGREEMENT FOR ANY LOSSES, DAMAGES, COSTS OR EXPENSES FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT OR REVENUE, LOSS OF THE USE OF EQUIPMENT, COST OF CAPITAL, COST OF TEMPORARY EQUIPMENT OR SERVICES, WHETHER BASED IN WHOLE OR IN PART IN CONTRACT, IN TORT, INCLUDING NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER THEORY OF LIABILITY; PROVIDED, HOWEVER, THAT DAMAGES FOR WHICH A PARTY MAY BE LIABLE TO THE OTHER PARTY UNDER ANOTHER AGREEMENT WILL NOT BE CONSIDERED TO BE SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES HEREUNDER.

10.17 <u>Assignment</u>. This Agreement may be assigned by either Party only with the written consent of the other Party; provided that either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Generator shall have the right to assign this Agreement, without the consent of the TSP, for collateral security purposes to aid in providing financing for the Plant, provided that the Generator will require any secured party, trustee or mortgagee to notify the TSP of any such assignment. Any financing arrangement entered into by the Generator pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee will notify the TSP of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

10.18 <u>Severability</u>. If any provision in this Agreement is finally determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this Agreement; provided that if the Generator (or any third-party, but only if such third-party is not acting at the direction of the TSP) seeks and obtains such a final determination with respect to any provision of Section 4.1.B, then none of the provisions of Section 4.1.B. shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by Section 4.1.A.

10.19 <u>Comparability</u>. The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

10.20 <u>Invoicing and Payment</u>. Unless the Parties otherwise agree (in a manner permitted by applicable PUCT Rules and as specified in writing in an Exhibit "E" attached hereto), invoicing and payment rights and obligations under this Agreement shall be governed by PUCT Rules or applicable Governmental Authority. Invoices shall be rendered to the paying Party at the address specified on, and payments shall be made in accordance with the requirements of, Exhibit "D".

## 10.21 Confidentiality.

Α. Subject to the exception in Section 10.21.B, any information that a Party claims is competitively sensitive, commercial or financial information under this Agreement ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to the ISO. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subsection, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subsection, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

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

#### EXHIBIT "B"

#### TIME SCHEDULE

Interconnection Option chosen by Generator (check one): X Section 4.1.A. or Section 4.1.B

If Section 4.1.B is chosen by Generator, the In-Service Date(s) was determined by (check one): (1) \_\_\_\_\_\_ good faith negotiations, or (2) \_\_\_\_\_\_ designated by Generator upon failure to agree.

Date by which Generator must provide written authorization to proceed with design and procurement and provide security, as specified in Section 4.2, so that TSP may maintain schedule to meet the In-Service Date:

As of the Execution Date of this Agreement, Generator hereby provides such written authorization to TSP. Generator shall provide Security as set forth in Section 1 of Exhibit "E".

Date by which Generator must provide written authorization to commence construction and provide security as specified in Section 4.3, so that TSP may maintain schedule to meet the In-Service Date:

As of the Execution Date of this Agreement, Generator hereby provides such written authorization to TSP. Generator shall provide Security as set forth in Section 1 of Exhibit "E".

In - Service Date(s):

TSP will use Reasonable Efforts to complete the Permanent Facilities within <u>eighteen (18)</u> <u>months</u> from the Execution Date of this Agreement.

Until then, a temporary Point of Interconnection will be provided by means of a switch and switch structure hard tapped on the 69 kV Paducah-Clare Street transmission line. TSP will use Reasonable Efforts to complete the Temporary Facilities within  $\underline{six}$  (6) months from the Execution Date of this Agreement.

Scheduled Trial Operation Date:

N/A

Scheduled Commercial Operation Date:

Generator achieve commercial operation under the Original Agreement

Due to the nature of the subject of this Agreement, the Parties may mutually agree to change the dates and times of this Exhibit "B".

# EXHIBIT "C"

# **INTERCONNECTION DETAILS**

# 1. Substation Name: Whirlwind

#### 2. Location:

2.1. Generator's Whirlwind Substation ("Substation") (34.106116, -101.098423) is located in Motley County approximately 16 miles northeast of Floydada, Texas. Once the Permanent Facilities are completed and energized, the permanent Point of Interconnection will be located at TSP's first dead-end structure outside the fence of TSP's Matador Station ("Station") that terminates Generator's 69 kV transmission line from the Substation. Specifically, the permanent Point of Interconnection will be located where TSP's jumper conductors at TSP's first dead-end structure outside the Station fence connect to Generator's 69 kV transmission line conductors from the Substation. The Fiber Optic PCO will be located at TSP's first dead-end structure outside the Station fence. See attached Exhibit "C-1."

2.2. The temporary Point of Interconnection will be located at the jumper connection between TSP's switch and switch structure and Generator's 69 kV transmission line from the Substation. Specifically, the temporary Point of Interconnection will be located where TSP's jumper conductors from TSP's switch physically connect to Generator's 69 kV transmission line conductors from the Substation. See attached Exhibit "C-2."

#### **3. Delivery Voltage:** 69 kV

- 4. Number and Size of Generating Units: Nominal 60 MW Plant capacity comprised of 26 units at 2.3 MW each
- **5. Type of Generating Units:** Siemens 2.3 MW Mk II variable speed wind turbine generators coupled to asynchronous generators (SWT-2.3-93, 60 Hz Application)

#### 6. Metering and Telemetry Equipment:

6.1. The ERCOT Polled Settlement ("<u>EPS</u>") metering equipment described below will be procured, paid for, owned, and installed inside the Substation by TSP.

- (i) one (1) 69 kV meter panel with one (1) primary meter and one (1) back up meter
- (ii) three (3) 69 kV billing accuracy metering units comprised of combination potential transformers and current transformers. The metering will be a three-phase, four-wire system.

Note: If the EPS metering in Section 6.1 above and the Point of Interconnection are not at the same location, the metering will be compensated for power losses from the EPS metering location to the Point of Interconnection.

6.2 The telemetry equipment described below was paid for by Generator but procured, owned, and installed by TSP inside the Substation.

(i) one (1) GE D20 multi-ported remote terminal unit (RTU)

6.3 Such facilities shall meet the following TSP requirements in addition to the ERCOT Requirements. If there is a conflict between the TSP requirements below and the ERCOT Requirements, the ERCOT Requirements shall prevail.

- i) The transfer of power between the TIF and GIF shall be read as if metered at the Point of Interconnection with bi-directional metering. Backfeed power from the TSP System to the Plant is "MW Out". "MW Out" is considered positive and "MW In" is considered negative. The same conventions will be observed on the reactive power. Each of the four quantities will be recorded separately. Recording of Plant and GIF energy usage for the billing period will be determined by the EPS metering installed by TSP. For a Generator having more than one (1) Point of Interconnection (for example, two (2) or more lines), independent bi-directional metering is required at each Point of Interconnection.
- ii) Meters in Section 6.1 above are required for net generation output, with the bi-directional feature used to measure station-use auxiliaries when not exporting power. Unless used for the interconnection metering, all voltage and current transformers used for generation metering shall conform to meter accuracy class or better. MW and MVAR transducers shall be 3-element transducers with an accuracy of  $\pm 0.2\%$  or better.
- iii) Prior to the In-Service Date of the Original Agreement, and if available from TSP RTU equipment, Generator may request TSP to configure one (1) RTU communications port in a format satisfactory to TSP for the polling of metering quantities to be determined by mutual agreement; such request made on or after the In-Service Date shall be at Generator's expense. If such metering quantities are not available from TSP RTU equipment, they may be available by alternate means at Generator's expense. If requested by Generator, MW and MVAR transducers shall be 3-element transducers with an accuracy of  $\pm 0.2\%$  or better.
- iv) Appropriate personnel of the Parties and ERCOT shall be involved in engineering changes of interconnect metering equipment from project inception. Representatives of the Parties and ERCOT must be notified so a mutually agreeable time can be set for the changes. Both Parties and ERCOT must be satisfied with the making of any changes.

 Metering and operation personnel of the Parties shall be notified at least forty-eight (48) hours in advance, or at a mutually acceptable advance notice, prior to any calibrations or maintenance. In emergency conditions, TSP may make necessary repairs with notification to affected parties within twenty-four (24) hours. Copies of the repair and calibration records shall be forwarded to the metering and operation personnel of the Parties.

# 7. Generator Interconnection Facilities:

GIF include the following:

7.1. The facilities listed below are necessary to complete the permanent Point of Interconnection and are considered Permanent Facilities:

- i) the dead-end structure at the Station (retired and removed from the Station) that terminate the 69 kV transmission line from the Substation
- ii) the Substation and all facilities within it, except for those facilities identified as TIF in Section 8 below
- iii) the 69 kV transmission line, including structures, conductors, insulators and connecting hardware, from the Substation to TSP's first dead-end structure outside the Station fence
- iv) the existing optical ground wire ("<u>OPGW</u>") as referenced in Section 9.2(vi) below, from the Substation to the Fiber Optic PCO located at TSP's first dead-end structure outside the Station fence, including the fiber distribution panel ("<u>FDP</u>") in the Substation
- v) communication equipment described in Section 9.1 below

7.2. The facilities listed below are necessary to complete the temporary Point of Interconnection:

- i) the 69 kV transmission line from the Substation to TSP's 69 kV temporary switch structure
- ii) splice cases, fiber slack storage devices, and hand-hole facilities, as applicable, to accommodate TIF and GIF fiber optic cables at Generator's last 69 kV transmission structure before TSP's switch structure

#### 8. Transmission Service Provider Interconnection Facilities:

TIF are required to synchronize and deliver Plant capacity and energy output to the TSP System. TIF include the following:

8.1. The facilities listed below are necessary to complete the permanent Point of Interconnection and are considered Permanent Facilities:

- i) the 69 kV Station and all facilities within it and other necessary equipment at the Station to accommodate Generator's 69 kV transmission line from the Substation
- ii) the first dead-end structure outside the Station fence that terminates Generator's 69 kV transmission line from the Substation
- iii) conductors from the Station to TSP's first dead-end structure outside the Station fence
- iv) jumper conductors at TSP's first dead-end structure outside the Station fence
- v) metering equipment described in Section 6.1 above
- vi) telemetry equipment described in Section 6.2 above
- vii) two (2) all-dielectric fiber optic station entrance cables from the Station to the Fiber Optic PCO
- viii) two (2) entrance ducts at the Station to accommodate two (2) fiber optic cables from the Fiber Optic PCO
- ix) splice cases, fiber slack storage devices, and hand-hole facilities, as applicable, to accommodate TIF and GIF fiber optic cables at the Fiber Optic PCO
- x) two (2) FDP's in the Station
- xi) communication equipment described in Section 9.2 below

8.2. The facilities listed below are necessary to complete the temporary Point of Interconnection and are considered Temporary Facilities:

- i) one (1) 69 kV temporary switch
- ii) one (1) 69 kV temporary switch structure
- iii) jumper conductors at TSP's temporary switch structure
- iv) all-dielectric self-supporting ("ADSS") fiber cable

#### 9. Communications Facilities:

9.1. The communications facilities described below will be paid for, owned, and installed inside the Substation by Generator.

- (i) one (1) 4-wire RTU communication circuit between the Substation and TSP's Master SCADA system at TSP's Abilene Dispatch Center. This SCADA information will be forwarded to TSP's Corpus Christi dispatch center by TSP.
- (ii) one (1) telephone company interface box at the Substation
- (iii) optical isolation equipment for the telephone communication circuits, if required by the local telephone company
- 9.2. All communication facilities shall meet the following TSP requirements in addition to ERCOT Requirements. If there is a conflict between the TSP requirements below and the ERCOT Requirements, the ERCOT Requirements shall prevail.

- i) Generator shall pay for, own, install, and maintain communication capabilities necessary for TSP to adhere to its established interpersonal communication requirements to maintain reliability of the TSP System.
- ii) Generator shall be responsible for confirming with TSP the project-specific circuit requirements and requesting specific TSP addresses and TSP contact names in preparation for issuing communication circuit orders with Generator's telecommunication service provider of choice. These communication channel(s) may be leased telephone circuit, microwave, fiber optics or other media satisfactory to TSP. For telephone company circuits leased by Generator, Generator shall provide TSP and the communication provider with the necessary advanced authorization for communication circuit maintenance, allowing TSP to monitor circuits, report trouble and take corrective action with the communication provider, at Generator's expense.
- The RTU communications circuit will be a dedicated lease circuit from the RTU to TSP's dispatch office; this circuit is to be ordered by Generator. One circuit is required for each RTU. This circuit will be a Bell type 4-wire (420) analog circuit.
- iv) Generator shall provide an access plan to TSP for review and approval. Such access plan is to document Generator, TSP and telephone company personnel access privileges and restrictions to interconnection facilities on Generator's property, including, but not limited to, the RTU, metering equipment, telephone company interface box (demarcation equipment), high voltage isolation equipment and fiber optic equipment. The access plan described above shall be approved by TSP and implemented by Generator prior to TSP placing the interconnection facility in service.
- v) TSP will engineer, procure, pay for, own, and install at the Fiber Optic PCO, splice cases, fiber slack storage devices, and hand-hole facilities, as applicable, based upon the project configuration. To ensure integrity of the installed fiber optic facilities from the Fiber Optic PCO to the Substation, Generator shall engage for such facilities, at its expense, one entity satisfactory to TSP, to perform splicing and testing of all fibers in each fiber optic cable at a) all splice points, b) the transition splices, and c) the Substation FDP's. Generator hereby grants to TSP, at no cost to TSP and for so long as this Agreement remains in effect, an indefeasible right to use the last twenty-four (24) fibers in each fiber optic cable. Generator, at its sole expense, will maintain in operating condition such fiber optic cable and associated station entrance cable systems at the Substation. In addition, Generator hereby grants to TSP the following rights:
  - 1) access to and use of all TSP-assigned fibers
  - 2) access to and use of all route splice points, with the right to crossconnect TSP-assigned fibers for through circuits

Each Party will be responsible for maintenance and repair of its facilities and equipment.

vi) TSP requires Generator to provide fiber optic cable between the Fiber Optic PCO and Generator's Substation. Generator shall install fiber optic cable satisfactory to TSP in Generator's Substation between the TSP-assigned fibers (described in Section 9.2(v) above) and associated termination equipment, to provide TSP with fiber connectivity.

# 10. System Protection Equipment:

Protection of each Party's system shall meet the following TSP requirements in addition to ERCOT Requirements. If there is a conflict between the TSP requirements below and ERCOT Requirements, the ERCOT Requirements shall prevail.

- 10.1. TSP assumes no responsibility for the protection of the Plant and GIF for any or all operating conditions. Generator is solely responsible for protecting its equipment in such a manner that faults or other disturbances on the TSP System or other interconnected systems do not cause damage to the Plant and GIF.
- 10.2. Generator shall procure, pay for, install and own the transmission line protection panels, subject to TSP approval, within the Substation.
- 10.3. It is the sole responsibility of Generator to protect its Plant and GIF from excessive negative sequence currents.
- 10.4. Generator shall furnish at a minimum, a manual disconnect switch with visual contacts and allowance for padlocking, to separate the Plant, GIF, auxiliary load, and other non-auxiliary load tenants connected to Generator's facilities from TIF. The location of this switch will be determined by TSP and be readily accessible to TSP at all times. The disconnect switch will be under the exclusive control of TSP and will be considered as part of TSP's switching arrangement. TSP reserves the right to open this disconnecting device or operate TSP's interconnection facilities to isolate the Plant, GIF, auxiliary load, and other non-auxiliary load tenants connected to Generator's facilities for any of the following reasons:
  - 1) The Plant or GIF, upon TSP's determination, cause objectionable interference with other customers' service or with the secure operation of the TSP System.
  - 2) The Plant output as determined by TSP exceeds the operating boundaries outlined above.
  - 3) Generator's control and protective equipment causes or contributes to a hazardous condition. TSP reserves the right to verify on demand all protective equipment including relays, circuit breakers, etc. at the inter-

tie location. Verification may include the tripping of the tiebreaker by the protective relays.

- 4) In TSP's opinion, continued parallel operation is hazardous to Generator, the TSP System or to the general public.
- 5) To provide TSP or TSP personnel the clearances for dead line or live line maintenance.
- 6) Generator fails to curtail the non-auxiliary load tenant at any time upon the request of TSP or ERCOT.

TSP will attempt to notify Generator before disconnection, but notification may not be possible in emergency situations that require immediate action.

- 10.5. Automatic reclosing is normally applied to transmission and distribution circuits. When TSP's source breakers trip and isolate the Plant and GIF, Generator shall ensure the Plant and GIF are disconnected from the TSP circuit prior to automatic reclosure by TSP. Automatic reclosing out-of-phase with the Plant may cause damage to Generator's equipment. Generator is solely responsible for the protection of his equipment from automatic reclosing by TSP.
- 10.6. TSP shall purchase, install, and maintain fault (transient) and long-term dynamic recording equipment to monitor and verify generator's proper transient and steady-state response to power system disturbances. This equipment may be located at the Generator's switchyard. The fault (transient) and dynamic recorder at the Generator's switchyard will be located in the Substation switchgear building. Generator shall provide the necessary analog and digital channels to the recording equipment and TSP will terminate the signals in the recorder. TSP shall own and maintain the recorder(s). The necessary communication equipment shall be installed by TSP and access shall be provided to allow TSP the ability to monitor the recorder(s) and verify the Plant response to ERCOT power system disturbances.
- 10.7. Generator shall provide to the fault (transient) and dynamic recorders the threephase analog signal output of the Plant current and voltages at the Plant side of the 69 kV interconnecting circuit breaker. The generator output currents can be measured at the high side (69 kV) of the generator power transformer. Generator shall also provide the digital signal output of the primary and backup lockout relays for the Plant and the status (power factor mode or voltage mode) of the Plant dynamic VAR controller.
- 10.8. Generator is required, upon TSP request, to provide event recordings per collection feeder in a format satisfactory to TSP. All disturbance monitoring equipment shall be equipped for time synchronization. The monitoring requirements of TSP do not reduce Generator's obligation to meet all disturbance monitoring requirements of ERCOT.
- 10.9. Documentation of all protective device settings shall be provided to TSP by Generator. The setting documentation shall also include relay type, firmware

version, model/catalog number, and setting range. If automatic transfer schemes or unique or special protective schemes are used, a description of their operation shall be included. Generator shall submit for TSP's review the settings of all protective devices and automatic control equipment which: 1) serve to protect the TSP System from hazardous currents and voltages originating from the Plant or 2) must coordinate with System Protection Equipment or control equipment located on the TSP System; such settings are subject to TSP approval.

10.10. Each Party agrees to notify the other Party in accordance with the requirements of Exhibit "D" attached to this Agreement on any changes a Party makes to settings or equipment that could impact the other Party's System Protection Equipment.

# 11. Inputs to Telemetry Equipment:

11.1. The following information shall be supplied for each meter to be connected to TSP's recording equipment and the RTU used for the Point of Interconnection.

- i) Status Points Transmission line(s) breaker(s) status inputs to the RTU will be a dry form "A" contact or dry form "B" contact that is a direct output from the device monitored. No signal conversion device shall exist between the device monitored and the RTU. Contact rating shall be 0.25 Amp at 125 volt AC or DC. Wetting voltage for status to be supplied from the RTU.
- ii) Analog Points Instantaneous MW and instantaneous MVAR inputs to the RTU will be -1 to 0 to +1 mA full scale for bi-directional values, 0 to +1 mA full scale for unidirectional values. An alternate input of 4 to 12 to 20 mA full scale for bi-directional and 4 to 20 mA full scale for unidirectional values will be acceptable. The RTU shall be directly connected using analog outputs from the interconnect meters or transducers. No signal conversion device shall exist between the meter or transducer and the RTU.
- Hourly Accumulation Points "In" MWh, "Out" MWh, "In" MVARh and "Out" MVARh pulses to the RTU will be a dry form "A" or dry form "C" contact (dry form "A" preferred). Contact rating shall be 0.25 Amp at 125 volt AC or DC. Wetting voltage for each contact to be supplied from the RTU. Separate contacts shall be used for "In" and "Out" values. The RTU shall be directly connected using pulse outputs from the interconnect meters. No signal conversion device shall exist between the meter and the RTU.

11.2 If the Plant has a total generation capacity is equal to or greater than five (5) MVA. A specific operational data points list will be developed by TSP as a part of each generation project based upon the project's electrical configuration. For such purpose, Generator is responsible for providing TSP with metering and relaying one-line diagrams of the generation and Substation facilities. Generator shall provide TSP with a station communications drawing which is to include operational data point sources (contacts supplying required data), interface devices, and device connections. Generator shall supply

operational data in a protocol and data transmission speed acceptable to TSP. The following points list is a comprehensive list that is not intended to be the final points list that will be designed by TSP for the Plant and GIF:

- i) Status Points
  - 1) Transmission line breaker / switch status
  - 2) Transformer high-side breaker / circuit switcher status
  - 3) Generation breaker / switch status
  - 4) Battery breaker / switch status
  - 5) BTM Load breaker / switch status
  - 6) Auxiliary breaker / switch status
  - 7) Collection feeder breaker status
  - 8) Shunt device (capacitor and reactor) breaker / switch status
  - 9) Tie breaker status
  - 10) Dynamic reactive controller status (off / on)
  - 11) Dynamic reactive controller mode (manual / auto)
  - 12) Dynamic reactive controller sensing (voltage / power factor)
  - 13) Automatic voltage regulator ("<u>AVR</u>") status (for each unit or controller)
  - 14) Battery AVR status
  - 15) Indication of battery charging and discharging conditions
  - 16) Black start availability
- ii) Analog Points
  - 1) Generation MW (for each unit or collector)
  - 2) Generation MVAR (bi-directional values, for each unit or collector)
  - 3) Generation auxiliary use MW
  - 4) Generation auxiliary use MVAR (bi-directional values)
  - 5) Battery MW (bi- directional values)
  - 6) Battery MVAR (bi-directional values)
  - 7) Behind the Meter Load MW
  - 8) Behind the Meter Load MVAR (bi-directional values)
  - 9) Voltage per phase for each winding of each transformer
  - 10) MW for each winding of each transformer
  - 11) MVAR for each winding of each transformer (bi-directional values)
  - 12) MW for each transmission line circuit breaker / switcher in the Substation
  - 13) MVAR for each transmission line circuit breaker / switcher in the Substation (bi-directional values required)
  - 14) MVAR for each shunt device (capacitor and reactor) (bi-directional values required)
  - 15) Number of wind turbines, solar and battery inverters connected to the ERCOT transmission grid for injection of real and / or reactive power (for the entire Plant, for each type of turbine / inverter)

- 16) Number of wind turbines, solar and battery inverters connected to the ERCOT transmission grid for injection of real and / or reactive power (for each collection feeder, for each type of turbine / inverter)
- 17) Number of wind turbines, solar and battery inverters out of service and unavailable for operation (for each collection feeder, for each type of turbine / inverter)
- 18) Number of wind turbines, solar and battery inverters in communications failure mode for which operational status is unknown (for each collection feeder, for each type of turbine / inverter)
- 19) Voltage set point for each dynamic reactive controller
- 20) Power factor set point for each dynamic reactive controller
- 21) Battery charge available (MWh)
- 22) Time remaining at the present battery discharge rate (minute or hours)
- 23) Maximum available battery power (MW)

# 12. Supplemental Terms and Conditions:

The following supplemental terms and conditions shall be met unless there is a conflict between these terms and conditions and ERCOT Requirements, in which case the ERCOT Requirements shall prevail. Such ERCOT Requirements include, but are not limited to, ERCOT Nodal Protocols sections 1.3.1, 3.15 and 8.1.1; ERCOT Nodal Operating Guides sections 2.2.5, 2.2.6, 2.7, 2.9 and 6.2.2; and the ERCOT Operating Procedures.

12.1. Each Party shall be consulted during the planning and design process of the Plant, GIF, and TIF. The engineering and design work (including drawings, plans, materials lists, specifications and other documentation and supporting data) will be prepared in accordance with Good Utility Practice and all applicable laws, rules and regulations, and is intended to be used solely in connection with the construction of the Plant, GIF and TIF. Neither Party shall make use of any aspect of the engineering and design work of the other Party for any other projects without the prior written consent of the other Party. Each Party shall treat such engineering and design work of the other Party as Confidential Information under Section 10.21 of Exhibit "A".

12.2. Generator shall use commercially reasonable efforts to change the GIF as may be reasonably required by TSP to meet future changes in the TSP System. Generator shall be given reasonable notice by TSP prior to the date that any such required change in the GIF must be made.

12.3. Significant changes can occur in the TSP System after execution of this Agreement and prior to completion of construction of the Plant. If such changes occur and they affect the ability to deliver the maximum output of the Plant to the TSP System, Generator shall be given reasonable notice by TSP of any additional System Upgrades required. Generator may ask TSP to revise the results of the System Security Study and amend this Agreement accordingly.

12.4. If wye-delta connected transmission voltage step-up transformers are utilized they shall be wye connected to the TIF and delta connected to the GIF.

12.5. Generator shall submit drawings of the GIF to TSP for review. TSP will review only those portions of the drawings that affect the TSP System. Any changes required by TSP shall be made prior to final issue of drawings and TSP shall be provided with final copies of the revised drawings. TSP will review only those portions of the drawings, which apply to protection, metering and monitoring of the TSP System. To aid Generator, TSP may make suggestions on other areas. TSP's review of Generator's drawings shall not be construed as confirming or endorsing the design or as any warranty of safety, durability, or reliability of the facility or equipment. Generator shall provide copies of the following:

- i) one-line and three-line diagrams indicating the following:
  - 1) equipment names and/or numerical designations for all circuit breakers, contactors, air switches, transformers, generators, etc., associated with the generation as required by TSP to facilitate switching
  - 2) power transformers nameplate or designation, nominal kVA, nominal primary, secondary, tertiary voltages, vector diagram showing winding connections, tap setting and transformer impedances (transformer test report showing the positive sequence, zero sequence, test voltages and MVA base for each winding)
  - station service transformers phase(s) connected and estimated kVA load
  - 4) instrument transformers voltage and current, phase connections
  - 5) surge arresters/gas tubes/metal oxide varistors/avalanche diode/spill gaps/surge capacitors, etc. type and ratings
  - 6) capacitor banks kVAR rating and reactive (static and dynamic) device operation capability
  - reactive device capability (required for wind generation only) kVAR rating and reactive device operation capability for static and dynamic devices for each generation collection feeder
  - disconnect switches status if normally open (N.O.), manual or motor operated including switch voltage, continuous and interrupting ratings
  - 9) circuit breakers and/or contactors interrupting rating, continuous rating, operating times
  - 10) generator(s) nameplate, test report, type, connection, kVA, voltage, current, rpm, power factor, impedances, time constants, etc.
  - 11) Point of Interconnection and phase identification
  - 12) fuses manufacturer, type, size, speed, and location
  - 13) transmission structure geometry (phase-to-phase, phase-to-ground, and shield-to-phase), phase conductor data, shield wire data,

transmission line ratings, positive and zero sequence impedances and mileage

- ii) potential and current elementary drawings associated with the protection and control schemes for the Plant and GIF and control elementary drawings of the Plant and interconnection circuit breaker indicating the following:
  - 1) terminal designation of all devices relay coils and contacts, switches, transducers, etc.
  - 2) relay functional designation per latest ANSI Standard where the same functional designation shall be used on all drawings showing the relay
  - 3) complete relay type (such as CV-2, SEL321-1, REL-301, IJS51A, etc.)
  - 4) switch contact as referenced to the switch development if development is shown on a separate drawing.
  - 5) switch developments and escutcheons where the majority of contacts are used. Where contacts of a switch are used on a separate drawing, that drawing should be referenced adjacent to the contacts in the switch development. Any contacts not used should be referenced as spare.
  - 6) all switch contacts shown open with each labeled to indicate the positions in which the contact will be closed with explanatory notes defining switch coordination and adjustment where mis-adjustment could result in equipment failure or safety hazard
  - 7) auxiliary relay contacts as referenced to the coil location drawing if coil is shown on a separate drawing where all contacts of auxiliary relays should be shown and the appropriate drawing referenced adjacent to the respective contacts
  - 8) device auxiliary switches (circuit breakers, contactor) as referenced to the drawing where they are used.
  - 9) any interlocks electromechanical, key, etc., associated with the generation or interconnection Substation.
  - 10) ranges of all timers and setting if dictated by control logic
  - 11) all target ratings; on dual ratings note the appropriate target tap setting
  - 12) complete internal for electromechanical protective relays where microprocessor type relays may be shown as a "black box", with manufacturer's instruction book number referenced and terminal connections shown
  - 13) isolation points (states links, PK-2 and FT-1 blocks), etc., including terminal identification
  - 14) all circuit elements and components, with device designation, rating and setting where applicable and where coil voltage is shown only if different from nominal control voltage
  - 15) size, type, rating and designation of all fuses

- 16) phase sequence designation as ABC or CBA
- 17) potential transformers nameplate ratio, polarity marks, rating, primary and secondary connections
- 18) current transformers (including aux. CT's) polarity marks, rating, tap ratio and connection

12.6 Generator may not commence parallel operation of the Plant until consent has been given by TSP. TSP reserves the right to inspect the GIF and witness testing of any equipment or devices associated with the Point of Interconnection.

12.7. The Plant and GIF shall not cause objectionable interference with the electric service provided to other customers of TSP nor jeopardize the security of the ERCOT power system. In order to minimize objectionable interference of the Plant and GIF, the Plant and GIF shall meet the following criteria:

- i) Voltage The Plant and GIF shall not cause excessive voltage excursions. Generator shall operate its Plant and GIF in such manner that the voltage levels on the TSP System are in the same range as if the Plant and GIF were not connected to the TSP System. Generator shall provide an automatic method of disconnecting its Plant and GIF from the TIF to protect against excessive voltage excursions.
- Flicker The Plant and GIF shall not cause excessive voltage flicker on the TSP System. Flicker is to be measured at the Point of Interconnection and shall not exceed 1.5% or the Borderline of Visibility Curve Voltage Flicker Chart of ANSI/IEEE Standard 141-1993, whichever is less.
- iii) Frequency The operating frequency of the Plant shall not deviate from the frequency of the TSP System. Plant under-frequency relays shall be set the same as TSP's under-frequency relays, so that the Plant will not separate from the TSP System during under-frequency conditions until all TSP under-frequency load shedding equipment has operated. Generator will provide applicable settings to TSP prior to Commercial Operation.
- iv) Harmonics, Telephone Interference, and Carrier Interference The Plant and GIF shall not introduce excessive distortion of the TSP System waveforms; voltage and current; telephone interference; or carrier interference at the Point of Interconnection. IEEE Standard 519 shall be used as a guide.
- v) Fault and Line Clearing The Plant and GIF shall be disconnected from the TSP System on occurrence of an outage or fault on the TIF serving the Plant radially. Generator is responsible for the electrical stability of its Plant and providing adequate facilities so that critical fault clearing times are met.

- vi) All generation resources (including self-serve generating units) that have a gross generating unit rating greater than twenty (20) MVA or those units connected at the same Point of Interconnection that have gross generating unit ratings aggregating to greater than twenty (20) MVA, that supply power to the ERCOT transmission grid, shall provide Voltage Support Service (VSS).
- vii) Reactive Power Requirements Generation resources must be capable of producing a defined quantity of reactive power to maintain a Voltage Profile established by ERCOT Nodal Protocol 3.15. The generator voltage-var schedule, voltage regulator, and transformer ratio settings will be jointly determined by TSP and Generator to ensure proper coordination of voltages and regulator action. The Plant must generate reactive requirements for the Plant and GIF. TSP may, in order to maintain security of the ERCOT power system, request Generator to adjust voltage schedule to accept or supply reactive power.
  - 1. Synchronous generators shall comply with the following reactive power requirements: an over-excited (lagging) power factor capability of ninety-five hundredths (0.95) or less and an under-excited (leading) power factor capability of ninety-five hundredths (0.95) or less, both determined at the generating unit's maximum net power to be supplied to the ERCOT transmission grid and at the transmission system Voltage Profile established by ERCOT, and both measured at the Point of Interconnection. The reactive power requirements shall be available at all MW output levels.
  - 2. Induction generators shall comply with the following reactive power requirements: an over-excited (lagging) power factor capability of ninety-five hundredths (0.95) or less and an under-excited (leading) power factor capability of ninety-five hundredths (0.95) or less, both determined at the generating unit's maximum net power to be supplied to the ERCOT transmission grid and at the transmission system Voltage Profile established by ERCOT, and both measured at the Point of Interconnection. The reactive power requirements shall be available at all MW output levels and may be met through a combination of the Generation Resource's Unit Reactive Limit ("URL"), which is the generating unit's dynamic leading and lagging operating capability, and/or dynamic VAR capable devices. For Wind Generation Resources ("WGR"), the reactive power requirements shall be available at all MW output levels at or above ten percent (10%) of the WGR's nameplate capacity and fully dispatchable below the ten percent (10%) level as the WGR is capable of providing with the control design capturing the full reasonable dynamic reactive power capability in this range or as ERCOT requires. When a WGR is operating below ten percent (10%) of its nameplate capacity and is unable to support voltage at

the Point of Interconnection, ERCOT may require a WGR to disconnect from the ERCOT transmission grid.

- 3. Other generators shall comply with the following reactive power requirements: an over-excited (lagging) power factor capability of ninety-five hundredths (0.95) or less and an under-excited (leading) power factor capability of ninety-five hundredths (0.95) or less, both determined at the generating unit's maximum net power to be supplied to the ERCOT transmission grid and at the transmission system Voltage Profile established by ERCOT, and both measured at the Point of Interconnection. The reactive power requirements shall be available at all MW output levels and may be met through a combination of the Generation Resource's URL, which is the generating unit's dynamic leading and lagging operating capability, and/or dynamic VAR capable devices. For Intermittent Renewable Resources ("IRR"), the reactive power requirements shall be available at all MW output levels, and at zero MW. When an IRR is operating below ten percent (10%) of its nameplate capacity and is unable to support voltage at the Point of Interconnection, ERCOT may require an IRR to disconnect from the ERCOT transmission grid. For Energy Storage Resources ("ESR"), the reactive power capability shall be available at all MW levels, when at zero MW, when charging and when discharging, and may be met through a combination of the ESR's corrected unit reactive limit ("CURL") and/or dynamic VAR-capable devices.
- viii) The dynamic MVAR capability at the current MW generation amount shall be provided in real time. If this dynamic MVAR capability is not available in real time, a dynamic capability curve plotted as a function of MW output shall be provided. The shunt static reactive available, but not in service, shall be provided in sufficient detail to determine the amount of dynamic and static reactive reserve available.
- ix) Excitation System and Automatic Voltage Regulation A Plant excitation system response ratio shall not be less than 0.5 (five-tenths). It shall conform, as near as achievable, to the field voltage vs. time criteria specified in American National Standards Institute Standard C50.13-1989 in order to permit adequate field forcing during transient conditions. A power system stabilizer ("PSS") shall be installed on each new generating unit to be interconnected unless specifically exempted from this requirement by ERCOT. Generator shall determine the PSS settings to dampen local area modes with oscillations within the range of 0.2 Hz to 2 Hz. The PSS settings shall be tested and tuned for adequate damping during PSS commissioning. Final PSS settings shall be provided to ERCOT and TSP within thirty (30) days of commissioning. The PSS shall be kept in service and maintained in working order throughout the service life of the Plant. The PSS requirement is not applicable to asynchronous resources including photovoltaic solar and

wind generation facilities. Each generator's exciter and exciter controls shall have a ride-through capability for significant system voltage disturbances (i.e., utilize UPS or DC design). Generator shall maintain the AVR of each generating unit in service and operable at all times. If the AVR is removed from service for maintenance or repair, TSP shall be notified.

x) Governor System – Plant governors shall be able to respond to interconnection frequency deviations and help return interconnection frequency to normal following an upset on the ERCOT transmission grid to assist in maintaining interconnection stability.

12.8. Generator shall not energize a de-energized TIF circuit, unless under direction of TSP. The line switch will have dual locks to allow Generator and TSP to lock it for clearances.

12.9. Generator shall maintain an operating log at each generating unit at the Plant that, at a minimum will indicate changes in operating status (available or unavailable), maintenance outages, trip indications or other unusual conditions found upon inspection. For generators that are "block-loaded" to a specific MW level, changes in this setting shall also be logged. TSP may waive this requirement at its discretion. Reliability information, as required by ERCOT Requirements, will be maintained by Generator.

12.10 TSP considers the energy and power that the Plant and GIF may from time to time consume from the transmission grid through the Point of Interconnection to be a retail transaction and as such, TSP does not intend to be the provider of this retail service. Generator shall be responsible to make necessary arrangements with the appropriate retail supplier for the energy and power that the Plant, GIF, auxiliary load, and other non-auxiliary load tenants connected to Generator's facilities may consume from the transmission grid through the Point of Interconnection.

12.11 Generator shall notify the TSP in writing as to which initial ERCOT Qualified Scheduling Entity ("<u>QSE</u>") the Plant will be scheduling through, and any changes made thereafter.

12.12. Upon written request from TSP, Generator shall supply notification to the TSP identifying their retail service provider.

12.13. Each Party will comply with NERC Reliability Standards applicable to its facilities identified in this Exhibit "C". Each Party shall provide to the other Party all information related to its interconnection facilities that may reasonably be required by the other Party to comply with NERC Reliability Standards applicable to its interconnection facilities, if any. "<u>NERC Reliability Standards</u>" means the mandatory electric reliability standards established and enforced by the North American Electric Reliability Corporation or its successor electric reliability organization.

12.14. Generator shall construct the GIF in accordance with TSP's "Requirements for Connection of New Facilities or Changes to Existing Facilities Connected to the AEP Transmission System" (or its successor) in effect at the time Generator provides authorization to commence construction per Exhibit "B" above. If Generator materially modifies the GIF, Generator shall comply with TSP's "Requirements for Connection of New Facilities or Changes to Existing Facilities Connected to the AEP Transmission System" (or its successor) in effect at the time of such modifications. Where the "Requirements for Connection of New Facilities or Changes to Existing Facilities Connected to the AEP Transmission System" are in conflict with this Agreement, this Agreement shall prevail.

12.15. Generator shall provide information in accordance with TSP's "Data and Modeling Requirements for Conventional Resource Entities" or "Data and Modeling Requirements for Solar and Wind Resource Entities" as applicable (or its successor) in effect at the time Generator provides authorization to commence construction per Exhibit "B" above. If Generator materially modifies the GIF, Generator shall provide TSP the modified GIF information in accordance with TSP's "Data and Modeling Requirements for Conventional Resource Entities" or "Data and Modeling Requirements for Conventional Resource Entities" or "Data and Modeling Requirements for Solar and Wind Resource Entities" as applicable (or its successor) in effect at the time of such modifications.

12.16 Generator shall notify TSP of all non-auxiliary load tenant interconnection requests.

12.17. Generator is the entity responsible for all obligations, actions, and functions on behalf of itself and all loads behind the EPS meter ("BTM Load") with respect to the Plant, GIF, auxiliary loads, and other non-auxiliary load tenants connected to Generator's facilities.

#### **13.** Special Operating Terms and Conditions:

13.1. TSP shall operate and control the 69 kV motor operated disconnect switch inside the Substation that disconnects the Plant from the TSP System.

13.2. For thermal powered generation, a Generator not qualified by ERCOT as a Quick Start Generation Resource ("<u>QSGR</u>"), will provide TSP at least thirty (30) minutes prior notice before coming on-line or off-line so TSP can adjust reactive resources. For thermal powered generation, a Generator qualified as a QSGR, will provide TSP at least ten (10) minutes prior notice before coming on-line or off-line so TSP can adjust reactive resources.

13.3. For thermal powered generation greater than 150 MW, the Plant controls will be designed and maintained to allow the Plant to operate in an isochronous frequency control mode among its other control modes. This will allow the Plant to be used in enhancing the System restoration in a System blackout after being started from another source.

13.4. For thermal powered generation units to be operated under the scheduling of a single QSE in the control area of TSP or TSP's affiliate, Generator shall ensure its QSE design the Automatic Generation Control to select frequency sensing at each unit site to accommodate constant frequency control during a black start event.

13.5. For wind powered generation greater than 50 MW, Generator shall notify TSP at least thirty (30) minutes in advance any time the reactive capability is expected to deviate by more than 10% from the reactive capability curves provided in accordance with Section 12.7(viii) above or any time Generator expects generation rate changes greater than 20% per minute of the Plant's nameplate MW rating.

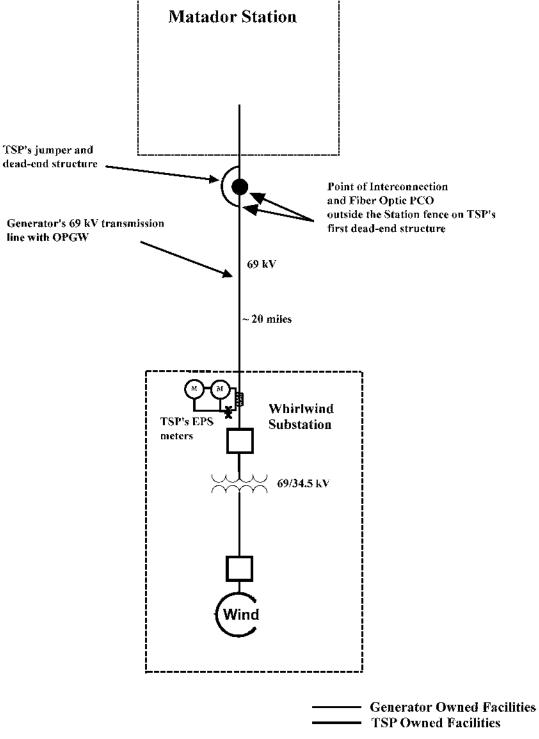
13.6. For solar powered generation greater than 10 MW, Generator shall notify TSP at least thirty (30) minutes in advance any time the reactive capability is expected to deviate by more than 10% from the reactive capability curves provided in accordance with Section 12.7(viii) above; TSP will coordinate the deviation in entire-site reactive disconnections of fifteen (15) minutes between solar farms in the same area, if any, for daily planned disconnections.

13.7. For battery storage resources greater than 5 MW, in addition to Generator's obligations set forth in Section 11 of Exhibit "C" to this Agreement, Generator shall supply to TSP information including, but not limited to, the following: i) indication of battery charging and discharging conditions; ii) battery charge available; iii) time remaining at the present discharge rate; iv) maximum available power; v) voltage regulation set point; and vi) battery AVR status. Generator shall supply such information to TSP in a format satisfactory to TSP.

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# EXHIBIT "C-1"

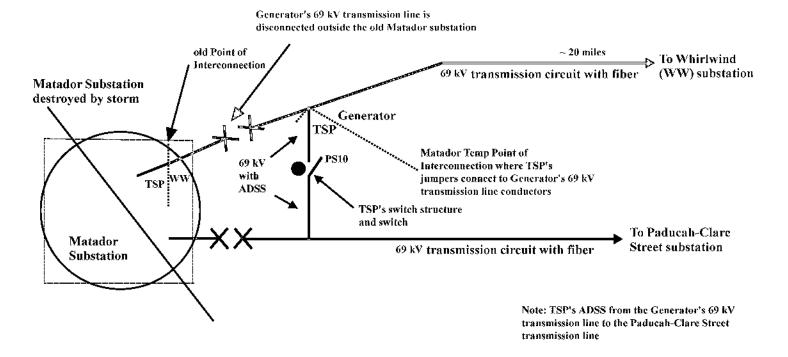
Conceptual One-Line Drawing of Permanent Facilities/Permanent Point of Interconnection

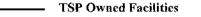


Distances as shown are conceptual and not to scale; Station and Substation not shown completely.

#### EXHIBIT "C-2"

Conceptual One-Line Drawing of Temporary Facilities/Temporary Point of Interconnection





Generator Owned Facilities

----- Other TSP Owned Facilities

Distances as shown are conceptual and not to scale; facilities are not shown completely.

# EXHIBIT "D" NOTICE INFORMATION OF THE INTERCONNECTION AGREEMENT

(a) All notices of an operational nature shall be in writing and/or may be sent between the Parties via electronic mail with read receipt as follows:

	If to Generator:	If to Transmission Service Provider:
Company Name:	Whirlwind Energy, LLC c/o TC Renewable Holdco VII,	AEP Texas Inc. c/o American Electric Power Service
Attn:	LLC Nancy Johnson, Vice President, Renewable Energy Asset Management & Finance <and> David Govert, Vice President, Renewable Energy Asset Management &amp; Finance 6363 College Boulevard, Suite</and>	Corporation Manager, Transmission Operations Reliability
Address:	100A	12730 Hearn Road
City, State, Zip: Phone:	Overland Park, KS 66211 888-870-3088	Corpus Christi, TX 78410 361-299-6580
E-mail:	njohnson@ecofininvest.com <and> dgovert@ecofininvest.com</and>	tsspringer@aep.com
Copy:		
Company Name:	Ecofin Advisors, LLC	AEP Texas Inc. c/o American Electric Power Service Corporation
Attn:	Manager, Renewable Energy Asset Management & Finance	Manager, Transmission Dispatching
Address:	6363 College Boulevard, Suite 100A	12730 Hearn Road
City, State, Zip:	Overland Park, KS 66211	Corpus Christi, TX 78410
Phone:	888-870-3088	361-289-4006
E-mail:	renewableops@tortoiseecofin.com	lllopez@aep.com <and> notices_cctoc@aep.com</and>
System Protection Notices:		
Company Name:	Whirlwind Energy, LLC c/o TC Renewable Holdco VII, LLC	AEP Texas Inc. c/o American Electric Power Service Corporation

Attn:	Manager, Renewable Energy Asset Management & Finance	Manager, P&C Engineering
Address:	6363 College Boulevard, Suite 100A	212 E. 6th Street
City, State, Zip:	Overland Park, KS 66211	Tulsa, OK 74119
Phone:	888-870-3088	
E-mail:	renewableops@tortoiseecofin.com	rgodwin@aep.com <and> prc-027@aep.com</and>

# (b) Notices of an administrative nature:

	If to Generator:	If to Transmission Service Provider:
Company	Whirlwind Energy, LLC	AEP Texas Inc.
Name:	c/o TC Renewable Holdco VII,	c/o American Electric Power
INdIIIC.	LLC	Service Corporation
	Nancy Johnson, Vice President,	
	Renewable Energy Asset	
Attn:	Management & Finance <and></and>	Director, System Interconnections
Aun.	David Govert, Vice President,	Director, system interconnections
	Renewable Energy Asset	
	Management & Finance	
Address:	6363 College Boulevard, Suite	212 E. 6th Street
	100A	212 E. oth Street
City, State, Zip:	Overland Park, KS 66211	Tulsa, OK 74119
Phone:	888-870-3088	918-599-2723
E-mail:	njohnson@ecofininvest.com	rlpennybaker@aep.com <and></and>
	<and> dgovert@ecofininvest.com</and>	ERCOTrequest@aep.com
Copy:		
		AEP Texas Inc.
Company	Ecofin Advisors, LLC	c/o American Electric Power
Name:		Service Corporation
	Manager, Renewable Energy	Assistant General Counsel -
Attn:	Asset Management & Finance	Transactions
Address:	6363 College Boulevard, Suite	1 Riverside Plaza
	100A	
City, State, Zip:	Overland Park, KS 66211	Columbus, OH 43215
Phone:	888-870-3088	
E-mail:	renewableops@tortoiseecofin.com	legalnotices@aep.com
		·

(c) Notice for statement and billing purposes:

	If to Generator:	If to Transmission Service Provider:
Company	Whirlwind Energy, LLC	AEP Texas Inc.
Name:	c/o TC Renewable Holdco VII,	c/o American Electric Power Service
	LLC	Corporation
Attn:	Nancy Johnson, Vice President, Renewable Energy Asset Management & Finance <and> David Govert, Vice President, Renewable Energy Asset Management &amp; Finance</and>	Accounts Receivable
Address:	6363 College Boulevard, Suite 100A	301 Cleveland Ave SW
City, State, Zip:	Overland Park, KS 66211	Canton, OH 44702

(d) Information concerning Electronic Funds Transfers:

	If to Generator:	If to Transmission Service Provider:
Bank Name:		
Address:		
City, State:		
ABA No.		
for credit to		
Account No.		

[The remainder of this page is intentionally left blank.]

# EXHIBIT "E"

# SECURITY ARRANGEMENT DETAILS

1. Generator is not required to provide Security.

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