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**PROJECT NO. 35077**

**INFORMATIONAL FILING OF ERCOT § PUBLIC UTILITY OF COMMISSION**  
**INTERCONNECTION AGREEMENTS §**  
**PURSUANT TO SUBST. R. §25.195(e) § OF TEXAS**

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ERCOT STANDARD GENERATION  
INTERCONNECTION AGREEMENT

Between

AES ES Deepwater, LLC

and

AES Deepwater, Inc.

and

CenterPoint Energy Houston Electric, LLC

for

AES Energy Storage Project, Pasadena, Texas

January, 2013

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## ERCOT STANDARD GENERATION INTERCONNECTION AGREEMENT

This Standard Generation Interconnection Agreement is made and entered into between **CenterPoint Energy Houston Electric, LLC** ("Transmission Service Provider and successor in interest to Houston Lighting & Power Company"), a Texas limited liability company, and **AES ES Deepwater, LLC** ("Generator"), a Virginia limited liability company, and **AES Deepwater, Inc.** ("Third Party Facility Owner"), a Delaware corporation, hereinafter individually referred to as "Party," and collectively referred to as "Parties." 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. Third Party Facility Owner represents that it will own and operate certain interconnecting facilities. Pursuant to the terms and conditions of this Agreement, Transmission Service Provider shall interconnect Generator's Plant in conjunction with existing facilities owned by Third Party Facility Owner with Transmission Service Provider's System consistent with the Facilities Study Agreement executed between Generator and TSP on May 10, 2010.

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

This Agreement shall become effective on the date of the last signature executing this Agreement below, 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 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 Exhibit "C";
- F. The notice requirements attached hereto as Exhibit "D";
- G. The Security Arrangement Details attached hereto as Exhibit "E";
- H. The Transmission Service Provider's "Outage and Clearance Coordination Procedure", as it may be updated from time to time, the current version of which is attached hereto as Exhibit "F";
- I. The Transmission Service Provider's "Telemetry Specification", specification 007-400-02, as it may be updated from time to time, the current version of which

is attached hereto as Exhibit "G", and is further amended by provisions in Exhibit "C"; and

- J. Selected drawings related to the interconnection between Plant and Transmission Service Provider's System, attached hereto as Exhibit "H".

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

AES ES DEEPWATER, LLC

By: [Signature]  
Title: Peter Lewis, Director  
Date: 14 January, 2013

CENTERPOINT ENERGY HOUSTON  
ELECTRIC, LLC

By: [Signature]  
Title: Vice President - HVPD  
Date: 11/21/2013

AES DEEPWATER, INC.

By: [Signature]  
Title: Vice President  
Date: 18 January, 2013

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

**ARTICLE 1. DEFINITIONS**

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

1.1 "CCN" shall mean a Certificate of Convenience and Necessity issued by the PUCT.

1.2 "Commercial Operation" 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.

1.3 "Control Area" shall have the meaning ascribed thereto in PUCT Rule 25.5(8) or its successor.

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

1.5 "ERCOT Requirements" means the ERCOT Operating Guides, ISO Generation Interconnection Procedures as well as any other documents adopted by the ISO or 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.

1.6 "Facilities Study" shall have the meaning as described in PUCT Rule 25.198(g) or its successor.

- 1.7     “Facilities Study Agreement” shall mean an agreement executed by the Parties relating to the performance of the Facilities Study.
- 1.8     “GIF” shall mean Generator’s interconnection facilities as described in Exhibit “C.”
- 1.9     “Good Utility Practice” shall have the meaning described in PUCT Rule 25.5(23) or its successor.
- 1.10    “Governmental Authority(ies)” shall mean any federal, state, local or municipal body having jurisdiction over a Party.
- 1.11    “In-Service Date” shall be the date, as reflected in Exhibit “B,” that the TIF will be ready to connect to the GIF
- 1.12    “ISO” shall mean the ERCOT Independent System Operator.
- 1.13    “Plant” shall mean the electric generation facility owned and operated by the Generator, as specified in Exhibit “C.”
- 1.14    “Point of Interconnection” shall mean the location(s) where the GIF connects to the TIF as negotiated and defined by the Parties and as shown on Exhibit “C” of this Agreement.
- 1.15    “PUCT” shall mean the Public Utility Commission of Texas.
- 1.16    “PUCT Rules” shall mean the Substantive Rules of the PUCT.
- 1.17    “Reasonable Efforts” shall mean the use of Good Utility Practice and the exercise of due diligence (pursuant to PUCT Rule 25.196(e)).
- 1.18    “System Protection Equipment” shall mean those facilities located within the TIF and the GIF as described in Section 5.6 and Exhibit “C.”



1.19 “System Security Study” shall have the meaning as described in PUCT Rule 25.198(f) or its successor.

1.20 “TCOS” shall mean the TSP’s transmission cost of service as allowed by the applicable Governmental Authority.

1.21 “TIF” shall mean the TSP’s interconnection facilities as described in Exhibit “C” to this Agreement.

1.22 “Trial Operation” shall mean the process by which the Generator is engaged in on-site test operations and commissioning of the Plant prior to Commercial Operation.

1.23 “TSP” shall mean the Transmission Service Provider.

1.24 “TSP System” shall mean the electric transmission facilities, including the TIF, and all associated equipment and facilities owned and/or operated by the TSP.

## ARTICLE 2. TERMINATION

2.1 Termination Procedures. 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 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 Termination Costs. 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 Disconnection. Upon termination of this Agreement, the Parties will disconnect the GIF from the TIF.

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

3.1 Filing. The TSP shall file this executed Agreement with the appropriate Governmental Authority, if required. Any portions of this Agreement asserted by Generator to contain competitively sensitive commercial or financial information shall be filed by the TSP identified as "confidential" 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 Regulatory Approvals. 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 Options. The Generator shall select one 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 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  $\frac{1}{2}$  of 1% of the actual cost of the TIF, per day. However, in no event shall the total liquidated damages exceed 20% of the actual cost of the TIF. 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 is 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 days after receipt of the invoice, unless otherwise agreed to by the Parties.

4.2 Equipment Procurement. 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 Facilities 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 Construction Commencement. 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 Work Progress. 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.

4.5 Conditions Precedent Delay. 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.

## **ARTICLE 5. FACILITIES AND EQUIPMENT**

5.1 Information Exchange. 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 GIF Construction. 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. 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 Generator to the main power transformers and the GIF, and the impedances (determined by factory tests) for the associated main power transformers and the generators.

5.3 TIF Construction. 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 Equipment Changes. 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 Metering, Telemetry and Communications Requirements.



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. At the Point of Interconnection, 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 are 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, the Control Area(s) in which the Plant and the TSP are located 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 to 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 No Annexation. Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **ARTICLE 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, the ERCOT Requirements, PUCT Rules and all applicable laws and regulations. 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, the Control Area(s) in which the Plant and the TSP are located, and the Generator and will be conducted in accordance with ERCOT Requirements.

6.2 Control Area Notification. At least six months before Trial Operation, the Generator shall notify the TSP in writing of the Control Area in which it will be located. If the Generator elects to be located in a Control Area other than the Control Area in which the TSP is located, all necessary agreements, including but not limited to remote control area generator interchange agreements, if applicable, and appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Plant in the other Control Area. The Parties will diligently cooperate with one another to enable such agreements to be executed and implemented on a schedule necessary to meet the Trial Operation date specified in Exhibit "B."

6.3 Land Rights and Easements. 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 Service Interruption. 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 Start-Up and Synchronization. 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 Routine Operational Communications. On a timely basis, the Parties shall exchange all information necessary to comply with ERCOT Requirements.

6.8 Blackstart Operations. If the Plant is capable of blackstart operations, Generator will coordinate individual Plant start-up procedures consistent with ERCOT Requirements. Any blackstart operations shall be conducted in accordance with the blackstart criteria included in the ERCOT Requirements and the TSP Blackstart Plan on

file with the ISO. Notwithstanding this section, the Generator is not required to have blackstart capability by virtue of this Agreement. If the Generator will have blackstart capability, then Generator shall provide and maintain an emergency communication system that will interface with the TSP during a blackstart condition.

6.9 Power System Stabilizers. 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 Data Acquisition. 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 Initial Data Submission by TSP. The initial data submission by the TSP shall occur no later than 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 Initial Data Submission by Generator. The initial data submission by the Generator, including manufacturer data, shall occur no later than 90 days prior to the Trial Operation and shall include a completed copy of the following forms contained in the ISO's 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 Data Supplementation. 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 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 Data Exchange. 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 Generator's Cost Responsibility. The Generator will acquire, construct, operate, test, maintain and own the Plant and the GIF at its sole expense. 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 TSP's Cost Responsibility. 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 shall be specified in Exhibit "E." Within five business days after the Plant achieves Commercial Operation, the TSP shall return the deposit 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 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. Employers Liability and Worker's Compensation Insurance 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. Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

C. Comprehensive Automobile Liability Insurance 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. Excess Public Liability Insurance over and above the Employer's Liability, Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

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 and provide thirty (30) days advance written notice to Other Party Group prior to anniversary date of 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 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 Governing Law and Applicable Tariffs.

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 No Other Services. 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 Entire Agreement. 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. 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 Facilities Study Agreement, if any, is unaffected by this Agreement.

10.4 Notices. 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 fax to the address or number identified on Exhibit "D" attached to this Agreement. Either Party may change the notice information on Exhibit "D" by giving five business days written notice prior to the effective date of the change.

10.5 Force Majeure.

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, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

#### 10.6 Default

A. The term "Default" 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 non-defaulting 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 30 days, the defaulting Party shall commence such cure within 30 days after notice and continuously and diligently complete such cure within 90 days from receipt of the Default notice; and, if cured within such time, the Default specified in such 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 Intrastate Operation. 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 Comision 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 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

10.9 No Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of 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 Headings. 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 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

10.12 Amendment. 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 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or 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 Further Assurances. 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 Indemnification and Liability. The indemnification and liability provisions of the PUCT Rule 25.202(b)(2) or its successor shall govern this Agreement.

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

10.17 Assignment. This Agreement may be assigned by either Party only with the written consent of the other; 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's assignment rights pursuant to said arrangement, the secured creditor, the trustee 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 Severability. 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 Comparability. The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

10.20 Invoicing and Payment. 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.

A. 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**

- 1) Interconnection Option chosen by Generator (check one):

  X   Section 4.1.A. or        Section 4.1.B

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

- 2) Date by which Generator must provide to TSP the written Notice to Proceed with design, procurement, and construction of the TIF and provide security, as specified in Exhibit "A", Section 4.2 and 4.3, so that TSP may maintain schedule to meet the In-Service Date: **January 10, 2013 ("NTP Need Date")**

**With the execution of this agreement and the provision of security in accordance with the terms of this agreement, TSP is authorized to proceed with design, procurement, and construction of the TIF.**

- A. If Generator does not provide the written Notice to Proceed to TSP by the above respective NTP Need Date, the designated TIF In-Service Date, Scheduled Generation Trial Operation Date, and Scheduled Generation Commercial Operation Date, identified below, will each be extended day for day for each day after the NTP Need Date that the Notice to Proceed is delayed.
- B. If Generator does not provide a written Notice to Proceed to TSP by 12 months after the NTP Need Date ("NTP Deadline"), such non-provision of the Notice to Proceed shall constitute a Default, in accordance with Section 10.6.A of Exhibit "A", by the Generator and written notice of Default shall be deemed to have been given by TSP to Generator on the NTP Deadline. If such Default is not cured in accordance with Section 10.6 of Exhibit "A", then TSP may terminate this Agreement in accordance with the provisions of Section 10.6.B of Exhibit "A".

TIF In-Service Date: **May 31, 2013**

Scheduled Generation Commercial Operation Date: **July 1, 2013**

- 3) In addition to day-for-day delays caused by the Generator not providing the written Notice to Proceed by the NTP Need Date, the designated In-Service Date, Scheduled Trial Operation Date, and Scheduled Commercial Operation Date will each be extended day-for-day for:
- A) each day after 180 calendar days after the date that the Notice to Proceed was given that real property access rights for TSP to access the easement are not in place; and

- B) each day after the date that the Notice to Proceed was given that security arrangements outlined in Exhibit "A", Article 8, Paragraph 8.3, Financial Security Arrangements, and Exhibit "E" are not in place.
  - C) each day that ERCOT does not grant outages as required by TSP to perform work that must be accomplished to connect the Generator to the ERCOT transmission system.
- 4) 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) Name: AES Energy Storage Project ("Plant").
- 2) Points of Interconnection Locations are at Third Party Facility Owner's 138 kV start up transformer dead-end structure at 701 Light Company Road, Pasadena, Texas 77506 as follows:
  - A. The point at which TSP's overhead transmission line phase conductors connect to Generator's 138 kV disconnect switch.
  - B. The point at which TSP's transmission line phase conductor insulators connect to Third Party Facility Owner's 138 kV start up transformer dead-end structure.
  - C. The point at which TSP's overhead transmission line phase conductor 'T-connector' 4-hole NEMA pad connects to Third Party Facility Owner's 138 kV start up transformer phase conductors.
  - D. The point at which TSP's overhead transmission line static wires connect to Third Party Facility Owner's 138 kV start up transformer dead-end structure.
- 3) Delivery Voltage: 138 kV
- 4) Number and Size of Generating Units
  - A. Plant will be comprised of containers of batteries and inverters with a total net rating of 40 MW ("Planned Capacity"), which is projected to be the Plant's Net Dependable Capability, as defined by ERCOT Requirements.
- 5) Type of Generating Unit Description
  - A. Containers of advanced chemistry sealed cell rechargeable batteries and bidirectional inverters arranged in modules of battery and inverter capacity. All bidirectional inverters in each module are fed from 13.8 kV/O, 480 kV isolation transformers. Each inverter is equipped with both magnetic input and output contactors which serve as redundant power interrupting devices in the event the Generator Units become isolated from the transmission system, isolating the battery strings from the inverters, as well as the inverters from the transmission system. All 13.8 kV/O, 480 kV isolation transformers are connected to a single 138 kV/13.8 kV power transformer.
  - B. Electrical characteristics of Plant's generating unit(s) shall be in accordance with the most recent version of data that Generator has provided to TSP.
- 6) Metering and Telemetry Equipment
  - A. TSP shall provide and install ERCOT Polled Settlement (EPS) primary and check meters, 138 kV metering current transformers and 138 kV metering potential transformers and associated wiring required for measuring the electrical output or load of the Plant at TSP's DEEPWATER 138 kV Substation or at Third Party Facility Owner's 138kV startup transformer dead-end structure. TSP shall provide two separate "Plain Old Telephone Service ("POTS")" lines, one for each of the EPS meters. TSP will provide one RS485 communication port

from the EPS metering to the TSP Remote Terminal Unit (RTU). TSP shall install and maintain the metering system's components in a manner consistent with ERCOT Requirements and the PUC Substantive Rules. TSP shall furnish a substation Supervisory Control & Data Acquisition ("SCADA") (RTU) at the DEEPWATER 138 kV Substation.

- B. The TSP shall provide a RS 485 communication port from TSP's RTU to the Generator and Generator shall be allowed to convert the communication link to Ethernet for SCADA and metering on its side of the meter. TSP shall furnish the fiber optic cable between the DEEPWATER 138 kV Substation and the Plant for this purpose. The RTU will be multi-port equipped and operate with protocols compatible with TSP's. The RTU will be equipped to monitor the DEEPWATER 138 kV Substation as outlined in Paragraph 11 and control circuit breakers in the DEEPWATER 138 kV Substation. TSP shall also furnish the RTU inputs, such as contacts and transducers, in the DEEPWATER 138 kV Substation. Selected real-time data of the DEEPWATER 138 kV Substation will be available at one port of TSP's RTU for Generator's use. TSP's RTU will be equipped with a MODBUS or DNP-3 "Master" communications port for this purpose. TSP shall furnish the fiber optic cable between the DEEPWATER 138 kV Substation and the Plant for this purpose.
- C. Generator shall furnish Plant data to TSP's RTU communication port at the DEEPWATER 138 kV Substation as referenced in Paragraph 11 below. Generator's RTU/DCS shall be equipped with a MODBUS or DNP-3 "Master" communications port for this purpose. TSP shall furnish the fiber optic cable between the Plant and the DEEPWATER 138 kV Substation for this purpose.

7) Generator Interconnection Facilities

- A. Generator shall furnish, operate and maintain a complete energy storage facility capable of charging or discharging the Planned Capacity, including, but not limited to, all battery and inverter units, power transformers, protective devices, and other transformers and associated foundations, all relays necessary for the protection, synchronization and coordination of the Generator's battery and inverter units, any auxiliary equipment and the disconnect switch( s ) and metering instrument transformer foundation( s ) and stands and other equipment necessary for protection and coordination, controls, and wiring all as necessary to provide an interconnection between Generator's facilities and TSP's transmission system.
- B. The energy storage unit(s) shall meet all applicable voltage and reactive requirements as outlined in the ERCOT Protocols and ERCOT Operating Guides.
- C. Generator's energy storage facility shall meet all applicable ERCOT Requirements for maintaining continuity of service, including low-voltage ride-through capability. TSP has not assessed and makes no determination of Generator's compliance with applicable requirements. Generator shall provide the Plant's 138 kV disconnecting device( s ).
- D. Generator shall provide all power transformer(s) to connect the Plant's energy storage units with TSP's transmission system.



- E. Generator shall provide a disconnect switch at Third Party Facility Owner's 138 kV start up transformer dead-end structure and connection to TSP's phase conductors.
  - F. Generator shall provide CT cables and protection and control cables of sufficient length to connect from the Plant to TSP's DEEPWATER 138 kV Substation control house. Generator shall only be responsible for pulling cables to Generator's interface manhole. Generator shall own and shall be responsible for repairing the Generator provided cables from the Plant to TSP's DEEPWATER 138 kV Substation control house.
  - G. Generator shall install, own, and maintain necessary conduit system in accordance with Exhibit "J" for metering control cables and RS 485 communication from TSP's manhole located outside TSP's Deepwater 138 kV Substation to the metering cabinets located at the Third Party Facility Owner's 138 kV start up transformer dead-end structure.
  - H. Generator shall own all protective relays, instrument transformers, instrumentation, and control equipment physically located on the Plant side of the Point( s ) of Interconnection.
- 8) TSP Interconnection Facilities
- A) TSP shall complete its entire scope of work in TSP's DEEPWATER 138 kV Substation, ( except for Punch List Items, ) including, but not limited to, changes to existing metering, changes to existing relaying and other equipment necessary for protection and coordination, controls, and wiring all as necessary to provide an interconnection between the Plant's energy storage facilities and TSP's System; energize the same, and interconnect with the Plant.
  - B) Punch List Items are defined as those non-material items of work that remain to be performed in order to ensure full compliance with this Agreement. Punch List Items do not include any items of work, alone or in the aggregate, non-completion of which (i) prevent the DEEPWATER 138 kV Substation from being used for its intended purposes as described in this Agreement or in accordance with applicable laws; (ii) prevents the DEEPWATER 138 kV Substation from being legally, safely and reliably placed in commercial operation; or (iii) in the exercise of reasonable engineering judgment could have an adverse effect on the operation, efficiency or reliability of the DEEPWATER 138 kV Substation, or its ability to transmit the Plant's power to the ERCOT grid.
  - C) TSP shall own and maintain the existing connection from DEEPWATER 138 kV Substation to Third Party Facility Owner's 138 kV start up transformer dead-end structure located at the Point of Interconnection including phase conductors, static conductors, tower fittings, insulators, line phase conductor terminal fittings for attachment to Generator's disconnect switch, and line phase conductor 'T-connector 4-hole NEMA pad for attachment to Third Party Facility Owner's 138 kV start up transformer phase conductors.
  - D) TSP shall furnish, own, and maintain the connection from DEEPWATER 138 kV Substation to TSP's transmission system.

E) TSP shall develop and install transmission improvements that it determines, in its sole discretion, are foreseeable and reasonably necessary to safely, reliably, and economically integrate the Plant's generation into TSP's Transmission System. TSP MAKES NO PROMISE, REPRESENTATION, OR WARRANTY AS TO WHETHER TSP'S TRANSMISSION SYSTEM WILL BE FREE OF CONSTRAINTS AT ANY TIME, INCLUDING BUT NOT LIMITED TO TIMES WHEN THE TRANSMISSION IMPROVEMENTS UNDER THIS AGREEMENT ARE BEING MADE OR AFTER THEIR COMPLETION.

9) Communications Facilities

- A. TSP shall maintain a communication circuit for real-time data transmittal via SCADA equipment from the DEEPWATER 138 kV Substation to TSP's Energy Management System.
- B. TSP shall furnish the communications RS 485 cable and converters required to connect TSP's DEEPWATER 138 kV Substation RTU to Generator's monitoring system.
- C. Generator shall furnish RTU inputs referenced in Paragraph 11) A) from the Plant to the DEEPWATER 138 kV Substation's communication interface termination point.
- D. Generator shall provide a voice telephone extension outlet in close proximity to the Plant's relay panel that is located within the Plant. Such telephone extension outlet shall be connected to the local exchange carrier's telephone system; however, the telephone extension outlet may be connected to the Plant's internal telephone system, provided Plant's internal telephone system is equipped with an uninterruptible power supply system.
- E. TSP shall furnish RTU inputs referenced in Paragraph 11B, from the DEEPWATER 138 kV Substation to the Plant's communication interface termination point.

10) System Protection Equipment

- A. Generator shall provide two sets of protective relaying accuracy (C800) current transformers on Generator's 138 kV circuit breakers associated with the protective relaying between the Plant and TSP's DEEPWATER 138 kV Substation. Each set of current transformers shall provide input signals to two independent sets of TSP provided protective relays. The current transformer ratio will be specified on the detailed one-line relaying and metering diagram.
- B. Generator shall provide current transformer cables and protection and control cables of sufficient length to connect from the Plant to TSP's DEEPWATER 138 kV Substation control house. Generator shall only be responsible for pulling cables to the Generator's interface manhole. Generator shall own and shall be responsible for repairing Generator provided cables from the Plant to TSP's DEEPWATER 138 kV Substation control house.
- C. TSP shall provide protective relays consisting of GE-B30 Bus Differential relaying and SEL-487B Bus Differential relaying for the interconnecting line between the GIF and TSP's DEEPWATER 138 kV Substation.

- D. Protective relay tripping between TSP's DEEPWATER 138 kV Substation and the Plant will be accomplished by interposing relay contacts.
- E. TSP shall provide a 138 kV single phase voltage source at TSP's DEEPWATER 138 kV Substation that will be connected to Generator's protection and control cable for Generator's synchronizing control circuit.

11) Inputs to Telemetry Equipment

- A) Generator shall provide to TSP at TSP's DEEPWATER 138 kV Substation the following signals originating at Generator's Plant as indicated on the attached one-line drawing entitled "CNP 138 KV DEEPWATER SUBSTATION ONE LINE RELAYING & METERING DIAGRAM FOR AES/DEEPWATER GENERATION PROJECT STANDARD INTERCONNECTION AGREEMENT" dated 11/8/2012 included in Exhibit "H":

- 1) Analog Signals From Plant

- (i) Kilovolts for Plant 13.8 kV bus (one phase only).
  - (ii) Frequency of Plant facility if available.
  - (iii) Net megawatts for each 138-13.8 kV transformer.
  - (iv) Net megavars for each 138-13.8 kV transformer.

- 2) Status Signals From Plant

- (i) Status of selected transmission voltage circuit breakers, generator breakers, motor operated switches, and line disconnect switches that may impact power flows on TSP's Transmission System.
  - (ii) Status of generator automatic voltage regulator (automatic/manual) for energy storage facility.

- B) TSP shall provide to Generator the following signals originating at TSP's DEEPWATER 138 kV Substation:

- 1) Analog Signals From TSP Substation Transducers

- (i) Kilovolts for the Point of Interconnection
  - (ii) Megawatts, megavars, and megawatt-hour data.

- 2) Status Signals From TSP Substation Transducers

- (i) Status of transmission voltage circuit breakers.

12) Supplemental Terms and Conditions, if any, attached:

- A. The following drawings are attached and made a part of this agreement as Exhibit "H" – Attached Drawings. (*Note: The drawings contain a line of demarcation between TSP provided facilities and Generator provided facilities*).

- 1) "CNP 138kV Deepwater Substation One Line Relaying & Metering Diagram For AES/Deepwater Generation Project Standard Interconnection Agreement" dated 11/8/2012.

- B. Plant Cost Responsibility:

- 1) Generator does not approve of any enhancements to TSP's basic offer interconnection facilities and no contribution in aid of construction ("CIAC") of the Transmission Interconnection Facilities is required.
  - 2) Notwithstanding the provisions of Exhibit "A", Section 8.1, the amount of the CIAC, if any, which Generator may be required to make, shall be specified in Exhibit "E", Security Arrangement Details.

- 3) The TIF described in this agreement is designed based on the storage capacity provided by Generator. It is assumed that the energy storage facility will be capable of charging and discharging the Planned Capacity by the Scheduled Commercial Operation Date specified in Exhibit "B". Within the first 12 months following Commercial Operation, if the highest level of Actual Capacity is less than ninety-five percent (95%) of the Planned Capacity, Generator shall be responsible for TIF costs, if any, that are determined, solely by TSP, to have been incurred to accommodate Generator's Planned Capacity, but are then determined to not be necessary to accommodate Generator's Actual Capacity. As used here, "Actual Capacity" shall mean the Plant's total Net Dependable Capability, as determined or accepted by ERCOT, in accordance with ERCOT Requirements. Generator shall pay such costs within thirty (30) days following the receipt of TSP's invoice.
- 4) Third Party Facility Owner shall own, operate, and maintain certain interconnection facilities required to interconnect the Plant with TSP System ("Third Party Interconnecting Facilities"). Generator and Third Party Facility Owner shall be responsible for maintaining the capability of such Third Party Interconnecting Facilities to interconnect the Plant to TSP System.

C. Clarifications to Exhibit "A"

- 1) The Parties agree that at the time of executing this Agreement the references to the PUCT Rules contained within certain definitions set forth in Exhibit "A", "Article 1. Definitions" have the meanings ascribed to such terms as established in the current PUCT Rules. The Parties recognize that the PUCT Rules are amended from time to time by the PUCT. The parties also acknowledge that ERCOT issues ERCOT Requirements in which terms are redefined from time to time. When the PUCT Rules and/or ERCOT Requirements are amended and terms defined in Exhibit "A", "Article 1. Definitions" are affected by such amendments; the Parties agree that such terms shall have the meanings as amended by the PUCT or ERCOT. Further, because there is no longer a definition for "System Security Study" in the PUCT Rules or in the ERCOT Requirements, the term shall have the same definition as "Security Study" in the ERCOT Requirements.

D. Miscellaneous

- 1) Each Party shall be solely responsible for keeping itself informed of, and understanding its respective responsibilities under, all applicable National Electric Reliability Corporation ("NERC") Standards and ERCOT Requirements and all valid, applicable laws, rules, regulations and orders of, and tariffs approved by, duly constituted Governmental Authorities.
- 2) Each Party's personnel, contractors, subcontractors and agents shall abide by and comply with the other Party's safety requirements and procedures while in areas designated as under that other Party's control.
- 3) In the event that Generator's personnel, contractors, subcontractors, or agents cause delays in the work schedule of TSP, Generator shall reimburse to TSP

the additional costs associated with such delays within 30 days of receipt of an invoice for such costs.

- 4) Generator understands and agrees that identification of any stability or oscillation condition that may affect Generator's Plant, and implementation of any associated protective measures, are the sole responsibility of Generator.
- 5) ERCOT Requirements.
  - (i) Unless expressly stated in this Agreement, where the ERCOT Requirements are in conflict with TSP's specifications or procedures, the ERCOT Requirements shall prevail.
  - (ii) ERCOT Requirements currently require installation of power system stabilizers on generators.
  - (iii) Prior to commercial operation ERCOT may verify that the Generator is meeting ERCOT Requirements, including complying with reactive standards, the provision of accurate stability models and the installation of power system stabilizers, if required. Failure to meet these ERCOT Requirements may result in delays to commercial operation.
- 6) All energy storage facility data including data for stability studies (transient, voltage, etc.) and sub synchronous resonance ("SSR") data shall be provided to ERCOT and TSP before commercial operation. This data shall be updated when the Plant goes into commercial operation. Any updates to this information will be provided within 60 days to ERCOT and TSP as changes or upgrades are made during the life of the Plant. This requirement applies to all future owners of the Plant. Generator and any future owners of the Plant shall comply with these data requirements along with all applicable ERCOT Requirements and NERC Standards, including, without limitation, those contained in the ERCOT Protocols and ERCOT Operating Guides. Such Requirements are subject to change from time to time, and such changes shall automatically become applicable based upon the effective date of the approved change.

**Exhibit "D"**  
**Notice and EFT Information of the ERCOT Standard Generation  
Interconnection Agreement**

**(a) All notices of an OPERATIONAL nature shall be in writing and/or may be sent between the Parties via electronic means including facsimile as follows:**

<b>If to AES Energy Storage, LLC Project</b> Attn: Piers Lewis 4300 Wilson Boulevard Arlington, VA, 22203 24 Hour Telephone (703) 682-6404 Operational/Confirmation Fax: TBD E-mail piers.lewis@aes.com	<b>If to CenterPoint Energy Houston Electric, LLC</b>  CenterPoint Energy Houston Electric, LLC Attn: Transmission Control - Real Time Operations P.O. Box 1700 Houston, Texas 77251 24 Hour Telephone 713-207-2393 Operational/Confirmation Fax 713-207-2349
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**(b) Notices of an ADMINISTRATIVE nature:**

<b>If to AES Energy Storage, LLC</b>  Company Name Attn: Piers Lewis 4300 Wilson Boulevard Arlington, VA, 22203 Phone: (703) 682-6404 Fax: TBD E-mail piers.lewis@aes.com	<b>If to CenterPoint Energy Houston Electric, LLC</b>  CenterPoint Energy Houston Electric, LLC Manager, Transmission Accounts P.O. Box 1700 Houston, TX 77251 Phone 713-207-2785 Fax: 713-207-9122 E-mail: don.chandler@CenterPointEnergy.com
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**(c) Notice for STATEMENT AND BILLING purposes:**

<b>If to AES Energy Storage, LLC</b>  Company Name Attn: Piers Lewis 4300 Wilson Boulevard Arlington, VA, 22203 Phone: (703) 682-6404 Fax: TBD E-mail piers.lewis@aes.com	<b>If to CenterPoint Energy Houston Electric, LLC</b>  Accounts Payable P.O. Box 1374 Houston, TX 77251-1374 Phone 713-207-5279 Fax: 713-207-9986 E-mail: <a href="mailto:AP.invoices@centerpointenergy.com">AP.invoices@centerpointenergy.com</a> Mark Invoices with "WF022096"
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**(d) Information concerning ELECTRONIC FUNDS TRANSFERS:**

<b>If to AES Energy Storage, LLC</b>  Bank Name: Citibank, NA Address: 399 Park Ave., NY, NY, 10043 ABA No. 02100089 for credit to: AES Energy Storage, LLC Account No. 30790357	<b>If to CenterPoint Energy Houston Electric, LLC</b>  Chase Bank of Texas Houston, Texas ABA No. 113000609 For credit to: CenterPoint Energy Houston Electric, LLC Account No. 0010-097-0798
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**Exhibit "E"**  
**Security Arrangement Details**

**Letter of Credit**

- 1) Securitization of Project:
  - A) The total estimated project cost to construct the TIF as described in Exhibit "C" is approximately \$331,000.00 ("Secured Cost"). The Parties may mutually agree to change the amount of the Secured Cost.
  - B) In accordance with Exhibit "A", Article 8, Paragraph 8.3 Financial Security Arrangements, Generator shall provide a financial security instrument(s) in the form of an irrevocable letter of credit in favor of TSP, in a form and substance acceptable to TSP to secure Generator's obligations outlined in Exhibit "A", Article 2 in accordance with the SECURITIZATION SCHEDULE below. Such letter of credit shall be with a financial institution reasonably acceptable to TSP having a long term debt rating by Moody's Investor Services of "A2" or better, and/or Standard & Poor's of "A" or better.
  - C) Generator's obligation to pay amounts set forth in this Agreement will survive any termination of this Agreement.

**Exhibit “F”**  
**Outage and Clearance Coordination Procedure**





# Transmission & Substation Outage And Clearance Coordination Procedures

Real Time Operations Department

Revised April 18, 2012

# Telephone Numbers

## Real Time Operations Department (RTO)

**RTO HOTLINE** **281-894-1625** (24 hours)

RTO System Controller 281-894-0491 (24 hours)

**Outage Schedulers:** **713-207-2196**

Mike Nunn (Outage Scheduler) 713-207-2714  
[michael.nunn@centerpointenergy.com](mailto:michael.nunn@centerpointenergy.com)

Larry Pilcik (Outage Scheduler) 713-207-2730  
[larry.pilcik@centerpointenergy.com](mailto:larry.pilcik@centerpointenergy.com)

RTO Outage Schedulers (FAX) 713-207-2571

RTO System Coordinators:

Steve McNeill 713-207-2497  
[steve.mcneill@centerpointenergy.com](mailto:steve.mcneill@centerpointenergy.com)

Michael Hall 713-207-2766  
[michael.hall@centerpointenergy.com](mailto:michael.hall@centerpointenergy.com)

## Metering Department

High Voltage Metering 713-945-6689

Metering Engineering 713-207-7507

## Transmission Accounts Representatives

Gary Dwyer 713-207-3621  
Rick Ferrell 713-207-3512  
Henry French 713-207-2789  
Gary Shadwell 713-207-3538