

#### PROJECT NO. 35077

# INFORMATIONAL FILING OF ERCOT§PUBLIC UTILITY OF COMMISSIONINTERCONNECTION AGREEMENTS§PURSUANT TO SUBST. R. §25.195(e)§OF TEXAS

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November 4, 2016

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## ERCOT STANDARD GENERATION INTERCONNECTION AGREEMENT

Between

National Aeronautics and Space Administration, Johnson Space Center

and

Energy Systems Group, LLC

and

CenterPoint Energy Houston Electric, LLC

for

Combined Heat and Power Generation Facility

October 27, 2016

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#### ERCOT STANDARD GENERATION INTERCONNECTION AGREEMENT

This Standard Generation Interconnection Agreement ("Agreement") is made and entered into this <u>27th</u> day of <u>October</u>, <u>2016</u>, between CenterPoint Energy Houston Electric, LLC ("Transmission Service Provider" or "TSP") and National Aeronautics and Space Administration, Johnson Space Center ("NASA JSC", "Generator", or "Government"), and Energy Systems Group, LLC ("Operator" or "ESG") 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 (i) the cogeneration facility that is the subject of this Agreement (the "Plant") will be developed and operated by Operator pursuant to an ongoing federal Energy Savings Procurement Contract ("ESPC") with Operator, and (ii) and that Generator will own the Plant. Operator will operate the Plant in accordance with the ESPC contract requirements and obligations identified in this Agreement. 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 terms for such interconnection described with particularity by the Parties in Exhibit "C".

This Agreement applies only to the Plant and the interconnection facilities of the TSP and Generator, as identified in Exhibit "C".

This Agreement shall become effective on execution, subject to Governmental Authority approval, if required, and shall continue in full force and effect until terminated in accordance with Exhibit "A".

Unless otherwise authorized by public law or federal regulation, nothing contained herein shall be construed as binding the Government to expend any sum in excess of the appropriation made by Congress for that fiscal year in furtherance of the matter of the agreement or to involve the Government in an obligation for the future expenditure of monies before an appropriation is made.

Any conflict between laws governing this Agreement shall be resolved by giving precedence to applicable federal laws and regulations. To the extent that federal law does not resolve a particular issue, this Agreement will be interpreted under the laws of the State of Texas excluding, however, any conflict of laws rule that would apply the law of another jurisdiction. The Parties agree to operate in compliance with applicable federal laws, ordinances, rules, and regulations of duly constituted regulatory authorities having jurisdiction over the Parties and subject matter of this Agreement.

This Agreement will be subject to the following, which are not in order of precedence, 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, as supplemented from time to time by federal law (unless expressly stated herein, where the ERCOT Requirements are in conflict with this Agreement, the ERCOT Requirements shall prevail);
- C. The PUCT Rules, as supplemented from time to time by federal law (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 138kV Specification for a Customer Owned Substation as Exhibit "F";
- I. Transmission & Substation Outage and Clearance Procedures as Exhibit "G"; and
- J. Applicable federal laws, ordinances, rules, and regulations.

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.

#### **Transmission Service Provider:**

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CenterPoint Energy Houston Electric, LLC

By: Tickle Connent ?? Name: Leste Confirming and Name: Leste Carpining aps & Title: Manager, Transmission derouted Support

#### Generator:

National Aeronautics and Space Administration, Johnson Space Center

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#### **Operator:**

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Energy Systems Group, LLC

twee W. Spentaree By:

 Name:
 Steven W. Spanbauer

 Title:
 Sr. Vice President – Federal

## 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 "<u>CCN</u>" shall mean a Certificate of Convenience and Necessity issued by the PUCT.
- 1.2 "<u>Control</u> Area" shall have the meaning ascribed thereto in PUCT Rule 25.5(8) or its successor.
- 1.3 "ERCOT" shall mean the Electric Reliability Council of Texas, Inc.

1.4 "<u>ERCOT</u> 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.

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

1.6 "<u>Facilities Study Agreement</u>" shall mean an agreement executed by the Parties relating to the performance of the Facilities Study.

1.7 "GIF" shall mean Generator's interconnection facilities as described in Exhibit "C."

1.8 "Good Utility Practice" shall have the meaning described in PUCT Rule 25.5(23) or its successor.

1.9 "<u>Governmental Authority(ies)</u>" shall mean any federal, state, local or municipal body having jurisdiction over a Party pursuant to the subject matter and terms of this Agreement.

1.10 "<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.

1.11 "ISO" shall mean the ERCOT Independent System Operator.

1.12 "<u>Operation Date</u>" shall mean the date on which Generator determines that the construction of the Plant has been substantially completed, Trial Operation of the Plant has been completed, and the Plant is ready for operation.

1.13 "<u>Operator</u>" shall mean Energy Systems Group, LLC, which will, pursuant to a federal ESPC, be constructing and operating Generator's Plant by the Operation Date, and will fulfill obligations specified in this Agreement.

1.14 "<u>Plant</u>" shall mean the electric generation facility owned by the Generator and operated by the Operator, as specified in Exhibit "C."

1.15 "<u>Point of Interconnection</u>" 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.

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

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

1.18 "<u>Reasonable Efforts</u>" shall mean the use of Good Utility Practice and the exercise of due diligence (pursuant to PUCT Rule 25.196(e)).

1.19 "System Protection Equipment" shall mean those facilities located within the TIF and the GIF as described in Section 5.6 and Exhibit "C."

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

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

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

1.23 "<u>Trial Operation</u>" shall mean the process by which the Generator and Operator are engaged in on-site test operations and commissioning of the Plant prior to Operation Date.

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

1.25 "<u>TSP System</u>" 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 <u>Termination Procedures</u>. This Agreement may be terminated as follows:

A. the Generator may terminate this Agreement after giving the TSP and Operator 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 and Operator if the Generator's Plant has not achieved its Operation Date within one year after the Operation Date reflected in Exhibit "B"; or

C. either TSP or Generator may terminate this Agreement in accordance with Section 10.6, upon notice to the other Parties.

2.2 <u>Termination Costs</u>. If a Party elects to terminate the Agreement pursuant to Section 2.1 above, the Operator 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. Operator shall not, however, be obligated to pay costs incurred (or committed to be incurred) by TSP to the extent that such costs result from wrongful action, inaction, or delay by TSP. In the event of termination, the 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 the appropriate Governmental Authority, if required. Any portions of this Agreement asserted by Generator or Operator 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 or Operator asserts such information is confidential information and has requested such filing under seal. If requested by the TSP, Generator or Operator shall provide the TSP, in writing, with the Generator's or Operator'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>TIF.</u> 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.

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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.

4.2 <u>Equipment Procurement</u>. 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 Operator has provided financial security to the TSP in accordance with Section 8.3 by the dates specified in Exhibit "B." The obligations in Section 4.2(C) are the sole responsibility of the Operator.

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 Operator by the date specified in Exhibit "B"; and

D. The Operator has provided security to the TSP in accordance with Section 8.3 by the dates specified in Exhibit "B." The obligations in Section 4.2(D) are the sole responsibility of the Operator.

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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 Operator becomes aware that the completion of the TIF will not be required until after the specified In- Service Date, the Operator will promptly provide written notice to the TSP of a new, later In- Service Date.

4.5 <u>Conditions Precedent Delay</u>. To the extent this Agreement incorporates a specified In- Service Date and the Operator 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 <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>. Operator 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 the Operation Date, unless the Parties agree on another mutually acceptable deadline, the Operator 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 Operator's main-power transformers, the facilities connecting the Operator to the main power transformers and the GIF, and the impedances (determined by factory tests) for the associated main power transformers and the generators.

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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 a 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, ("SCADA Remote Terminal Unit" or "RTU"), 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 Operator 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 Operator 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 Operator 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 m 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 Operation Date, 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 <u>Operation and Maintenance of Interconnection Facilities</u>. 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, as applicable, 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

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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 Operator, and will be conducted in accordance with ERCOT Requirements.

6.2 <u>Control Area Notification</u>. 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 <u>Land Rights and Easements</u>. Prior to the Operation Date, 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 m 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."

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6.6 <u>Start-Up and Synchronization</u>. Consistent with ERCOT Requirements and the Parties' mutually acceptable procedure, the Operator 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>Blackstart Operations</u>. If the Plant is capable of blackstart operations, Operator 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 Operator will have blackstart capability, then Operator shall provide and maintain an emergency communication system that will interface with the TSP during a blackstart condition.

#### **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 Operator 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. 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 Operator to select equipment and meet any system protection and stability requirements.

7.3 <u>Initial Data Submission by Operator</u>. The initial data submission by the Operator, 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

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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 Operator 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 the Operation Date, the TSP and Operator 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 the Operation Date, the Operator shall provide the TSP any data changes due to equipment replacement, repair, or adjustment. The TSP shall provide the Operator 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 TSP and Operator shall provide such data no later than 30 days after the date of the actual change in equipment characteristics. Also, the TSP and Operator 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>. The TSP and Operator shall furnish to each other real-time and forecasted data as required by ERCOT Requirements. The TSP and Operator 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>Operator's Cost Responsibility</u>. The Operator, pursuant to the federal ESPC Task Order Award NNJ15JM10T with Generator, will construct, operate, test, and maintain the Plant and the GIF owned by Generator. These costs are borne by the Operator and Generator pursuant to ESPC Task Order Award NNJ15JM10T. In addition, the Operator may be required to make a contribution in aid of construction in the amount, if any, set out in and for the facilities described in Exhibit "C," in

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#### Ex. A-12

accordance with PUCT Rules. The obligations in Section 8.1 are the sole responsibility of the Operator. Operator is not responsible for the cost to purchase electricity.

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 <u>Financial Security Arrangements</u>. The TSP may require the Operator 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, if any. The required security arrangements, if any, shall be specified in Exhibit "E." Within five business days after the Plant achieves its Operation Date with respect to the applicable Phase, the TSP shall return the deposit or security to the Operator relating to such Phase. If the Plant has not achieved its Operation Date within one year after the scheduled 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.

8.4 <u>ESPC Task Order</u>. Nothing in this Agreement modifies or otherwise alters the terms and conditions of federal Energy Savings Performance Contract (ESPC) Task Order Award NNJ15JM10T for the National Aeronautics and Space Administration Johnson Space Center Combined Heat and Power facility.

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#### **ARTICLE 9. INSURANCE**

9.1 TSP and Operator shall, at their own expense, maintain in force throughout the period of this Agreement and until released by the other 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 from 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.

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E. The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance, and Excess Public Liability Insurance policies shall name the TSP or Operator, as applicable, 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. The TSP and Operator shall each be responsible for their 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 TSP and Operator.

H. The requirements contained herein as to the types and limits of all insurance to be maintained by the TSP and Operator are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the TSP and Operator 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, the TSP and Operator shall each 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, the TSP and Operator may each-self-insure to the extent they maintain 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. TSP and Operator 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 shall be construed in accordance with and governed by applicable state and federal law.

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 any Party to provide, or entitle any Party to receive, any service not expressly provided for herein. The TSP and Operator are each responsible for making the arrangements necessary to receive any other service that they may desire

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#### Ex. A-16

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 any Party, either before or after its Operation Date.

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. 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, there is nothing in this Agreement that modifies or otherwise alters the terms and conditions of federal ESPC Task Order Award NNJ15JM10T for the NASA JSC Combined Heat and Power Facility. This Agreement creates no additional obligations between the Parties.

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 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. No 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 Parties in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this 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 <u>Default</u>,

A. The term "Default" shall mean the failure of a 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 another Party. Upon a Default, the non-defaulting Party or Parties shall give written notice of such Default to the defaulting Party or Parties. Except as provided in Section 10.6 B, the defaulting Party or Parties 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 or Parties 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.

#### Ex. A-18

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Β. 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 or Parties 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 Operator 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 Operator 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 <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.

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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 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. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other 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.

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 the rights and obligations of the TSP under this Agreement. Liability, if any, of Generator arising from or relating to this Agreement, for injury or loss of property, or personal injury or death shall be governed exclusively by the Federal Tort Claims Act (28 U.S.C. 1346, and 2671-2680).

10.16 <u>Consequential Damages</u>. OTHER THAN THE LIQUIDATED DAMAGES HERETOFORE DESCRIBED, IN NO EVENT SHALL A 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

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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 ANOTHER 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 a Party only with the written consent of the other Parties and the proposed new party.

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, and not inconsistent with federal laws governing the rights and obligations of Generator hereunder.

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.

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Subject to the exception in Section 10.21.B, any information that a Party claims is Α. 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, including the Freedom of Information Act; (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) Within five days of the final signature on this Agreement ("NTP Need Date"), the Operator must provide a written Notice to Proceed with design, procurement, and construction of the TIF, so that TSP may maintain schedule to meet the In-Service Date identified below. The "NTP Date" shall be the date Generator provides such full Notice to Proceed to TSP.
  - A) If Generator does not provide a written Notice to Proceed to TSP by the above 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 above 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: The later of:

- a) January 16, 2017; or
- b) 4 months after the NTP Date.

Scheduled Generation Trial Operation Date: The later of:

- a) February 1, 2017; or
- b) 1 month after the TIF In-Service Date.

Scheduled Generation Commercial Operation Date: The later of:

- a) March 15, 2017; or
- b) 4 months after the TIF In-Service Date.

2) In addition to day-for-day delays caused by the Generator not providing a 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 Notice to Proceed was given that real property access rights for TSP to access the substation property are not in place; and
- B) each day after the date that 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.

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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.

3) 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.

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#### Exhibit "C" Interconnection Details

- 1) Name: NASA-JSC Natural Gas Combined Cycle Generator Project ("Plant").
- 2) Point of Interconnection Location (GIF):
  - A) The system side of the NASA 138kV ring bus disconnect switches; device numbers D732 & D741 and D742 & D751, located on the NASA Substation dead end structures for the Webster and Fairmont transmission lines located at 2101 NASA Pkwy, Houston, Harris County, Texas.
- 3) Delivery Voltage: 138 kV
- 4) Number and Size of Generating Units: Plant will be comprised of three (3) generators, two 5.7 MW gas turbine generators and one 0.5MW steam turbine generator, for a total net rating of 11.9 MW ("Planned Capacity"), which is projected to be the Plant's Net Dependable Capability, as defined by ERCOT Requirements.
- 5) Type of Generating Unit:
  - A) Generation Description

Two Solar Turbines T60 Combustion Turbine Generators (CTG) rated at approximately 5.7MW each and one AirClean Energy Steam Turbine Generator rated at approximately 0.5MW. The 480V STG has its own 480V-12.47kV generator stepup transformer (GSU) which allows the paralleling of the STG and 12.47kV CTG units on a common main-tie-main 12.47kV bus. Each CTG bus (two total) is connected to the secondary of a 13.SkV (Wye)-138kV (Delta) 42MVA transformer allowing the generation to connect to the existing 138kV ring bus and thus the Webster and Fairmont transmission lines.

Description	Manufacturer	Rating	GSU Transformer Voltages	Fuél/Energy Source
Combustion To	urbine Generator			
CTGl	Solar Turbine	5.7 <b>MW</b>	13.8kV(Wye)- 138kV (Delta) 42 MVA	Natural Gas
CTG2	Solar Turbine	5.7MW	13.8kV(Wye)- 138KV (Delta) 42 MVA	Natural Gas
Steam Turbine	Generator			
STGl	AirClean Energy	0.5MW	480V(Wye)- 12.47kV (Delta) 0.84MVA	Steam
Total nominal	gross MW: 11.9 N	/W		

- B) Each GSU will have a 138 kV disconnect switch or circuit breaker for isolation from the TIP.
- C) Electrical characteristics of Plant's generating unit(s) shall be in accordance with the most recent version of Generator's ERCOT Resource Asset Registration Form ("RARF") data submittal.
- 6) Metering and Telemetry Equipment (TF, GIF):
  - A) TSP shall install and maintain the metering system's components in a manner consistent with ERCOT Requirements and the PUC Substantive Rules. The metering current transformers and metering potential transformers are procured, owned, maintained, and replaced by TSP. This is existing. (TIF)
  - B) TSP shall furnish a substation Supervisory Control & Data Acquisition (SCADA) Remote Terminal Unit (RTU) at the NASA Substation. The RTU will be equipped to monitor the NASA Substation as outlined in Paragraph 11 but will control only a 138kV circuit breaker D740 in the NASA Substation. Selected real-time data of the NASA Substation will be available at TSP's RTU for Operator's use. TSP's RTU will be equipped with a MODBUS or DNP-3 "Master" communications port for this purpose. Operator shall furnish the fiber optic cable between the NASA Substation and the Plant RTU/DCS "Slave" communications port for this purpose. (TIF)
  - C) Operator shall furnish Plant data to TSP's RTU communication port at the NASA Substation as referenced in Paragraph 11 below. The RTU will be multi-port equipped and operate with protocols compatible with TSP. Operator's RTU/DCS shall be equipped with a MODBUS or DNP-3 "Master" communications port for this purpose. Operator shall furnish the fiber optic cable between the Plant and TSP's RTU "Slave" communications port in the NASA Substation for this purpose. (GIF)
- 7) Generator Interconnection Facilities (GIF):
  - A) Operator shall furnish, operate and maintain a complete generation facility capable of generating the Planned Capacity, including, but not limited to all generators, generator step-up transformers, protective devices, and other transformers and associated foundations, the terminating structures, all relays necessary for the protection, synchronization and coordination of the generators, generator auxiliary equipment and the disconnect switches and foundations at the Point of Interconnection.
  - B) The Generation unit(s) shall meet all voltage and reactive requirements as outlined in the ERCOT Protocols and ERCOT Operating Guides.
  - C) Generator shall provide the foundations for the Plant's terminating structure(s)/disconnecting device(s). Generator shall design and install the Plant's terminating structure(s)/dead-end rack(s)/ disconnecting device(s) in accordance with TSP's conductor loading requirements. This is existing.
  - D) Generator shall connect its 138 kV NASA Substation ground mat to TSP's transmission tower static wire at the 138 kV NASA Substation terminating structure. This is not needed because the existing configuration is acceptable.

- E) Generator shall provide all generator step-up transformers to connect the Plant's generators with TSP's transmission system. This is not needed because the existing configuration is acceptable.
- F) Electrical characteristics of Plant's Generator Interconnection Facilities shall be in accordance with the most recent version of TSP's "Specification for Customer 138kV Substation Design" attached as Exhibit "F" and in particular, the section pertaining to "Generation".
- G) Generator shall provide 138 kV disconnect switch(es) for connection to TSP System located on the high voltage side of the Plant's generator step-up transformers OR Generator's dead-end structure in the NASA Substation. This is existing.
- H) Generator shall own all protective relays, instrument transformers, instrumentation, and control equipment physically located on the Plant side of the Point of interconnection.
- 8) TSP Interconnection Facilities (TIF):
  - A) TSP shall complete its entire scope of work and other equipment necessary for protection and coordination, controls, and wiring all as necessary to provide an interconnection between the Plant's generation facilities mid the TSP System; energize the same, and interconnect with the Plant. No connection is needed as the system will be utilized in existing configuration.
  - B) TSP shall furnish, own and maintain the connection from TSP's equipment to the Plant's terminating structure/disconnecting device, including phase conductors, static conductors, tower fittings, suspension insulators, dead-end clamps and line conductor terminal fittings with NEMA standard four-hole flat pads for attachment to the first item of equipment or bus of the GIF. TSP will also provide NEMA four-hole pads and associated hardware for connection to NEMA four-hole pads on the Plant's disconnecting device. This is existing equipment.
  - C) TSP shall furnish, own and maintain the connection from NASA Substation to the TSP's transmission system. This is existing.
  - D) 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 the TSP 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 (GIF and TIF):
  - A) TSP shall order and pay for and maintain a communication circuit for real-time data transmittal via SCADA equipment from the NASA Substation to TSP's Energy Management System. (TIF)
  - B) Operator shall provide fiber optic communication interface devices associated with the RTU inputs between the Plant and NASA Substation. (GIF)
  - C) Operator shall furnish RTU inputs identified in Exhibit "C", Paragraph 11(A) from the Plant to the NASA Substation's communication interface termination point. (GIF)

- D) Operator 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. (GIF)
- E) TSP shall provide fiber optic communication interface devices associated with the RTU inputs between the NASA Substation and the Plant. (TIF)
- F) TSP shall furnish RTU inputs identified in Exhibit "C", Paragraph 11(D) from NASA Substation to Plant's communication interface termination point. (TIF)
- G) Operator shall provide fiber optic communication cables of sufficient length to connect from Plant to the NASA Substation RTU cabinet, but Operator shall only be responsible for pulling communication to the RTU cabinet. (GIF)
- H) TSP shall be responsible for terminating communication cables in RTU cabinet in the NASA Substation. (TIF)
- 10) System Protection Equipment (GIF):
  - A) Operator shall design and install a time-overvoltage protective relay on the 138kV incoming transmission line position to detect zero-sequence over-voltage and trip the respective 138kV circuit breaker(s) at the NASA Substation or trip the generator to ensure Plant's generator does not sustain a fault on TSP's transmission system. TSP shall provide the required time-overvoltage protective relay bill of materials for the 138kV zero-sequence over-voltage relaying scheme to ensure coordination with other transmission relaying. TSP shall calculate the set points for the zero-sequence time-overvoltage protective relay at NASA Substation.
  - B) TSP shall review the existing 138 kV transmission line automatic reclosing schemes to determine if any changes are required. This is not in the project.
  - C) Operator's engineering documents shall be submitted for TSP comments, functional review, and compliance with TSP requirements.
- 11) Inputs to Telemetry Equipment (GIF and TIF):
  - A) Operator shall provide to TSP at NASA Substation the following signals originating at Operator's Plant: (GIF)
    - 1) Analog Signals From Plant
      - (i) Kilovolts for each generator bus (one phase only).
      - (ii) Frequency of each generating unit, if available.
      - (iii) Net megawatts for each generating unit.
      - (iv) Net megavars for each generating unit.
      - (v) Data from each of the Plant electrical load BP& meters (auxiliary power watts, vars, watt-hr from each meter).
    - 2) Status Signals From Plant
      - (i) Status of selected transmission voltage circuit breakers, generator breakers, that may impact power flows on TSP's Transmission System.
      - (ii) Status of generator automatic voltage regulator (automatic/manual) for each generating unit.

- B) TSP shall provide to Generator the following signals originating at NASA Substation: (TIF)
  - (i) Metering data from the EPS meters (watts, vars, watt-hr, and etc.).
- 12) Supplemental Terms and Conditions:
  - A) Cost Responsibility:
    - 1) The TIF described in this Agreement is designed based on the generating capacity provided by Operator. It is assumed that the generating facility will be capable of generating 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 the Planned Capacity, Operator shall be responsible for TIF costs, if any, that are determined, solely by TSP to have been incurred to accommodate Operator's Planned Capacity, but me then determined to not be necessary to accommodate Operator'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. Operator shall pay such costs within thirty (30) days following the receipt of TSP's invoice.
  - B) Authorization to Proceed:
    - 1) TSP will not, without prior written approval from Operator, incur any costs and expenses until released to do so by Operator. Such release shall be provided in the form of a Notice to Proceed.
  - 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 or ERCOT Requirements are amended and terms defined in Exhibit "A", "Article I. Definitions" are affected by such amendments, the Parties agree that such terms shall have the meanings as amended by the PUCT or ERCOT. The term "System Security Study" shall have the same definition as "Security Screening Study" in the ERCOT Requirements.
  - D) Miscellaneous
    - Each Party shall be solely responsible for keeping itself informed of, and understanding its respective responsibilities under, all applicable North American 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) Generator will provide on its property, access roads to the TIF and such access roads will be maintained by Generator in such a manner and condition to allow passage of heavy utility vehicles.
    - 3) At no cost to TSP, Generator shall provide access to existing restroom facilities and potable water facilities located at the Plant to TSP and TSP's personnel, contractors, subcontractors and agents, provided, that TSP shall be responsible for any damage

caused to such facilities by such parties. Such access shall be limited to personnel engaged in normal operations and maintenance activities.

- 4) 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.
- 5) In the event that Operator's personnel, contractors, subcontractors, or agents cause delays in the work schedule of TSP, Operator shall reimburse to TSP the additional costs associated with such delays within 30 days of receipt of an invoice for such costs.
- 6) Operator understands and agrees that identification of any stability or oscillation condition that may affect Operator's Plant, and implementation of any associated protective measures, are the sole responsibility of Operator.
- 7) 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) Prior to commercial operation, ERCOT may verify that Operator 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.
- 8) All generator data including data for stability studies (transient, voltage, etc...) and subsynchronous 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. Operator 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

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:

If to NASA	If to CenterPoint Energy Houston Electric, LLC
Attn: Site Manager- Melissa McKinley	Attn: Real Time Operations
P.O. Box 2101 NASA Parkway MC-JMS	P.O. Box 1700
City- Houston, Texas	City- Houston, Texas 77251
24 Hour Telephone 281-684-0597/281-483-3061	Phone: 713-207-2393
	Operation/Fax: 713-207-2349
If to Energy Systems Group, LLC	
Attn: Thomas Bane	
2600 Eagan Woods Drive, Suite 300	
Eagan, MN 55121	
Phone: 651-249-8376	
E-mail: tbane@energysystemsgroup.com	

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#### (b) Notices of an ADMINISTRATIVE nature:

If to NASA	If to CenterPoint Energy Houston Electric, LLC
Attn: Site Manager - Melissa McKinley P.O. Box 2101 NASA Parkway MC-JMS City: Houston, Texas Phone: 281-684-0597 Fax: 281-483-3048 E-mail Melissa.k.Mckinley@nasa.gov	CenterPoint Energy Houston Electric, LLC Manager, Transmission Accounts P.O. Box 1700 Houston, TX 77251 Phone 713-207-7617 Fax: 713-207-9122 E-mail: lesli.cummings@CenterPointEnergy.com
If to Energy Systems Group, LLC Attn: Lisa Estlow 2600 Eagan Woods Drive, Suite 300 Eagan, MN 55121 Phone: 651-905-5710 E-mail: lestlow@energysystemsgroup.com	

### (c) Notice for STATEMENT AND BILLING purposes:

If to Energy Systems Group, LLC	If to CenterPoint Energy Houston Electric, LLC
Attn: Accounts Payable	Accounts Payable
4655 Rosebud Lane	P.O. Box 1374
Newburgh, IN 47630	Houston, TX 77251-1374
	Phone 713-207-7888
	Fax: 713-207-9986
	E-mail: AP.invoices@centerpointenergy.com

## (d) Information concerning ELECTRONIC FUNDS TRANSFERS:

If to Energy Systems Group, LLC	If to CenterPoint Energy Houston Electric, LLC
ABA: 086300041 Fifth Third Southern Indiana (Evansville, IN) For the Benefit of Energy Systems Group, LLC Account 101480880	Chase Bank of Texas Houston, Texas ABA No. 113000609 For credit to: CenterPoint Energy Houston, LLC Account No. 0010-097-0798

#### Exhibit "E" Security Arrangement Details

Not later than the date by which it provides the NTP in accordance with Exhibit B, Operator shall provide financial security to TSP in the form of a \$23,000 cash deposit. Within five business days after the Plant achieves its Operation Date with respect to the applicable Phase, the TSP shall return the deposit to the Operator relating to such Phase. If the Plant has not achieved its Operation Date within one year after the scheduled 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 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, 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.