

Control Number: 35077



Item Number: 720

Addendum StartPage: 0

PROJECT NO. 35077

RECEIVED

INFORMATIONAL FILING OF ERCOT  
INTERCONNECTION AGREEMENTS  
PURSUANT TO SUBST. R. §25.195(e)

§  
§  
§

PUBLIC UTILITY OF  
OF TEXAS

2017 APR 19 AM 11:04  
PUBLIC UTILITY COMMISSION  
FILING CLERK

Patrick Peters  
CenterPoint Energy Service Company, LLC  
1005 Congress Ave., Suite 650  
Austin, Texas 78701  
Tel. No.: (512) 397-3032  
Fax: (512) 397-3050  
Email: [patrick.peters@centerpointenergy.com](mailto:patrick.peters@centerpointenergy.com)

April 19, 2017

## TABLE OF CONTENTS

### Description

### Page

ERCOT Standard Generation Interconnection Agreement between CenterPoint Energy Houston Electric, LLC and Cross Texas Transmission, LLC.....	2-24
--	------

1720

**INTERCONNECTION AGREEMENT**  
**BETWEEN**  
**CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC**  
**AND**  
**CROSS TEXAS TRANSMISSION, LLC**

**DATED:** 3/8/2017

**INTERCONNECTION AGREEMENT  
BETWEEN  
CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC  
AND  
TEXAS MUNICIPAL POWER AGENCY**

This Agreement is made and entered into this 8<sup>th</sup> day of March, 2017, by and between CenterPoint Energy Houston Electric, LLC ("CenterPoint Energy") and Cross Texas Transmission, LLC ("CTT") each sometimes hereinafter referred to individually as "Party" or both referred to collectively as "Parties".

**WITNESSETH**

WHEREAS, each Party is the owner and operator of transmission and/or distribution facilities and is engaged in the business of transmitting electric energy within the Electric Reliability Council of Texas; and

WHEREAS, the Parties desire to interconnect their respective transmission and/or distribution systems in the respects, and under the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and conditions herein set forth, the Parties agree as follows:

**ARTICLE I – EFFECTIVE DATE AND TERM**

This Agreement and any subsequent addendum to this Agreement shall become effective on the date of execution by both Parties. Unless otherwise mutually agreed, this Agreement shall remain in effect initially for a period of twenty (20) years from the effective date, and shall continue in effect thereafter for periods of five (5) years each unless canceled after such initial period or any subsequent period either by mutual agreement or by either Party upon at least thirty-six (36) months written notice to the other party. Upon termination of this Agreement, each Party shall discontinue the use of the facilities of the other and shall disconnect the Points of Interconnection.

**ARTICLE II – OBJECTIVE AND SCOPE**

2.1 It is the intent of the Parties, by this Agreement, to state the terms and conditions under which the Parties' transmission and/or distribution systems will be interconnected and to identify the facilities and equipment provided by each Party at the Points of Interconnection.

2.2 This Agreement shall apply to the ownership, construction, operation and maintenance of those facilities that are specifically identified and described in the Facility Schedule(s) that are attached hereto and incorporated herein.

2.3 This Agreement, including all attached Facility Schedule(s), constitutes the entire agreement and understanding between the Parties with regard to the interconnection of the facilities of the Parties at the Points of Interconnection expressly provided for in this Agreement. The Parties are not bound by or liable for any statement, representation, promise, inducement, understanding, or undertaking of any kind or nature (whether written or oral) with regard to the subject matter hereof if not set forth or provided for herein. This Agreement replaces all other agreements and undertakings, oral and written, between the Parties with regard to the subject matter hereof. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein; such agreements are unaffected by this Agreement.

### **ARTICLE III – DEFINITIONS**

For purposes of this Agreement, the following definitions shall apply:

3.1 Agreement shall mean this Agreement with all exhibits, schedules and attachments applying hereto, including any schedules and attachments hereafter made and any amendments hereafter made.

3.2 ERCOT shall mean the Electric Reliability Council of Texas, Inc., or its successor in function.

3.3 ERCOT Requirements shall mean the ERCOT Operating Guides, ERCOT Metering Guidelines, and ERCOT Protocols, adopted by ERCOT, and approved by the PUCT, including any attachments or exhibits referenced in the ERCOT Protocols, as amended from time to time, that contain the scheduling, operating, planning, reliability, and settlement (including customer registration) policies, rules, guidelines, procedures, standards, and criteria of ERCOT.

3.4 Facility Schedule(s) shall mean the addendum(s) to this Agreement that describe the agreement on ownership, control, operation, and maintenance responsibilities of the Parties at the Point(s) of Interconnection.

3.5 Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region. Good Utility Practice may include, but not be limited to, conformance with the applicable and consistently applied reliability criteria, standards and operating guides of ERCOT and the NERC, or successor organization(s).

3.6 NERC shall mean the North American Electric Reliability Corporation or its successor in function.

3.7 NERC Reliability Standards shall mean the mandatory electric reliability standards enforced by NERC.

3.8 Point(s) of Interconnection shall mean the points where the electrical systems of the Parties are connected or may, by the closure of normally open switches, be connected.

3.9 PUCT shall mean the Public Utility Commission of Texas or its successor in function.

#### **ARTICLE IV – ESTABLISHMENT AND TERMINATION OF POINTS OF INTERCONNECTION**

4.1 The Parties agree to comply with the ERCOT Requirements and NERC Reliability Standards as they relate to the interconnection of their facilities at the locations identified and described in the Facility Schedule(s) which are attached hereto and incorporated herein.

4.2 The Parties agree to interconnect their facilities at the locations, and in accordance with the terms and conditions, specified in the attached Facility Schedule(s). All Points of Interconnection shall be specified in Exhibit A and the Facility Schedule(s) attached hereto and made a part hereof. The Facility Schedule(s) shall specify the responsibilities of the Parties with respect to ownership, control, operation, and maintenance of the interconnection facilities.

4.3 Unless otherwise provided in a Facility Schedule, each Party shall, at each Point of Interconnection, at its own risk and expense, design, install, or cause the design and installation of the transmission or distribution facilities (including all apparatus and necessary protective devices) on its side of the Point of Interconnection, so as to reasonably minimize the likelihood of voltage and frequency abnormalities, originating in the system of one Party, from affecting or impairing the system of the other Party, or other systems to which the system of such Party is interconnected. The Parties agree that all Points of Interconnection will be established in conformance with the ERCOT Requirements. The Parties agree to cause their systems to be constructed in accordance with specifications at least equal to those provided by the National Electrical Safety Code, approved by the American National Standards Institute, in effect at the time of construction. Except as otherwise provided in the Facility Schedule(s), each Party will be responsible for the equipment and facilities it owns on its side of the Point of Interconnection.

4.4 From time to time, a Point of Interconnection may be added, changed, modified, or deleted from this Agreement as mutually agreed by the Parties (not to be unreasonably withheld) and/or as ordered by a regulatory authority having jurisdiction thereof. Any such change, addition, or deletion shall be recorded in an Amendment to Exhibit A and a revised or appended Facility Schedule in such a way that the numbering of any other Facility Schedules is not changed. Subject to regulatory approval, if required, either Party may terminate a Point of Interconnection on twelve (12) months advance written notice. Upon termination of a Point of Interconnection, each Party shall discontinue the use of the facilities of the other associated with the use of that Point of Interconnection and shall disconnect from that Point of Interconnection.

The Parties agree to use reasonable efforts to coordinate the termination of a Point of Interconnection to minimize any disruption in service by either Party.

4.5 Subject to regulatory approval, if required, unless mutually agreed, neither party shall have the right to disconnect from the other Party at any Point of Interconnection specified on Exhibit A and a Facility Schedule, originally attached to this Agreement or added subsequent to the execution of this Agreement, except as set forth in Section 4.4 above, or for reason of a material violation of the terms of this Agreement, for which opportunity to correct such violation was given under Paragraph 15.1 of this Agreement and such violation was not corrected in accordance with said Paragraph 15.1.

4.6 For facilities not specified in the Facility Schedule(s), or if either Party makes equipment changes or additions to the equipment at a Point of Interconnection, which may 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 Good Utility Practice, ERCOT Requirements, the National Electrical Safety Code, other applicable codes, and standards in effect at the time of construction, and coordinated between the Parties.

4.7 Each Party agrees to provide current conformance to construction drawings to the other Party of the facilities owned by that Party at each Point of Interconnection.

4.8 The Parties agree to coordinate and cooperate on assessments of the reliability impacts to the interconnected transmission system for new facilities requesting connection to their distribution or transmission facilities, in accordance with the NERC Reliability Standards.

#### **ARTICLE V - OTHER SERVICES**

5.1 This Agreement is applicable only to the interconnection of the facilities of the Parties at the Points 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 to receive any other service that either Party may desire from the other Party or any third party.

5.2 All transmission, transformation, distribution, metering, operations and maintenance, engineering, billing or other miscellaneous services will be provided and charged under agreements separate from this Agreement.

#### **ARTICLE VI - SYSTEM OPERATION AND MAINTENANCE**

6.1 Unless otherwise provided by the Facility Schedule(s), each Party shall, at each Point of Interconnection, at its own risk and expense, operate and maintain the facilities (including all apparatus and necessary protective devices) it owns or hereafter may own, so as to reasonably minimize the likelihood of voltage and frequency abnormalities, originating in the system of one Party, from affecting or impairing the system of the other Party, or other systems to which the Party is interconnected. The Parties agree that all Points of Interconnection will be

operated and maintained in conformance with the ERCOT Requirements, PUCT Rules, Good Utility Practice and all applicable laws and regulations.

6.2 Unless otherwise provided by the Facility Schedule(s), each Party will be responsible for the operation, maintenance and inspection of all facilities it owns now or hereafter may own associated with each Point of Interconnection.

6.3 Unless otherwise provided by the Facility Schedule(s), each Party shall operate the facilities within its transmission network. The operation of the electrical network shall be performed with Good Utility Practice and within the ERCOT Requirements. Operational responsibility for facilities owned by one Party, but installed in another Party's substation or transmission line will be identified in the Facility Schedule for that particular Point of Interconnection.

6.4 During the term of this Agreement, the Parties will, consistent with maintaining good operating practices, coordinate their operations to maintain continuity of services to their respective customers to the extent practicable. Planned facility maintenance by either Party that will cause a deviation from the normal power and energy flow at a Point of Interconnection will be coordinated and scheduled with ERCOT. Except as otherwise permitted by the terms of this Agreement, no changes will be made in the normal operation of a Point of Interconnection without the mutual agreement of the Parties. The Parties will, to the extent necessary to support continuity of operations, coordinate the operation of protective devices on the facilities they operate in the proximity of the Points of Interconnection that might reasonably be expected to affect the operation of facilities on the other Party's system.

6.5 During periods of emergency conditions declared by ERCOT, or as necessary to restore customer service, either Party may operate equipment that is normally operated by the other Party, provided that authorization to do so must first be received from the Party that normally operates the equipment, such authorization not to be unreasonably withheld or delayed. It shall be considered reasonable for the Party that normally operates such equipment to deny such a request by the other Party if the withholding Party will provide such operation within the time frame called for in the circumstances. Such operations by the other Party will be at no cost to the owner or normal operator of the equipment.

6.6 Each Party will determine the operating limits of the facilities that it owns and make such limits known to the Party operating those facilities. The operating Party of those facilities will not exceed those limits without prior approval of the Party owning the facilities.

## **VII - RIGHTS OF ACCESS, EQUIPMENT INSTALLATION, AND REMOVAL**

7.1 Each Party shall permit duly authorized representatives and employees of the other Party to enter upon its premises for the purpose of inspecting, testing, repairing, renewing, or exchanging any or all of the equipment owned by such other Party that is located on such premises or for the purpose of performing any work necessary in the performance of this Agreement.



7.2 Each Party grants to the other Party permission to install, maintain, and/or operate, or cause to be installed, maintained, and/or operated, on its premises, the necessary equipment, apparatus, and devices required for the performance of this Agreement. Any such installation, maintenance, and operation to be performed, except in the case of emergencies, shall be performed only after a schedule of such activity has been submitted and agreed upon by the Parties.

7.3 Any and all equipment, apparatus, and devices placed or installed, or caused to be placed or installed by one Party on, or in, the premises of the other Party, shall be and remain the property of the Party owning and installing such equipment, apparatus, devices, or facilities, regardless of the mode and manner of annexation or attachment to real property. Upon the termination of any Point of Interconnection under this Agreement, the Party owning and installing such equipment, apparatus, devices, or facilities on the property of the other Party, shall 1) have the right to sell such equipment, apparatus, devices, or facilities to the other Party if the other Party wishes to purchase such equipment, apparatus, devices, or facilities or 2) to enter the premises of the other Party and, within a reasonable time, remove such equipment, apparatus, devices, or facilities, at no cost to the owner of the premises. If, upon the termination of any Point of Interconnection under this Agreement, equipment of a Party that is installed on the premises of the other Party is either not sold to the other Party or removed by the owning Party within one hundred eighty (180) days, it shall be considered abandoned by the owning Party and may be disposed of by the other Party in the manner it shall determine appropriate; provided, however, that any net cost incurred by the disposing Party shall be reimbursed by the abandoning Party.

7.4 Each Party shall clearly mark their respective equipment, apparatus, devices, or facilities with appropriate ownership identification.

7.5 Either Party may request the other Party to upgrade or modify its terminal facilities at a Point of Interconnection in accordance with the other Party's standard design of equipment, provided that the upgrade or modification is consistent with Good Utility Practice and, if applicable, is approved by ERCOT. The requesting Party shall provide the responsive Party a minimum of twenty-four (24) months notice of the upgrade or modification of its terminal facilities at a Point of Interconnection, absent mutual acceptance of a shorter notice period. The Parties agree to use reasonable efforts to coordinate the upgrade or modification of terminal facilities at a Point of Interconnection to minimize any disruption in service by either Party.

#### **ARTICLE VIII – METERING AND RECORDS**

8.1 All metering equipment required herein shall be selected, installed, tested, operated, and maintained by the Party owning such metering equipment in accordance with Good Utility Practice and the ERCOT Requirements.

8.2 The Party that does not own the metering equipment shall be permitted to witness any testing, inspection, maintenance, or alteration of such metering equipment owned by the other Party. The owner of such equipment shall give reasonable advance notice of all tests and

inspections so that representatives of the other Party may be present. After proper notification to the other Party, the owner may proceed with the scheduled tests or inspections regardless of whether a witness is present.

8.3 If any test or inspection of metering equipment shows that it does not meet the accuracy requirements established by the ERCOT Requirements, the meter or other equipment found to be inaccurate or defective shall be promptly repaired, adjusted, or replaced by the owner. Should metering equipment fail to register, the power and energy delivered and received shall be determined in accordance with the ERCOT Requirements.

8.4 As long as metering, telemetering or communications facilities are required by the ERCOT Requirements and are operated and maintained in accordance with ERCOT guidelines and Protocols, the Party owning these facilities shall allow the other Party to read the meter by means of the existing telemetering and communications facilities. The other Party shall be responsible for any incremental costs incurred by the owning Party to provide any meter reading capability over and above that which is required by the owning Party.

#### **ARTICLE IX – COMMUNICATION AND TELEMETERING FACILITIES**

9.1 All communication and telemetering facilities required herein shall be selected, installed, tested, operated, and maintained by the Party owning such equipment in accordance with Good Utility Practice and the ERCOT Requirements.

#### **ARTICLE X - INDEMNIFICATION**

EACH PARTY SHALL ASSUME ALL LIABILITY FOR, AND SHALL INDEMNIFY, DEFEND, AND SAVE HARMLESS THE OTHER PARTY, ITS AFFILIATES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, AND EMPLOYEES (COLLECTIVELY, "INDEMNIFIED PARTIES") FROM ANY AND ALL DAMAGES, LOSSES, CLAIMS, INCLUDING CLAIMS AND ACTIONS RELATING TO INJURY TO OR DEATH OF ANY PERSON (INCLUDING THE EMPLOYEES OF THE INDEMNIFIED PARTY) OR DAMAGE TO PROPERTY (INCLUDING PROPERTY OF THE INDEMNIFIED PARTY) DEMANDS, SUITS, RECOVERIES, COSTS AND EXPENSES, COURT COSTS, AND REASONABLE ATTORNEY FEES, TO THE EXTENT ARISING OUT OF OR RESULTING FROM NEGLIGENCE OR INTENTIONAL WRONGDOING IN THE DESIGN, CONSTRUCTION, OR OPERATION OF THEIR RESPECTIVE FACILITIES, DURING THE PERFORMANCE OF THIS AGREEMENT AND TO THE EXTENT PERMITTED BY LAW, EXCEPT TO THE EXTENT OF NEGLIGENCE OR INTENTIONAL WRONGDOING BY ANY INDEMNIFIED PARTY.

#### **ARTICLE XI –NOTICES**

11.1 Notices of an administrative nature, including but not limited to a notice of termination, notice of default, request for amendment, change to a Point of Interconnection, or request for a new Point of Interconnection, shall be forwarded to the designees listed below for each Party and shall be deemed properly given if delivered in writing to the following:

If to CTT:

CROSS TEXAS TRANSMISSION, LLC  
400 Chesterfield Center, Suite 105  
Chesterfield, MO 63017  
Attn: Project Manager

With copy to:

CROSS TEXAS TRANSMISSION, LLC  
400 Chesterfield Center, Suite 105  
Chesterfield, MO 63017  
Attn: Managing Counsel

If to CenterPoint Energy:

CenterPoint Energy Houston Electric, LLC  
P.O. Box 1700  
Houston, TX 77251  
Attn: Manager, Transmission Accounts and Support

11.2 The above listed names, titles, and addresses of either Party may be changed upon written notification to the other Party.

## **ARTICLE XII - SUCCESSORS AND ASSIGNS**

12.1 Subject to the provisions of Section 12.2 below, this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the respective Parties.

12.2 Neither Party shall assign its interest in this Agreement in whole or in part without the prior written consent of the other Party. Such consent shall not be unreasonably withheld, provided that neither Party will be required to consent to any assignment which would, in its sole judgment and among other reasons, subject it to additional federal or state regulation, result in the imposition of additional costs of administration which the Party requesting consent to assignment does not agree to reimburse, or in any way diminish the reliability of its system, enlarge its obligations or otherwise create or maintain an unacceptable condition. The respective obligations of the Parties under this Agreement may not be changed, modified, amended, or enlarged, in whole or in part, by reason of the sale, merger, or other business combination of either Party with any other person or entity. Notwithstanding the foregoing, a Party may assign, without the consent of the other Party, its interest in this Agreement, in whole or in part, to a successor to all or a substantial portion of the Party's transmission and distribution business; to

any transmission service provider (including an affiliate of the assigning Party) with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; or for collateral security purposes in connection with any financing or financial arrangements.

12.3 The several provisions of this Agreement are not intended to and shall not create rights of any character whatsoever in favor of any persons, corporations, or associations other than the Parties to this Agreement, and the obligations herein assumed are solely for the use and benefit of the Parties to this Agreement.

### **ARTICLE XIII – GOVERNING LAW AND REGULATION**

13.1 This Agreement was executed in the State of Texas and must in all respects be governed by, interpreted, construed, and enforced in accordance with the laws thereof except as to matters exclusively controlled by the Constitution and statutes of the United States of America. This Agreement is subject to all valid applicable federal, state, and local laws, ordinances, rules and regulations of duly constituted regulatory authorities having jurisdiction.

13.2 This Agreement and all obligations hereunder, are expressly conditioned upon obtaining approval or authorization or acceptance for filing by any regulatory authority whose approval, authorization or acceptance for filing is required by law. Both Parties hereby agree to support the approval of this Agreement before such regulatory authority and to provide such documents, information and opinions as may be reasonably required or requested by either Party in the course of approval proceedings.

13.3 In the event that a regulatory authority having jurisdiction over the Parties orders a change in the terms of this Agreement, the Parties agree to negotiate in good faith a replacement term that will most nearly accomplish the purpose and intent of the original term consistent with the regulatory order. If the Parties cannot reach an agreement over the new term, and if the old term is an essential provision of this Agreement, either Party may elect to terminate this Agreement by providing sixty (60) days prior written notice of such election to the other Party. An election to terminate under this provision shall not affect either Party's duty to perform prior to the effective date of termination.

13.4 In the event any part of this Agreement is declared invalid by a court of competent jurisdiction, the remainder of this Agreement shall remain in full force and effect and shall constitute a binding agreement between the Parties provided, however, that if either Party determines, in its sole discretion, that there is a material change in this Agreement by reason of any provision or application being finally determined to be invalid, illegal, or unenforceable, that Party may terminate this Agreement upon sixty (60) days prior written notice to the other Party. An election to terminate under this provision shall not affect either Party's duty to perform prior to the effective date of termination.

### **ARTICLE XIV – DEFAULT AND FORCE MAJEURE**

Neither Party shall be considered in default with respect to any obligation hereunder, other than the payment of money, if prevented from fulfilling such obligations by reason of any

cause beyond its reasonable control, including, but not limited to, outages or interruptions due to weather, accidents, equipment failures or threat of failure, strikes, civil unrest, injunctions or order of governmental or regulatory authority having jurisdiction ("Force Majeure"). If performance by either Party has been prevented by such event, the affected Party shall promptly and diligently attempt to remove the cause of its failure to perform, except that neither Party shall be obligated to agree to any quick settlement of any strike or labor disturbance, that, in the affected Party's opinion, may be inadvisable or detrimental, or to appeal from any administrative or judicial ruling.

#### **ARTICLE XV - TERMINATION ON DEFAULT**

15.1 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 15.2, the defaulting Party shall have thirty (30) days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within thirty (30) days, the defaulting Party shall commence such cure within thirty (30) days after notice and continuously and diligently complete such cure within ninety (90) days from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

15.2 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.

15.3 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of this Agreement will not be considered to waive the obligations, rights, or duties imposed upon the Parties by this Agreement.

#### **ARTICLE XVI - INSURANCE**

16.1 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 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 affiliates 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.

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.

16.2 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 16.1.A through 16.1.I. In the event that a Party is permitted to self-insure pursuant to this Section 16.2, it shall not be required to comply with the insurance requirements applicable to it under Sections 16.1.A through 16.1.I.

16.3 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 XVII - MISCELLANEOUS PROVISIONS**

17.1 Any undertaking by a Party to the other Party under this Agreement shall not constitute the dedication of the electrical system or any portion thereof of that Party to the public or to the other Party, and it is understood and agreed that any such undertaking shall cease upon the termination of this Agreement.

17.2 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.

17.3 This Agreement shall not affect the obligations or rights of either Party with respect to other agreements. Both Parties to this Agreement represent that there is no agreement or other obligation binding upon it, which, as such Party is presently aware, would limit the effectiveness or frustrate the purpose of this Agreement.

17.4 This Agreement may be amended only upon mutual agreement of the Parties, which amendment will not be effective until reduced in writing and executed by the Parties.

17.5 The descriptive headings of the various sections of this Agreement have been inserted for convenience of reference only and are to be afforded no significance in the interpretation or construction of this Agreement.

17.6 This Agreement will be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

[signatures are on next page]



IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by the undersigned authorized representatives.

**CENTERPOINT ENERGY HOUSTON  
ELECTRIC, LLC**

**CROSS TEXAS TRANSMISSION, LLC**

By: John R. Kellum Jr.

By: B. Cameron Fredkin

Name: John R. Kellum Jr.

Name: B. Cameron Fredkin

Title: Vice President - High Voltage Power Delivery

Title: Vice President

Date: 3/8/2017

Date: March 2, 2017

# EXHIBIT A

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE IN THIS AGREEMENT OR SUBSEQUENT AMENDMENT TO THIS AGREEMENT
1	Limestone Substation Deadend Structures for Gibbons Creek - Limestone Ckt 50 and Ckt 18 (2)	345	Effective with this Agreement

## FACILITY SCHEDULE NO. 1

- 1) **Name:** Gibbons Creek – Limestone 345 kV Interconnection
- 2) **Point of Interconnection Location:** CenterPoint Energy's Limestone Substation, Limestone County, Texas.
  - a) The Point of Interconnection location is defined as the physical junctions between CTT's Gibbons Creek-Limestone double-circuit 345 kV transmission line ("Transmission Line") circuit conductor connectors and CenterPoint Energy's 345 kV jumpers located on CenterPoint Energy's Limestone Substation deadend structures.
  - b) CTT's interconnecting transmission circuits are designated as "345KV CKT. 18 TO TMPA-GIBBONS CREEK" and "345KV CKT. 50 TO TMPA-GIBBONS CREEK" on the attached "LIMESTONE SUBSTATION 345KV BASIC ONE LINE DIAGRAM".
- 3) **Nominal Interconnection Voltage:** 345 kV
- 4) **Metered Voltage:** None
- 5) **Loss Adjustment Due to Meter Location:** None
- 6) **Metering, Telemetry and Communications:**
  - a) Except as otherwise specified herein, CenterPoint Energy will design, procure, install, own, operate, test, calibrate and maintain the telemetry and communications equipment for the Point of Interconnection, including panels, remote terminal unit ("RTU"), current transformers, potential transformers, hardware, conduit, cable and any other associated equipment. Any changes to the telemetry or communications equipment, which will affect the data being received by the Parties must be mutually agreed to by the Parties. Each Party will promptly advise the other Party if it detects or otherwise learns of any metering, telemetry, communications equipment or situation that requires attention and/or correction by the other Party.
  - b) CTT shall allow CenterPoint Energy to utilize two OPGW fiber pairs on the Gibbons Creek-Limestone double-circuit 345 kV transmission line for sending/receiving SCADA telemetry data, as well as two OPGW fiber pairs for the protection scheme, with no financial obligations.
  - c) CenterPoint Energy shall install and make available to CTT one communication port with DNP3 slave protocol in CenterPoint Energy's Limestone Substation SCADA RTU with no financial obligations. CenterPoint Energy shall make available at its SCADA RTU applicable data monitored by such RTU, including, but not limited to, power flows, breaker and switch statuses, and bus voltages.

- d) A separate communication port from the CenterPoint Energy's Limestone Substation SCADA RTU with DNP3 master protocol shall be used to receive data from TMPA's Gibbons Creek Substation SCADA RTU, including, but not limited to, power flows, breaker and switch statuses, and bus voltages.
- 7) **Normally Closed (check one):** X yes; \_\_\_ no
- 8) **One-Line Diagram Attached (check one):** X yes; \_\_\_ no
- 9) **Facilities Installed and Owned by CenterPoint Energy:** CenterPoint Energy, at CenterPoint Energy's expense, will design, purchase, construct, install, set, own, operate, maintain, and control all necessary and desirable substation improvements to the CenterPoint Energy Limestone Substation required to establish the Point of Interconnection including, but not limited to, the following:
- a) 345 kV circuit breaker additions;
  - b) 345 kV current transformers and potential transformers for interconnect metering and protective relaying;
  - c) multi-ported SCADA RTU with CenterPoint Energy and TMPA protocols;
  - d) telemetry equipment including modem(s) and communication channel(s) to CenterPoint Energy's control center;
  - e) OPGW Splice box on CenterPoint Energy's dead-end tower, including fiber to the control house.
- 10) **Facilities Installed and Owned by CTT:**
- a) CTT, at its own expense, will design, purchase, construct, install, set, own, operate, maintain, and control the Transmission Line. CTT will provide line termination fittings to and including four hole NEMA pads to connect CenterPoint Energy's jumpers, at the CenterPoint Energy horizontal dead-end structure, to the Transmission Line at CenterPoint Energy's Limestone Substation.
  - b) CTT, at its own expense, will design, purchase, construct, install, set, own, operate, maintain, and control the West Circuit Optical Ground Wire (OPGW) – 1550nm single mode fiber for high-speed communication. CTT will dead-end the OPGW at CenterPoint Energy's Limestone Substation dead-end tower and provide a coil near the OPGW Splice box provided by CenterPoint Energy.
- 11) **Maintenance Responsibilities of Each Party:** Each party is responsible for the maintenance of the facilities it owns.

12) **Maximum Contract Demand:** None

13) **Relay Design Basis:**

a) Limestone Line Terminal – West Circuit (CenterPoint Energy designated Ckt. 18) – with OPGW and Power Line Carrier Communications

i. Protection Scheme #1

1. The protection scheme #1 will utilize a directional comparison blocking (DCB) configuration with an On/Off Power line Carrier (PLC) set. The DCB scheme shall utilize phase distance and residual ground directional overcurrent elements only. The residual ground directional overcurrent elements in the DCB scheme shall utilize only negative-sequence voltage-polarized (32QG) directional elements. One Frequency Shift Keyed (FSK) carrier set will be utilized for breaker failure transfer trip send/receive to the remote terminal. The PLC set-up will utilize single phase-to-ground coupling to the transmission line. The carrier will be coupled to TMPA phase 'B' and CenterPoint Energy phase 'C'. The On/Off carrier set will incorporate a checkback scheme to periodically test the health of the carrier channel.

ii. Protection Scheme #2

1. The protection scheme #2 will be configured as a line current differential. The protection scheme #2 will integrate a secondary breaker failure transfer trip send/receive via the fiber communication channel to the remote terminal. The protection scheme #2 will default to a step-distance protection scheme on loss of channel. One Frequency Shift Keyed (FSK) carrier set will also be utilized for the secondary breaker failure transfer trip send/receive to the remote terminal and will be coupled to the same tuning unit as the primary protection.

iii. Power Line Carrier Frequency Assignments

1. Gibbons Creek Substation Carrier Frequencies

a. Limestone No. 1 Line Terminal – West Circuit  
(CenterPoint Energy designated Ckt. 18)  
ON/OFF (DCB Scheme): 148KHZ  
TTT: 192 & 192.5KHZ (Primary FSK / Secondary FSK)  
TTR: 189 & 189.5KHZ (Primary FSK / Secondary FSK)

2. Limestone Substation Carrier Frequencies

a. Gibbons Creek Line Terminal – West Circuit (CenterPoint Energy designated Ckt. 18)  
ON/OFF (DCB Scheme): 148KHZ  
TTT: 189 & 189.5KHZ (Primary FSK / Secondary FSK)

TTR: 192 & 192.5KHZ (Primary FSK / Secondary FSK)

b) Limestone Line Terminal – East Circuit (CenterPoint Energy designated Ckt. 50) –  
with Power Line Carrier Communications Only

i. Protection Scheme #1

1. The protection scheme #1 will utilize a directional comparison blocking (DCB) configuration with an On/Off Power Line Carrier (PLC) set. The DCB scheme shall utilize phase distance and residual ground directional overcurrent elements only. The residual ground directional overcurrent elements in the DCB scheme shall utilize only negative-sequence voltage-polarized (32QG) directional elements. One Frequency Shift Keyed (FSK) carrier set will be utilized for breaker failure transfer trip send/receive to the remote terminal. The PLC set-up will utilize single phase-to-ground coupling to the transmission line. The carrier will be coupled to TMLA phase 'B' and CenterPoint Energy phase 'C'. The On/Off carrier set will incorporate a checkback scheme to periodically test the health of the carrier channel.

ii. Protection Scheme #2

1. The protection scheme #2 will be configured as a step-distance protection scheme. One Frequency Shift Keyed (FSK) carrier set will also be utilized for the secondary breaker failure transfer trip send/receive to the remote terminal and will be coupled to the same tuning unit as the primary protection.

iii. Power Line Carrier Frequency Assignments

1. Gibbons Creek Substation Carrier Frequencies

a. Limestone No. 2 Line Terminal – East Circuit (CenterPoint Energy designated Ckt. 50)

ON/OFF (DCB Scheme): 115KHZ

TTT: 124 & 124.5KHZ (Primary FSK / Secondary FSK)

TTR: 120 & 120.5KHZ (Primary FSK / Secondary FSK)

2. Limestone Substation Carrier Frequencies

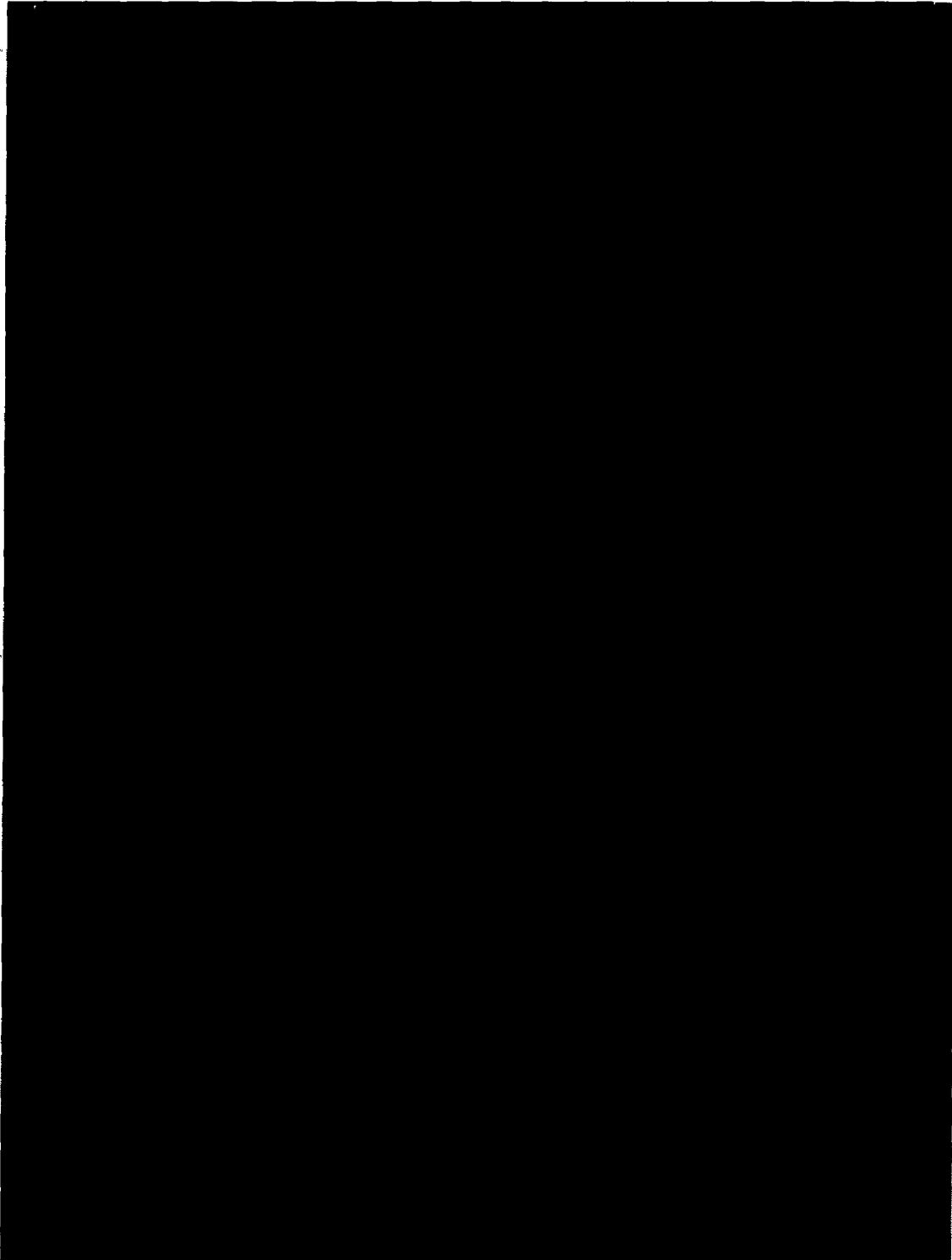
a. Gibbons Creek Line Terminal – East Circuit (CenterPoint Energy designated Ckt. 50)

ON/OFF (DCB Scheme): 115KHZ

TTT: 120 & 120.5KHZ (Primary FSK / Secondary FSK)

TTR: 124 & 124.5KHZ (Primary FSK / Secondary FSK)

- 14) **Cost Responsibility:** The Parties hereby agree that all work performed by CenterPoint Energy and all equipment purchased by CenterPoint Energy in establishing the Point of Interconnection shall be at CenterPoint Energy's expense and all work performed by CTT and all equipment purchased by CTT in establishing the Point of Interconnection shall be at CTT's expense. The OPGW fiber optic cable between CenterPoint Energy's Limestone Substation and TMPA's Gibbons Creek Substation shall be utilized as the communication medium for the 345 kV line current differential protection scheme and for data exchange between the substation RTUs at no additional cost to CenterPoint Energy. It is the specific intent of the Parties that neither Party shall be responsible for any expense or work performed by the other Party.



**LIMESTONE SUBSTATION 345 KV BASIC ONE-LINE DIAGRAM – Pg. 1**





**LIMESTONE SUBSTATION 345 KV BASIC ONE-LINE DIAGRAM – Pg 2**