

Control Number: 35077



Item Number: 575

Addendum StartPage: 0

PUC Project No. 35077

11. CO 11401

f the beau off

1

Amendment to

## **INTERCONNECTION AGREEMENT**

Between

City of Austin acting by and through its Electric Utility Department doing business as Austin Energy (Austin Energy)

and

LCRA Transmission Services Corporation

July 15, 2015

#### AMENDMENT TO INTERCONNECTION AGREEMENT

i

1

This Amendment ("Amendment") to the Interconnection Agreement (the "Agreement"), dated December 17, 1999, between the City of Austin acting by and through its Electric Utility Department doing business as Austin Energy ("Austin Energy") and LCRA Transmission Services Corporation ("LCRA TSC"); subsequently amended on numerous occasions and amended again most recently on November 6, 2013 is made and entered into this <u>15+h</u> day of <u>Tuly</u>, 2015, between Austin Energy and LCRA TSC, collectively referred to hereinafter as the Parties. In consideration of the mutual promises and undertakings herein set forth, the Parties agree to amend the Agreement as follows:

1. Exhibit A attached to the Amendment of November 6, 2013 is deleted in its entirety and Exhibit A attached to this Amendment is hereby added to the Agreement in lieu thereof.

2. Facility Schedule No. 8 "Gilleland Creek" (new) attached to this Amendment (including the one-line diagram and drawings attached thereto) is hereby added to the Agreement.

3. Facility Schedule No. 8 will become effective upon execution of this Amendment by the Parties. Unless otherwise agreed by the Parties, the Gilleland Creek Point of Interconnection will not be placed into service under Facility Schedule No. 8 until the Parties have completed the installation and testing of all equipment to be furnished for this Point of Interconnection in accordance with the provisions contained in Facility Schedule No. 8.

4. Except as otherwise expressly provided for herein, the Agreement will continue in full force and effect in accordance with its terms.

This Amendment constitutes the entire agreement and understanding between the Parties with regard to the interconnection of the facilities of the Parties at the Gilleland Creek Interconnection defined in this Amendment. 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 not set forth or provided for herein. This Amendment replaces all prior agreements and undertakings, oral or written, between the Parties with regard to the subject matter hereof and all such agreements and undertakings are agreed by the Parties to no longer be of any force or effect. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Amendment.

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

- Remainder of page has intentionally been left blank. -

City of Austin d/b/a Austin Energy

3

f

By:

Typed Name:Dan Smith, P.E.Title:Vice-PresidentElectric Service Delivery

15 JUL 2015 Date:

¥

LCRA Transmission Services Corporation

By: an

Typed Name: Ray Pfefferkorn, P.E. Title: LCRA TSC Transmission Engineering Manager

8/15 Date: \_\_\_



### EXHIBIT A

# LIST OF FACILITY SCHEDULES AND POINTS OF INTERCONNECTION

Facility Schedule No.	Name of Point of Interconnection
1	Trading Post
· 2	Garfield – Bastrop Energy Partners
3	Jollyville
4	Wells Branch
5	Lytton Springs
6	Elroy
7	Lakeway
8	Gilleland Creek

1 T

ł

3

4

#### FACILITY SCHEDULE NO. 8

- Name: Gilleland Creek Substation 1.
- Facility Location: Gilleland Creek Substation is located at 16275 Cameron Road, 2. Pflugerville, Travis County Texas, 78660.
- Points of Interconnection: There are two (2) Points of Interconnection located in 138 kV 3. bay 3 at Gilleland Creek Substation generally described as:
  - where Austin Energy's jumper from switch GL-300 attaches to LCRA TSC's four hole pad on LCRA TSC's 138 kV Operating Bus 1.
  - where Austin Energy's jumper from switch GL-301 attaches to LCRA TSC's four . hole pad on LCRA TSC's 138 kV Operating Bus 2 .
- Transformation Services Provided by LCRA TSC: No 4.
- Metering Services Provided by LCRA TSC: No 5.
- Delivery Voltage: 138 kV 6.
- Metered Voltage and Location: Austin Energy provided ERCOT-Polled Settlement 7. metering will be accomplished using 138 kV potential transformers located on the 138 kV Austin Energy transmission line and metering accuracy current instrument transformers located internal to circuit breakers GL-1030-1 and GL-1030-2. The metering equipment will be used to measure the interchange of power and energy between the Parties. The metering equipment provided herein will be in accordance with the applicable requirements of the ERCOT Operating Guides.
- One line diagram attached: Yes 8.

#### **Description of Facilities Owned by Each Party:** 9.

#### LCRA TSC owns:

a) all facilities, property, ground grid, gravel and other appurtenances in Gilleland Creek Substation (345kV switchyard section) (not included in this facility schedule) b) all facilities in Gilleland Creek Substation (138 kV switchyard section) including, but not limited to, the following facilities

- The following 138 kV transmission lines comprised of structures, conductors, insulators, and connecting hardware:
  - Gilleland Creek to McNeil 138 kV transmission line, T147 0
  - Gilleland Creek to Elgin Switch 138 kV transmission line, T421 Ο

- All 138 kV A-frame dead end structures including foundations, insulators, surge arresters and jumpers for LCRA TSC and Oncor 138 kV transmission line bays
- Two (2) A-Frame dead-end structures, trusses, mounting plates and foundations in bay 3 for Austin Energy's Gilleland Creek to Techridge Substation 138 kV transmission line (Ckt-1030)
- Two (2) 138 kV auto transformer A-frame dead end structures including foundations, insulators, conductor and jumpers for the conductor running from 138 kV bay 5 (approximately) to auto transformer AT1
- Four (4) 138 kV surge arresters SA4, SA6, SA8 and SA9
- Five (5) 138 kV capacitor coupled voltage transformers CCVT4, CCVT6, CCVT8, CCVT9 and CCVT10
- Three (3) wave traps with tuners WT6, WT8 and WT9
- Two (2) 138 kV potential transformers PT1 and PT2
- One (1) single phase power voltage transformer PVT1
- Seven (7) 138 kV circuit breakers 10140, 10150, 10160, 10170, 10180, 22190 and 22200 including foundations, jumpers and protective relay packages
- Fourteen (14) 138 kV disconnect switches 10139, 10141, 10149, 10151, 10159, 10161, 10169, 10171, 10179, 10181, 22189, 22191, 22199 and 22201
- Two (2) 138 kV operating buses including bus supports, A-taps, insulators, foundations and jumpers (except jumpers in bay 3 which belong to Austin Energy)
- Two (2) 138 kV bus differential and breaker failure relaying schemes
- Two (2) Control houses (24' x 39' and 36' x 66') with associated control, communications, and SCADA equipment, 125 Vdc batteries, battery chargers and other appurtenances
- Substation property (by easement from Texas Utilities Electric Co) ground grid, gravel, cable trough, fencing and other appurtenances

Facilities owned by Austin Energy:

- The following 138 kV transmission lines comprised of structures, conductors, insulators, and connecting hardware:
  - o Gilleland Creek to Technidge Substation 138 kV transmission line, Ckt-1030
- 138 kV conductor between 138 kV transmission line dead end structure and the 138 kV operating bus dead end structure (138 kV bay 3)
- One (1) 138 kV circuit breaker GL-1030-1 and two (2) 138 kV disconnect switches GL-300 and GL-200 including foundations, jumpers and protective relay packages
- One (1) 138 kV circuit breaker GL-1030-2 and two (2) 138 kV disconnect switches GL-301 and GL-201 including foundations, jumpers and protective relay packages
- Two (2) sets of jumpers from Austin Energy's switches GL-300 and GL-301 to the Points of Interconnection at LCRA TSC's four hole pads on 138 kV Operating Bus 1 and 138 kV Operating Bus 2
- One (1) set of three phase 138 kV surge arresters

- One (1) set of three phase 138 kV line potential transformers
- One (1) single phase power voltage transformer SSVT (for AE station service) including foundation and jumper
- Control house (21' x 40') with associated control, communications, and SCADA equipment, 125 Vdc batteries, battery charger and other appurtenances

Facilities owned by Oncor:

- A 7.618 acres tract of land occupied by the 138 kV switchyard section of LCRA TSC Gilleland Creek Substation (see Other Terms and Conditions concerning the LCRA TSC easement for this tract of land)
- The Oncor Transmission Lines to Pflugerville and Round Rock SE with associated insulator strings and attachment hardware to terminate the Oncor Transmission Lines on the LCRA TSC deadend structures located in the 138 kV switchyard section of LCRA TSC's Gilleland Creek Substation
- 10. Operational Responsibilities of Each Party: Each Party will be fully responsible for the operation of the facilities it owns.
- 11. Maintenance Responsibilities of Each Party: Each Party will be fully responsible for the maintenance of the facilities it owns.

#### 12. Other Terms and Conditions:

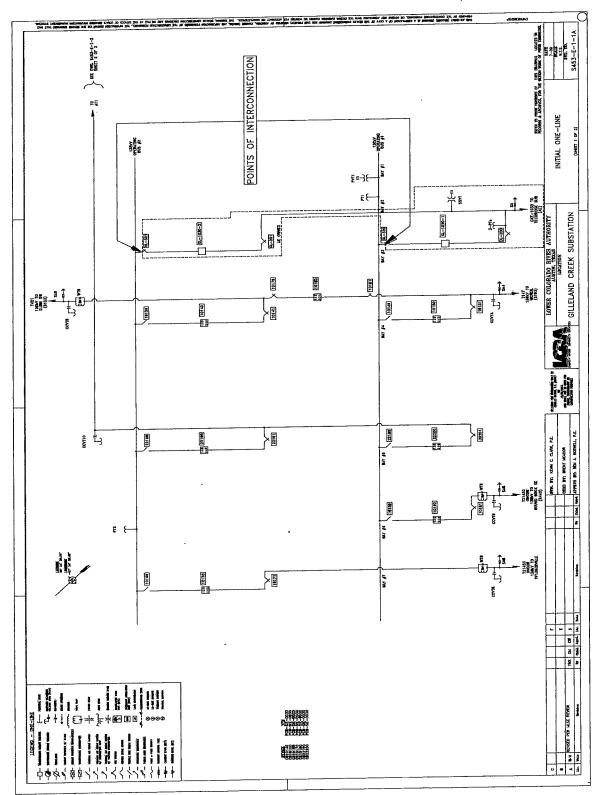
- LCRA TSC has an Electric Substation Easement and Right of Way from Texas Utilities Electric Co. (predecessor to Oncor) for the 7.618 acres tract of land occupied by the Gilleland Creek Substation (138 kV switchyard section).
- ERCOT-Polled Settlement metering equipment for Ckt 1030 will be provided by Austin Energy.
- Austin Energy and LCRA TSC are to share access to the substation by LCRA TSC and Austin Energy hardened locks in the gate.
- Austin Energy will supply and allow LCRA TSC use of circuit breakers GL-1030-1 and GL-1030-2 relaying bushing current transformers for LCRA TSC's 138 kV bus differential relaying schemes.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential and breaker failure panels to Austin Energy's circuit breakers GL-1030-1 and GL-1030-2 relaying panels.
- Austin Energy will supply and provide breaker failure initiate contacts from its circuit

breakers GL-1030-1 and GL-1030-2 relaying panels to LCRA TSC's 138 kV bus differential and breaker failure panels.

- LCRA TSC will provide B-phase bus potentials for Austin Energy breaker synchronization.
- Austin Energy will provide LCRA TSC with two pair of communication fibers between the Austin Energy Gilleland Creek control house and the Austin Energy Howard Lane control house. LCRA TSC will extend the fibers between a) the Austin Energy Gilleland Creek control house and the LCRA TSC Gilleland Creek control house b) the Austin Energy Howard Lane control house and the LCRA TSC Howard Lane control house. The parties will coordinate fiber connections at Howard Lane sub.
- LCRA TSC and Austin Energy shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- LCRA TSC will construct a new A-frame structure in bay 3 and will add the necessary trusses and mounting plates to accommodate Austin Energy's surge arresters, PTs and vertical switches.
- LCRA TSC will remove its existing switches and switch stands in bay 3.
- Austin Energy will install conduits for 138 kV bus differential and breaker failure cabling requirements from the Austin Energy control house to the existing LCRA TSC cable trough.
- Austin Energy will supply and install an AE interface junction box in the AE control house to allow termination and color code transition of the following cables: bus differential relaying and bus breaker failure tripping and AE breaker synchronization using 138 kV Bus #1 and Bus #2 B-phase bus potentials.
- Austin Energy will supply and have installed (AE will terminate the cables in the AE interface junction box while LCRA TSC will terminate the cables at the LCRA TSC panels) the following cables to interface to existing LCRA TSC equipment:
  - One (1) LCRA TSC color coded 12/c #10 cable (for AE Circuit Breaker GL-1030-1) from the AE interface junction box to the LCRA TSC 138 kV Bus #1 Differential/Breaker Failure Panel 2 in the LCRA TSC 138kV control house
  - One (1) LCRA TSC color coded 12/c #10 cable (for AE Circuit Breaker GL-1030-2) from the AE interface junction box to the LCRA TSC 138 kV Bus

#2 Differential/Breaker Failure Panel 22 in the LCRA TSC 138kV control house.

- Two (2) LCRA TSC color coded 4/c #10 cables (for 138 kV Bus #1 and Bus #2, B-phase potentials) from the AE interface junction box to LCRA TSC's Panel 21 in the LCRA TSC 138kV control house
- Upon commissioning, LCRA TSC shall own the control cables from the AE interface junction box to the LCRA TSC control house.
- Austin Energy will supply and have installed (AE will terminate the cables in the AE breakers while LCRA TSC will terminate the cables at the LCRA TSC CT Junction Boxes) the following LCRA TSC color coded cabling for bus differential CT circuits.
  - One (1) 4/c#10 cable from AE's Circuit Breaker GL-1030-1 directly to the LCRA TSC 138kV Bus #1 Differential CT Junction Box
  - One (1) 4/c#10 cable from AE's Circuit Breaker GL-1030-2 directly to the LCRA TSC 138kV Bus #2 Differential CT Junction Box
- Each Party shall be responsible for the ICCP data to ERCOT, ERCOT model configuration, equipment ratings, naming, and numbering convention for the equipment it owns or operates.
- LCRA TSC and Austin Energy will obtain necessary analog, status and alarm information by ICCP circuits to ERCOT.



#### **ONE LINE DRAWING**