

Control Number: 35077



Item Number: 605

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**Project No. 35077**

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PUBLIC UTILITY COMMISSION  
FILING CLERK

**Fifth Amendment to**

**INTERCONNECTION AGREEMENT**

**Between**

**Brazos Electric Power Cooperative**

**and**

**LCRA Transmission Services Corporation**

**Dated**

**November 9, 2015**

605 1

**FIFTH AMENDMENT TO  
INTERCONNECTION AGREEMENT**

This Fifth Amendment ("**Amendment**") is made and entered into this 9<sup>th</sup> day of November, 2015, between Brazos Electric Power Cooperative ("**Brazos Electric**") and the LCRA Transmission Services Corporation ("**LCRA TSC**"), collectively referred to hereinafter as "**the Parties**".

**WHEREAS**, the LCRA TSC and Brazos Electric entered into that certain Interconnection Agreement executed May 1, 2007, as amended by that certain Amendment No. 1 executed as of June 2, 2009, amended by that certain Amendment No. 2, executed as of September 15, 2009, amended by that certain Amendment No. 3, executed as of May 10, 2010, amended by that certain Amendment No. 4, executed as of September 27, 2012 (collectively, as amended, the "**Agreement**"); and

**WHEREAS**, LCRA TSC is upgrading the transmission line from Goldthwaite Substation to Lampasas Substation from 69 kV to 138 kV requiring changes at Lometa Substation, and

**WHEREAS**, LCRA TSC has added 12.5 kV mobile transformer disconnect switches and a 138 kV PVT at Goldthwaite Substation

**NOW, THEREFORE**, 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 Agreement is deleted in its entirety and the Exhibit "A" attached to this Fifth Amendment is hereby added to the Agreement in lieu thereof.
2. Facility Schedule No. 3 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 3 attached to this Fifth Amendment is hereby added to the Agreement in lieu thereof.
3. Facility Schedule No.3 (including the diagrams attached thereto) attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.
4. Facility Schedule No. 5 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 5 attached to this Fifth Amendment is hereby added to the Agreement in lieu thereof.
5. Facility Schedule No.5 (including the diagrams attached thereto) attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.
6. Except as otherwise expressly provided for herein, the Agreement will continue in full force and effect in accordance with its terms.

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.

BRAZOS ELECTRIC POWER  
COOPERATIVE

By: \_\_\_\_\_

Clifton Karnei

Name: Clifton Karnei

Title: Executive Vice President and  
General Manager DA 94

Date: \_\_\_\_\_

10/26/15

LCRA TRANSMISSION SERVICES  
CORPORATION

By: \_\_\_\_\_

Ray Pfefferkorn

Name: Ray Pfefferkorn, P.E.

Title: LCRA Transmission Engineering  
Manager

Date: \_\_\_\_\_

11/9/15



**Fifth Amendment**  
**EXHIBIT A**

[illegible]

### FACILITY SCHEDULE NO. 3

Amendment No. 5

1. **Name: Goldthwaite**
2. **Facility Location:** The Goldthwaite Substation is located at 131 US Highway 183 South, Goldthwaite, Mills County, Texas 76844.
3. **Points of Interconnection:** There are nine (9) Points of Interconnection at Goldthwaite Substation generally described as:
  - where the LCRA TSC 12.5 kV operating bus in Bay 1 connects to the Brazos Electric 12.5 kV operating bus in Bay 2.
  - where the LCRA TSC 12.5 kV transfer bus in Bay 1 connects to the Brazos Electric 12.5 kV transfer bus in Bay 2.
  - where the Brazos Electric 12.5 kV operating bus in Bay 3 connects to the LCRA TSC 12.5 kV operating bus in Bay 4.
  - where the Brazos Electric 12.5 kV transfer bus in Bay 3 connects to the LCRA TSC 12.5 kV transfer bus in Bay 4.
  - where the LCRA TSC jumper from the LCRA TSC 12.5 kV operating bus connects to the four hole pad on Brazos Electric's disconnect switch GO9.
  - where the LCRA TSC jumper from the LCRA TSC 12.5 kV transfer bus connects to the four hole pad on Brazos Electric's disconnect switch GO13.
  - where the incoming distribution line connects to the tubular bus between switches GO61 and GO63 at breaker GO60.
  - where the jumper from breaker GO60, passing through CT11, connects to the 4 hole pad on switch GO59.
  - where the jumper from breaker GO60 connects to the 4 hole pad on switch GO61.
4. **Transformation Service provided by LCRA TSC (check one):** Yes ☒ No ☐
5. **Metering Service provided by LCRA TSC (check one):** Yes ☒ No ☐
6. **Delivery voltage:** 12.5 kV
7. **Metering (voltage, location, loss adjustments, if any, due to location, other):** 12.5 kV, at the distribution bus on the load side of the distribution voltage regulators. The metering equipment provided herein will be in accordance with the applicable requirements of the ERCOT Operating Guides, or its successor in function, and the ERCOT Protocols.
8. **One-line Diagram attached (check one):** Yes ☒ No ☐
9. **Description of Facilities owned by Each Party:**

LCRA TSC owns: (see attached one-line for details)

The Goldthwaite Substation including, but not limited to, the following items:

- Substation property, ground grid, gravel, fencing and other appurtenances
- All 138 kV transmission equipment and 138 kV transmission lines
- 138 kV operating and transfer buses with structures, insulators, foundations and jumpers
- One (1) 138 kV bus differential and breaker failure relaying scheme
- One (1) 138X69/13.09 kV 12 MVA three phase power transformer T1 with associated surge arresters
- One (1) circuit switcher CS6515 with bypass switch 6517 and protective relaying
- Three (3) 138 kV switches 6509, 6511 and 6513
- Three (3) relaying current transformers CT7, CT8, and CT9
- Five (5) 12.5 kV metering current transformers CT1, CT2, CT3, CT4 and CT11
- One (1) 12.5 kV metering potential transformer, PT3 and fuse F2
- One (1) station service transformers SS2 with fuses F3
- One (1) 138 kV power voltage transformer PVT1
- One (1) control / metering house with air conditioner and appurtenances
- One (1) metering package
- One (1) 12.5 kV total bay 4 including buswork, 12.5 kV hook stick switches and three single phase 1250 kVA voltage regulators REG1
- One (1) 12.5 kV transformer bus switch G001
- Structures, structure foundations, operating and transfer buses for all distribution bays except bays 2 and 3.
- Feeder bay switches and feeder bay buswork in distribution bay 1A
- Two (2) 12.5 kV mobile transformer hook-up points with switches 9083 and 9089

Brazos Electric owns: (see attached one-line for details)

- 12.5 kV distribution bays 2 and 3 including structures, structure foundations, operating and transfer buses, breakers, breaker foundations, feeder bay switches, surge arrestors and feeder bay buswork
- Breaker, breaker foundation, breaker jumpers, feeder bay switches, surge arrestor and feeder bay buswork in distribution bay 1
- Breaker, breaker foundation, surge arrestor and breaker jumpers in distribution bay 1A

#### **10. Operational Responsibilities of Each Party:**

- Each Party will be responsible for the operation of the facilities it owns.
- No change will be made in the normal operation of the Points of Interconnection without the mutual agreement of the Parties.

#### **11. Maintenance Responsibilities of Each Party:**

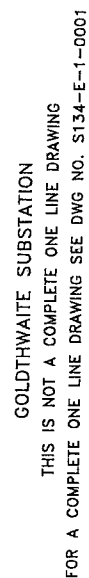
- Each Party will be responsible for the maintenance of the facilities it owns.
- Maintenance of any facilities by either Party that will cause a deviation from normal power and energy flow at the Points of Interconnection will be scheduled at a mutually agreeable time.

#### **12. Other Terms and Conditions:**

- Each Party will be responsible for costs associated with the facilities they own.
- Brazos Electric shall have access into the substation for the purpose of operating and maintaining Brazos Electric facilities in accordance with this facility schedule.
- The substation control house and the gate to the substation will be double-locked with the locks of both Parties.
- LCRA TSC and Brazos Electric 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 provide Brazos Electric access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards. Panel boards containing the OCPD may belong to either LCRA TSC (if space is available) or Brazos Electric.
- LCRA TSC will provide Brazos Electric with floor space (as available and as necessary) in its control house for the installation of Brazos Electric required panels and equipment.

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## **FACILITY SCHEDULE NO. 5**

Amendment No. 5

1. **Name: Lometa**
2. **Facility Location:** The Lometa Substation is located at 313 E. Railway Street in Lometa, Lampasas County, Texas 76853.
3. **Points of Interconnection:** There are two (2) Points of Interconnection in the Lometa Substation generally described as:
  - where the jumper from the LCRA TSC 12.5 kV distribution totalizing bay operating bus connects to the Brazos Electric 12.5 kV distribution bay operating bus.
  - where the jumper from the LCRA TSC 12.5 kV distribution totalizing bay transfer bus connects to the Brazos Electric 12.5 kV distribution bay transfer bus.
4. **Transformation Service provided by LCRA TSC (check one):** Yes ☒ No ☐
5. **Metering Service provided by LCRA TSC (check one):** Yes ☒ No ☐
6. **Delivery Voltage:** 12.5 kV
7. **Metering (voltage, location, loss adjustments, if any, due to location, other):** 12.5 kV, at the Lometa Substation which will be located at the 12.5 kV bus on the load side of the 138/13.09 kV power transformer. The metering equipment provided herein will be in accordance with the applicable requirements of the ERCOT Operating Guides, or its successor in function, and the ERCOT Protocols.
8. **One-line Diagram attached (check one):** Yes ☒ No ☐
9. **Description of Facilities owned:**

LCRA TSC owns: (see attached one-line for details)

The Lometa Substation including, but not limited to, the following items:

- Substation property, ground grid, gravel, fencing and other appurtenances
- LCRA TSC 138 kV transmission line from Lometa to Lampasas (T138).
- LCRA TSC 138 kV transmission line from Lometa to San Saba (T138).
- Three (3) 138 kV sectionalizing switches 1134, 1135 and 1136
- One (1) circuit switcher CS1125 with bypass switch 1127 and protective relaying
- One (1) power transformer T1 with associated surge arresters
- One (1) 12.5 kV metering potential transformer PT1 with fuse F3
- One (1) station service transformer SS1 with fuse F2
- One (1) control house with air conditioner, 125 Vdc batteries, battery charger and appurtenances
- One (1) total bay with 12.5 kV operating and transfer bus, hardware, insulators, disconnect switches, buswork, jumpers and structures for totalizing bay.

- One (1) mobile hookup and associated disconnect switch LO15

Brazos Electric owns:

- Four (4) 12.5 kV distribution bays including structures, foundations, operating and transfer buses, buswork, switches, surge arrestors, and jumpers.
- Four (4) 12.5 kV distribution breakers LO20, LO30, LO40 and LO50 with foundations, jumpers and protective relaying

**10. Operational Responsibilities of Each Party:**

- Each Party will be responsible for the operation of the facilities it owns.
- LCRA TSC's disconnect switches #1134 and #1135 will be operated in the normally closed position.
- LCRA TSC's disconnect switch #1136 will be operated in the normally open position.
- No change will be made in the normal operation of the Point of Interconnection without the mutual agreement of the Parties.

**11. Maintenance Responsibilities of Each Party:**

- Each Party will be responsible for the maintenance of the facilities it owns.

**12. Other Terms and Conditions (indicate one):**

- Each Party will be responsible for costs associated with the facilities they own.
- Brazos Electric shall have access into the substation for the purpose of operating and maintaining Brazos Electric facilities in accordance with this facility schedule.
- The substation control house and the gate to the substation will be double-locked with the locks of both Parties.
- LCRA TSC and Brazos Electric 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 provide Brazos Electric access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards. Panel boards containing the OCPD may belong to either LCRA TSC (if space is available) or Brazos Electric.
- LCRA TSC will provide Brazos Electric with floor space (as available and as necessary) in its control house for the installation of Brazos Electric required panels and equipment.

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