

Control Number: 35077



Item Number: 514

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PUC Project No. 35077

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PUBLIC UTILITY COMMISSION

FOURTH Amendment to FILING CLERK

### INTERCONNECTION AGREEMENT

Between

**Kerrville Public Utility Board** 

and

**LCRA Transmission Services Corporation** 

**December 8, 2014** 

### FOURTH AMENDMENT TO INTERCONNECTION AGREEMENT

This Fourth Amendment ("Amendment") is made and entered into this 8th day of December, 2014, between Kerrville Public Utility Board ("KPUB") and the LCRA Transmission Services Corporation ("LCRA TSC") collectively referred to hereinafter as the Parties.

WHEREAS, the LCRA TSC and KPUB entered into that certain Interconnection Agreement executed March 10, 2009 as amended by that certain Amendment No. 1, executed as of December 8, 2009, as amended by that certain Amendment No. 2, executed as of May 24, 2011, as amended by that certain Amendment No. 3, executed as of December 13, 2013 (collectively, as amended, the "Agreement"); and

WHEREAS, LCRA TSC is adding 138kV circuit breakers at Kerrville Travis and Kerrville Legion Substations.

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 Fourth Amendment is hereby added to the Agreement in lieu thereof.
- 2. Facility Schedule No. 5 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 5 attached to this Fourth Amendment is hereby added to the Agreement in lieu thereof.
- 3. Facility Schedule No. 5 (including the diagrams attached thereto) attached to this Fourth Amendment will become effective upon execution of this Fourth Amendment by the Parties.
- 4. Facility Schedule No. 8 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 8 attached to this Fourth Amendment is hereby added to the Agreement in lieu thereof.
- 5. Facility Schedule No. 8 (including the diagrams attached thereto) attached to this Fourth Amendment will become effective upon execution of this Fourth Amendment by the Parties.

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 Fourth Amendment to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

| KERRVILLE PUBLIC UTILITY BOARD | LCRA TRANSMISSION SERVICES CORPORATION              |  |  |
|--------------------------------|-----------------------------------------------------|--|--|
| By: 2. L. MeL                  | By: Ray Staffel                                     |  |  |
| Name: Tracy L. McCuan          | Name: Ray Pfefferkom, P.E.                          |  |  |
| Title: General Manager and CEO | Title: <u>LCRA Transmission Engineering</u> Manager |  |  |
| Date:                          | Date: /2/8/14                                       |  |  |

# **EXHIBIT A**Amendment No. 4

| FACILITY<br>SCHEDULE<br>NO. | LOCATION OF<br>POINT(S) OF<br>INTERCONNECTION<br>(# of Points) | INTERCONNECTION<br>VOLTAGE (KV) | EFFECTIVE DATE OF INTERCONNECTION |
|-----------------------------|----------------------------------------------------------------|---------------------------------|-----------------------------------|
| 1                           | Harper Road (2)                                                | 138 kV                          | 1.1.1.0000                        |
| 2                           | Hunt (2)                                                       | 138 kV                          | March 10, 2009                    |
| 3                           | Ingram (1)                                                     |                                 | March 10, 2009                    |
| 4                           | Kerrville Stadium (2)                                          | 138 kV                          | March 10, 2009                    |
| 5                           | Kerrville Legion (1)                                           | 138 kV<br>138 kV                | December 13, 2013                 |
| 6                           | Raymond F. Barker (1)                                          |                                 | Date of 4th Amendment             |
| 7                           | Rim Rock (12)                                                  | 138 kV                          | December 8, 2009                  |
| 8                           | Kerrville Travis (2)                                           | 12.5 kV                         | March 10, 2009                    |
| 9                           | TROFF VIIIC TTAVIS (2)                                         | 138 kV                          | Date of 4th Amendment             |
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#### FACILITY SCHEDULE NO. 5

Amendment No. 4

- 1. Name: Kerrville Legion Substation
- Facility Location: The Kerrville Legion Substation is located at 108 N. Peterson Farm Rd., Kerrville, Kerr County, Texas 78028.
- 3. Points of Interconnection: There is one (1) Point of Interconnection in the Kerrville Legion Substation generally described as:
  - where the 138 kV Operating Bus #1 connects to the four hole pad of switch 25194.
- 4. Transformation Services Provided by LCRA TSC: No
- Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 138 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformer is located in the total bay. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### KPUB owns:

- One (1) circuit switcher CS-25195 with associated bypass and disconnect switches 25197 and 25194
- One (1) power transformer T-1 with associated surge arresters
- All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- All distribution circuit breakers/reclosers including jumpers, protective relay packages and foundations
- All T-1 distribution and total bays including A-frames, trusses, insulators, disconnect switches, 12.5 kV operating and transfer bus, bus potential transformer and associated cabling
- One (1) station service SS-1 with fuse F-1
- One (1) load management system LM1 with fuse F-3
- One (1) outdoor cable trough

#### LCRA TSC owns:

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

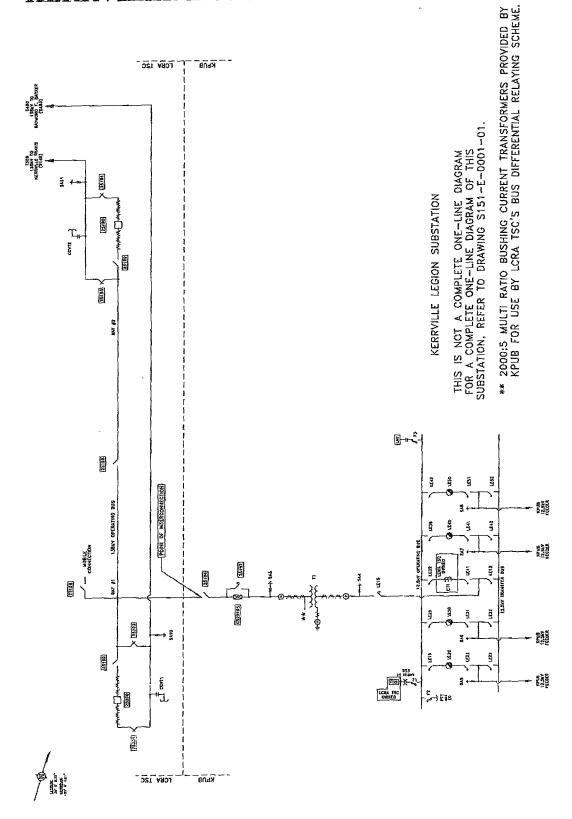
Three (3) A-Frame dead end structures at CB-25190 and CB-25200

- Two (2) 138 kV circuit breakers CB-25190 and CB-25200 including foundation, jumpers and protective relay packages
- One (1) 138kV mobile transformer connection
- Two (2) 138 kV surge arresters SA-10 and SA-11
- Eight (8) 138 kV switches 25189, 25191, 25193, 25196, 25198, 25199, 25201 and 25203
- One (1) metering accuracy current transformer CT-1
- 138 kV bus including structures, insulators, foundations and jumpers
- Two (2) 138 kV capacitor coupled voltage transformers CCVT-1 and CCVT-2
- One (1) station service fused disconnect switch FDS-1 and associated conduit and cabling
- One (1) 138 kV bus differential & breaker failure relaying scheme
- One (1) metering panel
- Control house and battery
- Two (2) AC panelboards
- Two (2) DC panelboards
- Substation property, ground grid, gravel, fencing and other appurtenances
- 10. Operational Responsibilities of Each Party: Each Party will be responsible for the operation of the equipment it owns.
- 11. Maintenance Responsibilities of Each Party: Each Party will be fully responsible for the maintenance of the equipment it owns.

#### 12. Other Terms and Conditions:

- KPUB and LCRA TSC are to share access to the substation and control house.
- KPUB will supply and allow LCRA TSC use of its 12.5 kV metering accuracy bus potential transformer PT-1 for metering.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to KPUB's circuit switcher CS-25195 relaying panel.
- KPUB will provide breaker failure initiate contacts from its circuit switcher CS-25195 relaying panel to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.
- LCRA TSC and KPUB 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 KPUB 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 KPUB.
- LCRA TSC will provide KPUB with floor space (as available and as necessary) in its control house for the installation of KPUB required panels and equipment.
- KPUB will provide LCRA TSC access to its station service as needed.
- KPUB will provide LCRA TSC access to its outdoor cable trough as needed.

### KERRVILLE LEGION ONE-LINE DIAGRAM



LCRA TSC - KPUB 4th Amendment

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#### FACILITY SCHEDULE NO. 8

Amendment No. 4

- 1. Name: Kerrville Travis Substation
- Facility Location: The Kerrville Travis Substation is located at 718 Travis St., Kerrville, Kerr County, Texas 78028.
- 3. Points of Interconnection: There are two (2) Points of Interconnection in the Kerrville Travis Substation generally described as:
  - where the 138 kV Operating Bus #1 connects to the four hole pad of switch 25264.
  - where the 138 kV Operating Bus #1 connects to the four hole pad of switch 1054.
- 4. Transformation Services Provided by LCRA TSC: No
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 138 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformers are located inside T-2 and inside the totalizing bay of T-1. The bus potential transformers are located on the 12.5 kV operating buses.
- 8. One Line Diagram Attached: Yes
- Description of Facilities Owned by Each Party:

#### KPUB owns:

- Two (2) circuit switchers CS-25265 and CS-1055 with bypass and disconnect switches 25267, 25264, 1057 and 1054
- Two (2) power transformers T-1 and T-2 with associated surge arresters
- All T-1 and T-2 transformer bus 12.5 kV disconnect and bypass switches
- All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- All distribution circuit breakers/reclosers including jumpers, protective relay packages and foundations
- All T-1 distribution and total bays including A-frames, trusses, insulators, disconnect switches, 12.5 kV operating and transfer bus, bus potential transformer, and associated cabling
- All T-2 distribution and total bays including A-frames, trusses, insulators, disconnect switches, 12.5 kV operating and transfer bus, bus potential transformer, and associated cabling
- Two (2) station service SS-1 and SS-2 with fuses F-4 and F-8
- Two (2) load management systems LM1 and LM2 with fuses F-6 and F-9

One (1) outdoor cable trough

#### LCRA TSC owns:

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

- Two (2) A-Frame dead end structures at CB-25260 and CB-25270
- 138 kV operating bus including structures, insulators, foundations and jumpers
- One (1) 138kV mobile transformer connection
- Two (2) 138 kV circuit breakers CB-25260 and CB-25270 including foundations, jumpers and protective relay packages
- Eight (8) 138 kV switches 1058, 25259, 25261, 25263, 25268, 25269, 25271 and 25273
- One (1) metering accuracy current transformer CT-1
- Two (2) 138 kV capacitor coupled voltage transformers CCVT-1 and CCVT-2
- Two (2) station service fused disconnect switches FDS-2 and FDS-3 and associated conduit and cabling
- Two (2) 138 kV surge arresters SA-18 and SA-17
- One (1) 138 kV bus differential & breaker failure relaying scheme
- One (1) metering panel
- One (1) underfrequency relay panel
- Control house and battery
- One (1) automatic transfer switch
- Two (2) AC panelboards
- Two (2) DC panelboards
- Substation property, ground grid, gravel, fencing and other appurtenances
- 10. Operational Responsibilities of Each Party: Each Party will be responsible for the operation of the equipment it owns.
- 11. Maintenance Responsibilities of Each Party: Each Party will be fully responsible for the maintenance of the equipment it owns.

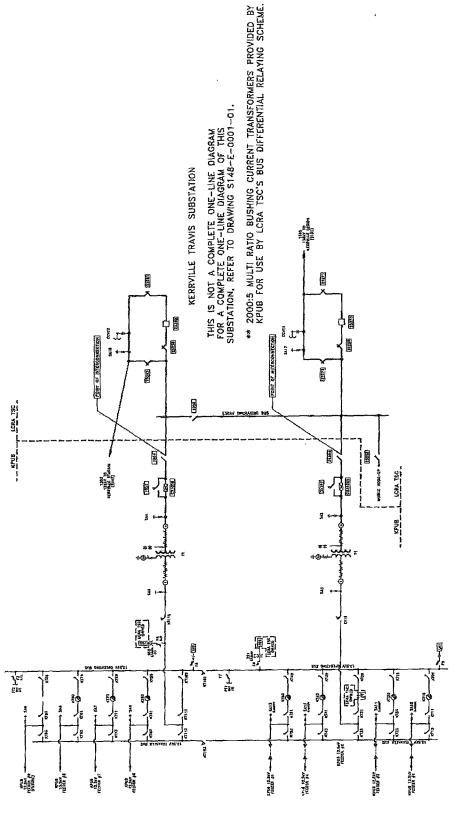
#### 12. Other Terms and Conditions:

- KPUB and LCRA TSC are to share access to the substation and control house.
- \* KPUB will supply and allow LCRA TSC use of its 12.5 kV metering accuracy bus potential transformers PT-1 and PT-2 for metering.
- KPUB will supply and allow LCRA TSC use of its 12.5kV 1200:5 dual ratio metering accuracy current transformers from power transformer T-2 for metering.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to KPUB's circuit switchers CS-1055 and CS-25265 relaying panels.
- \* KPUB will provide breaker failure initiate contacts from its circuit switchers CS-1055 and CS-25265 relaying panels to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.
- LCRA TSC and KPUB 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 KPUB 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 KPUB.
- LCRA TSC will provide KPUB with floor space (as available and as necessary)
  in its control house for the installation of KPUB required panels and equipment.
- KPUB will provide LCRA TSC access to its station service as needed.
- KPUB will provide LCRA TSC access to its outdoor cable trough as needed.

## KERRVILLE TRAVIS ONE-LINE DIAGRAM



LCRA TSC - KPUB 4th Amendment

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