

Control Number: 35077



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# **Amendment to Interchange Agreement**

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Between

South Texas Electric Cooperative

and

**LCRA Transmission Services Corporation** 

July 24, 2013

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#### AMENDMENT TO INTERCHANGE AGREEMENT

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This Amendment to the Interchange Agreement, dated October 7, 1987 ("the Agreement"), between South Texas Electric Cooperative ("STEC") and the Lower Colorado River is made and entered into this  $247^{47}$  day of  $304^{47}$ ,  $2013^{47}$  between STEC and the LCRA Transmission Services Corporation ("Corporation") (assignee of the Lower Colorado River Authority), and collectively referred to hereinafter as the Parties.

WHEREAS, Corporation will add additional protection equipment at Milton Substation as part of the "Kennedy Switch-Nixon-Seguin Transmission Line Upgrade"; and

WHEREAS, Corporation will add additional protection equipment at Helena Substation as part of the "Kennedy Switch-Nixon-Seguin Transmission Line Upgrade"; and

WHEREAS, Corporation will provide a 138 kV point of interconnection for the new STEC Bevo Substation

**NOW THEREFORE**, In consideration of the mutual promises and undertakings herein set forth, the Parties agree to amend the Agreement as follows:

1. Facility Schedule No. 6 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 6 attached to this Amendment is hereby added to the Agreement in lieu thereof.

2. Facility Schedule No. 6 will become effective upon execution of this Amendment by the Parties. Unless otherwise agreed by the Parties, the Milton Interconnection will not be placed into service under the amended Facility Schedule No. 6 until the Parties have completed the installation and testing of all equipment to be furnished for the Milton Interconnection in accordance with the provisions contained in Facility Schedule No 6.

3. Facility Schedule No. 7 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 7 attached to this Amendment is hereby added to the Agreement in lieu thereof.

4. Facility Schedule No. 7 will become effective upon execution of this Amendment by the Parties. Unless otherwise agreed by the Parties, the Helena Interconnection will not be placed into service under Facility Schedule No. 7 until the Parties have completed the installation and testing of all equipment to be furnished for the Helena Interconnection in accordance with the provisions contained in Facility Schedule No 7. 5. Facility Schedule No. 12 (including the diagrams attached thereto) attached to this Amendment is hereby added to the Agreement.

6. Facility Schedule No. 12 will become effective upon execution of this Amendment by the Parties.

7. 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.

SOUTH TEXAS ELECTRIC COOPERATIVE Bv

Name: Michael Packard

By: Ray ffeffer

LCRA TRANSMISSION SERVICES

CORPORATION

Name: Ray Pfefferkorn, P.E.

Title: General Manager

Date: 7-24-13

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Title: LCRA Transmission Engineering Manager

Date:



#### **FACILITY SCHEDULE NO. 6**

1. <u>Name:</u> Milton Substation (the Point of Interconnection)

2. <u>Point of Interconnection location:</u> The Point of Interconnection is located in Karnes County, Texas along the Corporation's 138 kV transmission line between Kenedy Switch and Nixon. The Point of Interconnection is where the Corporation's 138 kV bus connector bolts to the four hole pad on STEC's switch No. 11513.

3. Delivery Voltage: 138 kV

4. <u>Metering</u>: Metering shall be installed by STEC in its Milton Substation as necessary to meet the applicable provisions of the ERCOT Operating Guides, Protocols, and Metering Guidelines.

- 5. Normal closed: Yes
- 6. <u>One-Line Diagram Attached</u>: Yes

#### 7. Facilities owned by STEC:

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

- One (1) 138 kV circuit breaker 11511 including foundations, jumpers, relaying and internal relaying multi-ratio 2000:5 current transformers for use by the Corporation's bus differential scheme
- One (1) bus disconnect switch No. 11513
- One (1) 12/20 or 15/25 MVA power transformer, T-1, with associated surge arresters
- All distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, operating and transfer bus, bus potential transformers and associated cabling
- All distribution circuit breakers including jumpers, protective relay packages and foundations
- All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- Station service
- Control house 20' x 40' with cable trays in concrete floor
- Batteries and battery charger
- Substation property, ground grid, gravel, fence and appurtenances
- Communications and SCADA equipment including RTU
- 8. <u>Facilities owned by the Corporation:</u>
  - Two (2) 138 kV dead-end structures, foundations, insulators and jumpers
  - Two (2) 138 kV surge arresters SA-1 and SA-2
  - Two (2) 138 kV coupling capacitor voltage transformers CCVT-1 and CCVT-2

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- Two (2) 138 kV wave traps WT-1 and WT-2 with tuners
- 138 kV bus including support structures, foundations and jumpers
- Two (2) 138 kV circuit breakers, 1200 A, 40 kAIC, 23010 and 23020 including foundations, jumpers and line relaying
- Bus differential, breaker failure relaying, and associated panels
- One (1) power line carrier panel
- Six (6) 138 kV disconnect switches 23009, 23011, 23013, 23019, 23021 and 23023.
- One (1) RTU with associated interface and communications equipment
- 9. Operational and Maintenance Responsibility:
  - Each Party will be responsible for the operation and maintenance of the facilities it owns.
  - STEC will direct and coordinate all switching for STEC's facilities, including its 138 kV circuit breaker(s), disconnect switches, and distribution facilities associated with its transformer(s). These facilities will not be locked or switched by the Corporation unless done so in accordance with STEC System Operations dispatch instructions.
  - The Corporation will direct and coordinate all switching for the Corporation's facilities, including the 138 kV transmission lines, 138 kV circuit breakers and associated 138 kV disconnect switches, 138 kV bus, bus differential and breaker failure. STEC and its member cooperatives will be allowed to switch the Corporation's equipment as long as they have received the Corporation's Switch Training. Otherwise these facilities will not be locked or switched by STEC or its member cooperatives.
- 10. Supplemental terms and conditions:
  - Each Party will name and number their respective equipment.
  - Each Party shall be responsible for submitting the ICCP data to ERCOT for the equipment they own at this substation.
  - STEC will provide LCRA TSC 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 STEC (if space is available) or LCRA TSC
  - STEC will provide LCRA TSC with floor space (as available and as necessary) in its control house for the installation of LCRA TSC required relay panel boards and equipment.
  - STEC will supply and allow LCRA TSC use of circuit breaker 11511 relaying bushing current transformers for its bus differential relaying scheme.
  - LCRA TSC will provide tripping and close inhibit contacts from its bus differential & breaker failure relaying panel to STEC's circuit breaker 11511 relaying panel.
  - STEC will provide breaker failure initiate contacts from its circuit breaker 11511 relaying panel to LCRA TSC's bus differential & breaker failure relaying panel.

- LCRA TSC and STEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- STEC and the Corporation are to share access to the substation by each having their own locks in the gate and in the control house doors.
- Coordination and response to the ERCOT under-frequency, under-voltage or emergency load shedding program for STEC load served out of this substation is the responsibility of STEC.
- STEC is responsible for reporting to ERCOT all load data requests for STEC load served out of this substation.

# FACILITY SCHEDULE NO. 6 ONE LINE DIAGRAM



### **FACILITY SCHEDULE NO. 7**

### 1. <u>Name</u>: Helena Substation (the Point of Interconnection)

2. <u>Point of Interconnection location:</u> The Point of Interconnection is located in Karnes County, Texas along the Corporation's 138 kV transmission line between Kenedy Switch and Nixon. The Point of Interconnection is where the Corporation's 138 kV bus connector bolts to the four hole pad on STEC's switch No. 11613.

3. Delivery Voltage: 138 kV

4. <u>Metering</u>: Metering shall be installed by STEC in its Helena Substation as necessary to meet the applicable provisions of the ERCOT Operating Guides, Protocols, and Metering Guidelines.

- 5. <u>Normal closed</u>: Yes
- 6. <u>One-Line Diagram Attached</u>: Yes

#### 7. <u>Facilities owned by STEC</u>:

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

- One (1) 138 kV circuit breaker No. 11611 including foundations, jumpers and relaying
- One (1) 138 kV bus disconnect switch No. 11613
- One (1) 12/20 or 15/25 MVA power transformer, T-1, with associated surge arresters
- All distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, operating and transfer bus, bus potential transformers and associated cabling
- All distribution circuit breakers including jumpers, protective relay packages and foundations
- All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- Station service
- Control house 20' x 40' with cable trays in concrete floor
- Batteries and battery charger
- Substation property, ground grid, gravel, fence and appurtenances
- Communications and SCADA equipment including RTU
- 8. <u>Facilities owned by the Corporation</u>:
  - Two (2) 138 kV dead-end structures, foundations, insulators and jumpers
  - Two (2) 138 kV surge arresters SA-1 and SA-2
  - 138 kV bus including support structures, foundations and jumpers
  - Two (2) 138 kV motor operated switches 23729 and 23739 including foundations and jumpers

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- One (1) RTU with associated interface and communications equipment
- 9. Operational and Maintenance Responsibility:
  - Each Party will be responsible for the operation and maintenance of the facilities it owns.
  - STEC will direct and coordinate all switching for STEC's facilities, including its 138 kV circuit switcher(s), disconnect switches and distribution facilities associated with its transformer(s). These facilities will not be locked or switched by the Corporation unless done so in accordance with STEC System Operations dispatch instructions.
  - The Corporation will direct and coordinate all switching for the Corporation's facilities, including the 138 kV transmission lines and associated 138 kV disconnect switches. STEC and its member cooperatives will be allowed to switch the Corporation's equipment as long as they have received the Corporation's Switch Training. Otherwise these facilities will not be locked or switched by STEC or its member cooperatives.
- 10 Supplemental terms and conditions:
  - Each Party will name and number their respective equipment.
  - Each Party shall be responsible for submitting the ICCP data to ERCOT for the equipment they own at this substation.
  - STEC will provide LCRA TSC 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 STEC (if space is available) or LCRA TSC
  - STEC will provide LCRA TSC with floor space (as available and as necessary) in its control house for the installation of LCRA TSC required relay panel boards and equipment.
  - STEC and the Corporation are to share access to the substation by each having their own locks in the gate and in the control house doors.
  - Coordination and response to the ERCOT under-frequency, under-voltage or emergency load shedding program for STEC load served out of this substation is the responsibility of STEC.
  - STEC is responsible for reporting to ERCOT all load data requests for STEC load served out of this substation.

### FACILITY SCHEDULE NO. 7 ONE LINE DIAGRAM



#### **FACILITY SCHEDULE NO. 12**

1. <u>Name</u>: Bevo Substation (the Point of Interconnection)

2. <u>Point of Interconnection location:</u> The Point of Interconnection is located in Dimmit County, Texas along the Corporation's 138 kV transmission line between Asherton and Escondido Substations. The Point of Interconnection is where the Corporation's 138 kV bus connector bolts to the four hole pad on STEC's switch No. 16385.

- 3. Delivery Voltage: 138 kV
- 4. Metering: N/A
- 5. <u>Normal closed</u>: Yes
- 6. <u>One-Line Diagram Attached</u>: Yes

### 7. Facilities owned by STEC:

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

- One (1) 138 kV circuit breaker 16384 including foundations, jumpers and relaying with 138 kV-2000:5 multi ratio bushing current transformers and breaker failure initiate contacts for use by LCRA TSC's bus differential breaker failure relaying scheme and utilizing tripping and close inhibit contacts from LCRA TSC's bus differential & breaker failure relaying panel
- One (1) 138 kV bus disconnect switch 16385.
- One (1) 138 kV/69 kV auto transformer, AT-1
- One (1) 69 kV main and transfer bus
- One 69kV capacitor bank
- One (1) 3 phase 138 kV potential transformer PT1
- Three (3) 3 phase 69 kV potential transformers PT2, PT4, and PT7
- One (1) 1 phase 69 kV potential transformer PT3
- One (1) capacitor bank circuit breaker 6574 with foundation, jumpers and control relaying
- Three (3) 69 kV circuit breakers 6524, 6554 & 6564 with foundations, jumpers and relaying
- Fifteen (15) 69 kV disconnect switches 6522, 6523, 6525, 6532, 6535, 6542, 6545, 6512, 6515, 6552, 6553, 6555, 6563, 6565 & 6575
- Station service SS1
- Control house 20' x 40' with cable trays in concrete floor
- Batteries and battery charger
- Substation property, ground grid, gravel, fence and appurtenances
- Communications and SCADA equipment including RTU

- 8. <u>Facilities owned by the Corporation</u>:
  - Two (2) 138 kV dead-end structures, foundations, insulators and jumpers
  - One (1) 138 kV ring bus including foundations, stands and insulators
  - Three (3) 138 kV surge arresters SA-1, SA-2 and SA-3
  - One (1) 138 kV bus differential & breaker failure relaying scheme utilizing STEC supplied 138 kV-2000:5 multi ratio bushing current transformer from STEC's 138 kV circuit breaker 16384 and breaker failure initiate contacts from STEC's 138 kV circuit breaker 16384 relaying panel
  - 138 kV ring bus including support structures, foundations and jumpers
  - Three (3) 138 kV circuit breakers 24960, 24970 and 24980 including foundations and jumpers and relaying
  - Ten (10) 138 kv disconnect switches 24959, 24961, 24962, 24969, 24971, 24979, 24981, 24989, 24991 and 24992
  - Three (3) 138 kV capacitor coupled voltage transformers CCVT1, CCVT2 and CCVT3
  - Two (2) 138 kV wave traps WT-1 and WT-2
  - One (1) RTU with associated interface and communications equipment
- 9. Operational and Maintenance Responsibility:
  - Each Party will be responsible for the operation and maintenance of the facilities it owns.
  - STEC will direct and coordinate all switching for STEC's facilities, including its 138 kV circuit breaker 16384, disconnect switches and distribution facilities associated with its transformer(s). These facilities will not be locked or switched by the Corporation unless done so in accordance with STEC System Operations dispatch instructions.
  - The Corporation will direct and coordinate all switching for the Corporation's facilities, including the 138 kV transmission lines and associated 138 kV disconnect switches. STEC and its member cooperatives will be allowed to switch the Corporation's equipment as long as they have received the Corporation's Switch Training. Otherwise these facilities will not be locked or switched by STEC or its member cooperatives.
- 10. Supplemental terms and conditions:
  - Each Party will name and number their respective equipment.
  - Each Party shall be responsible for submitting the ICCP data to ERCOT for the equipment they own at this substation.
  - STEC will provide LCRA TSC 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 STEC (if space is available) or LCRA TSC
  - STEC will provide LCRA TSC with floor space (as available and as necessary) in its control house for the installation of LCRA TSC required relay panel boards and equipment.

- LCRA TSC and STEC 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 tripping and close inhibit contacts from its Bus Differential & Breaker Failure relaying panel to STEC's circuit breaker 16384 relaying panel.
- STEC will provide breaker failure initiate contacts from its circuit breaker 16384 relaying panel to LCRA TSC's Bus Differential & Breaker Failure relaying panel.
- STEC and the Corporation are to share access to the substation by each having their own locks in the gate and in the control house doors.

### FACILITY SCHEDULE NO. 12 ONE LINE DIAGRAM

