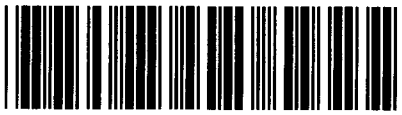
Control Number: 35077



Item Number: 347

Addendum StartPage: 0

Project No. 35077

Amendment No. 6

INTERCONNECTION AGREEMENT

Between

San Bernard Electric Cooperative

and

LCRA Transmission Services Corporation

January 16, 2013

341

INTERCONNECTION AGREEMENT
AMENDMENT NO. 6

This Amendment No. 6 ("Amendment") is made and entered into this 16th day of January, 2013, between San Bernard Electric Cooperative ("SBEC") and LCRA Transmission Services Corporation ("LCRA TSC"), collectively referred to hereinafter as the Parties.

WHEREAS, the LCRA TSC and SBEC entered into that certain Interconnection Agreement executed February 9, 2009, as amended by that certain Amendment No. 1 executed as of August 4, 2009, as amended by that certain Amendment No. 2 executed as of April 20, 2011, as amended by that certain Amendment No. 3 executed as of December 12, 2011, as amended by that certain Amendment No. 4 executed as of May 2, 2012, as amended by that certain Amendment No. 5 executed as of November 20, 2012 collectively, as amended, the "Agreement"); and

WHEREAS, the SBEC and LCRA TSC are converting the Colorado Substation to 138 kV and either SBEC will purchase LCRA TSC's low voltage bays and other equipment associated with LCRA TSC's T1 removal or LCRA TSC will remove its low voltage bays and other equipment associated with its T1 removal; and

WHEREAS, the LCRA TSC is adding an A-frame, truss, converting terminal equipment from 69 kV to 138 kV and SBEC is adding a 138 kV breaker and 138 kV switches at Glidden Substation; and

WHEREAS, Sheridan Switch Structure has been removed by LCRA TSC;

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 Amendment No. 6 is hereby added to the Agreement in lieu thereof.

2. Exhibit "A" attached to this Amendment No. 6 is effective upon execution of this Amendment No. 6 by the Parties.

3. Facility Schedule No. 4 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 4 attached to this Amendment No. 6 is hereby added to the Agreement in lieu thereof.

4. Facility Schedule No. 4 (including the diagrams attached thereto) attached to this Amendment No. 6 is effective upon execution of this Amendment No. 6 and reflects the full future configuration after the 138 kV conversion of the Colorado Substation by the Parties.

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

6. Facility Schedule No. 6 (including the diagrams attached thereto) attached to this Amendment No. 6 is effective upon execution of this Amendment No. 6 by the Parties.

7. Facility Schedule No. 13 (including the diagrams attached thereto) is deleted in its entirety.

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 No. 6 to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

SAN BERNARD ELECTRIC COOPERATIVE

By: Don Roberts

Name: Don Roberts

Title: SBEC Electric Systems Manager

Date: 1/16/13

LCRA TRANSMISSION SERVICES CORPORATION

By: Ray Pfefferkorn

Name: Ray Pfefferkorn, P.E.

Title: LCRA Transmission Engineering Manager

Date: 1/22/13

EXHIBIT A

Amendment No. 6

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF INTERCONNECTION
1	Bellville North (12)	12.5 kV	2/9/2009
2	Bellville South (3)	69 kV	2/9/2009
3	Bernardo (1)	69 kV	March 8, 2012
4	Colorado (2)	138 kV	Date of 6th amendment
5	Frelsburg (1)	138 kV	March 8, 2012
6	Glidden (3)	69/138 kV	Date of 6th amendment
7	Hallettsville City (6)	12.5 kV	4/20/2011
8	Macedonia(3)	24.9 kV/138 kV	March 8, 2012
9	New Bremen (12)	12.5 kV	4/20/2011
10	Prairie View (4)	138 kV	March 8, 2012
11	Quanex (2)	12.5 kV/69 kV	2/9/2009
12	Quanex Switch Structure (3)	69 kV	2/9/2009
13	Sheridan Switch Structure (0) (deleted)	69 kV	Date of 6th amendment
14	Thorstenburg Switch Structure (0) (deleted)	69 kV	November 20, 2012
15	Waller (5)	12.5 kV/138 kV	November 20, 2012
16	Rock Island (0) (deleted)		March 8, 2012
17	Seaway (0) (deleted)		March 8, 2012
18	Sheridan (0) (deleted)		March 8, 2012
19	Sunnyside (0) (deleted)		March 8, 2012
20	Thorstenburg #2 (0) (deleted)		March 8, 2012
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			

FACILITY SCHEDULE NO. 4
Amendment No. 6

1. **Name:** Colorado Substation

2. **Facility Location:** The Colorado Substation is located at 1075 Renner Fwy. (Alt 90), Sheridan, Colorado County, Texas 77475.

3. **Points of Interconnection:** There are two (2) Points of Interconnection in the Colorado Substation generally described as:

   - where the LCRA TSC 138 kV bus attaches to the four hole pad on SBEC's switch 24506.
   - where the LCRA TSC 138 kV bus attaches to the four hole pad on SBEC's switch 24664.

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 in T-1 total bay, in each T-1 distribution bay and in the T-2/12.5 kV transformer bus . The bus potential transformers are located on the 12.5 kV operating buses.

8. **One Line Diagram Attached:** Yes

9. **Description of Facilities Owned by Each Party:**
   SBEC owns:
   Approximately ½ of the Colorado Substation including, but not limited to, the following items:
   - The following transmission line comprised of conductors and connecting hardware:
     - 138 kV Colorado to Sheridan transmission line
   - One (1) 138 kV surge arrester SA2
   - One (1) 138 kV CCVT, CCVT-2
   - One (1) 138 kV T-2 operating bus up to switch 24506
   - One (1) 138 kV circuit breaker 24500 including 2000:5 ratio current transformers for use in LCRA TSC's bus differential relaying scheme, foundation, jumpers and protective relay package
   - Seven (7) 138 kV switches 24499, 24501, 24502, 24503, 24504, 24506 and 24664
   - Two (2) 138 kV circuit switchers CS24505 and CS24665 with bypass switches 24507 and 24667
   - Two (2) power transformer T-1 and T-2 with associated surge arresters and

2000:5 ratio current transformers for use in LCRA TSC's bus differential relaying scheme.

- Five (5) distribution and bus tie circuit breakers CD-30, CD-40, CD50, CD100, 110 and CD-120 including foundations, jumpers and protective relay packages
- All T-1 and T-2 distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, bus potential transformers, and associated cabling
- Two (2) station service for new SBEC control house
- SBEC control house and batteries
- Underfrequency relay equipment (disabled)
- Ground grid, gravel, fencing and other appurtenances in SBEC owned portion of yard.

LCRA TSC owns:

Approximately ½ of the Colorado Substation including, but not limited to, the following items:

- One (1) 138 kV circuit breaker 24660 including foundation, jumpers and protective relay package
- Three (3) 138 kV switches 24659, 24661 and 24663
- One (1) 138 kV surge arrester SA-1
- One (1) 138 kV CCVT, CCVT-1
- Five (5) metering current transformers CT-6, 7, 8, 9 and 10
- 138 kV bus differential, breaker failure relaying, and associated panels utilizing SBEC owned and supplied internal current transformers from circuit breaker 24500 and power transformers T1 and T2
- LCRA TSC control house and batteries
- Ground grid, gravel, fencing and other appurtenances in LCRA TSC owned portion of yard.

10. **Cost Responsibility:** SBEC shall provide written notification to LCRA TSC when SBEC begins serving distribution load that exceeds 21 MW from the Colorado Substation. In the event that SBEC does not provide written notification to LCRA TSC that it is serving distribution load that exceeds 21 MW from the Colorado Substation by August 30, 2014, then LCRA TSC shall notify SBEC that it intends to recover the LCRA TSC associated costs in converting its transmission facilities to 138-kV from SBEC unless SBEC provides written notification by August 30, 2014stating that i) SBEC is actually serving distribution load that exceeds 21 MW from the Colorado Substation; or, ii) SBEC intends to serve distribution load that exceeds 21 MW by August 30, 2015 from the Colorado Substation. LCRA TSC has the right to recover the LCRA TSC associated costs in converting its facilities to 138-kV from SBEC if it does not receive written notification as stated above or if SBEC does not actually serve distribution load that exceeds 21 MW from the Colorado Substation by August 30, 2014. Otherwise, if SBEC is serving distribution load that exceeds 21 MW from the Colorado Substation and has notified LCRA TSC accordingly, then each Party will be fully responsible for the liabilities related to the facilities it owns and SBEC and LCRA TSC will each be individually responsible for all costs it incurs in connection with the establishment of this

Point of Interconnection in accordance with this Facility Schedule. The provisions of this Section shall survive termination of the Agreement and/or this Facility Schedule.

11. **Operational Responsibilities of Each Party:** Each Party is responsible for the operation of the equipment it owns.

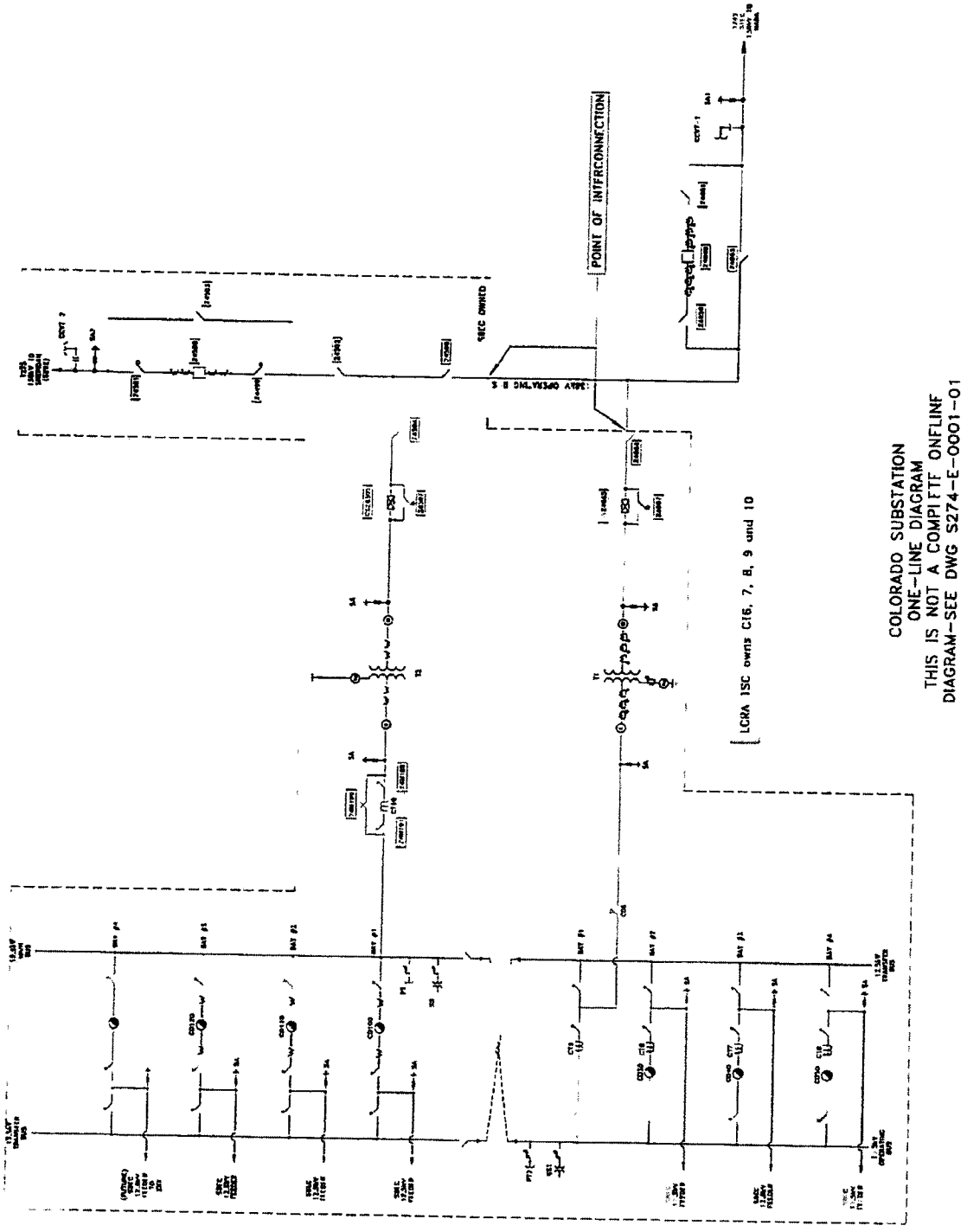
12. **Maintenance Responsibilities of Each Party:** Each Party will be fully responsible for the maintenance of the equipment it owns.

13. **Other Terms and Conditions:**

- SBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- SBEC will purchase and own the additional property required for the 2012 addition to the substation. SBEC will tie its ground grid and fencing to the LCRA TSC's ground grid and fencing.
- SBEC will allow LCRA TSC use of its 12.5 kV bus potential transformers for metering.

COLORADO ONE-LINE DIAGRAM

Amendment No. 6



FACILITY SCHEDULE NO. 6

Amendment No. 6

1. **Name:** Glidden Substation

2. **Facility Location:** The Glidden Substation is located at 2058 Montezuma, Columbus, Colorado County, Texas 78934.

3. **Points of Interconnection:** There is three (3) Points of Interconnection in the Glidden Substation generally described as:

   - where the incoming 69 kV SBEC operating bus terminates at the dead end structure in 69 kV bay #1.
   - where the jumper from SBEC switch 24669 terminates at the LCRA TSC 138 kV operating bus.
   - where the jumper from SBEC switch 24673 terminates at the LCRA TSC 138 kV transfer bus.

4. **Transformation Services Provided by LCRA TSC:** No

5. **Metering Services Provided by LCRA TSC:** Yes

6. **Delivery Voltage:** 69 kV and 138 kV

7. **Metered Voltage and Location:** The metering voltage is 12.5 kV. The metering current transformers are located in the T-3; 12.5 kV transformer bus. The bus potential transformer is on the 12.5 kV operating bus.

8. **One Line Diagram Attached:** Yes

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

   SBEC owns:

   - 69 kV dead-end box structure, foundations, conductors, insulators and jumpers
   - 69 kV operating bus including conductors and insulators from 69 kV box structure to 69 kV bay #1
   - Two (2) 69 kV switches 122 and 124
   - One (1) 60 kV surge arrester SA-8
   - One (1) 69 kV power fuse F-6
   - One (1) power transformer T-3
   - Three (3) single phase regulators REG-1 with associated disconnect switches, bypass switch and foundation
   - One (1) low voltage transformer bus disconnect switch CL-54
   - All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
   - All distribution circuit breakers including jumpers, protective relay packages and foundations

- All distribution and total bays including box structure, insulators, disconnect switches, surge arresters, 12.5 kV operating bus, bus potential transformer, current transformer and associated cabling
- One (1) load management system LM
- One (1) station service SS-4
- One (1) 138 kV Glidden to Rock Island transmission line
- One (1) 138 kV circuit breaker 24670 including foundations, jumpers and protective relaying
- Three (3) 138 kV switches 24669, 24671 and 24673
- One (1) 138 kV wave trap and tuner WT-1
- One (1) 138 kV coupling capacitor CC-1
- Jumpers from SBEC switches to LCRA TSC 138 kV operating and transfer bus
- Underfrequency relay equipment
- Battery and battery charger

LCRA TSC owns:

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

- 69 kV operating and transfer bus including structures, insulators, foundations and jumpers
- One (1) 69 kV circuit breaker 1230 including foundation, jumpers and protective relay package
- Five (5) 69 kV switches 1201, 1203, 1229, 1231 and 1233
- One (1) 69 kV surge arrester SA-1
- One (1) 69 kV bus potential transformer PT-1
- One (1) auto transformer AT-1 with associated surge arresters
- One (1) 138 kV dead end structure and foundations (for SBEC's transmission line to Rock Island)
- 138 kV operating bus and transfer bus including structures, insulators, foundations and jumpers
- One (1) 138 kV circuit breaker 5100 including foundation, jumpers and protective relay package
- Three (3) 138 kV switches 5099, 5101 and 5103
- One (1) 12.5 kV metering current transformer CT-4
- One (1) 138 kV surge arrester SA-5
- One (1) 138 kV bus potential transformer PT-3
- One (1) 138 kV relaying current transformer CT-6
- Two (2) station service SS-1 and SS-3
- Control house and battery
- Ground grid, gravel and fencing

10. Operational Responsibilities of Each Party: Each Party is responsible for the operation of the equipment it owns.

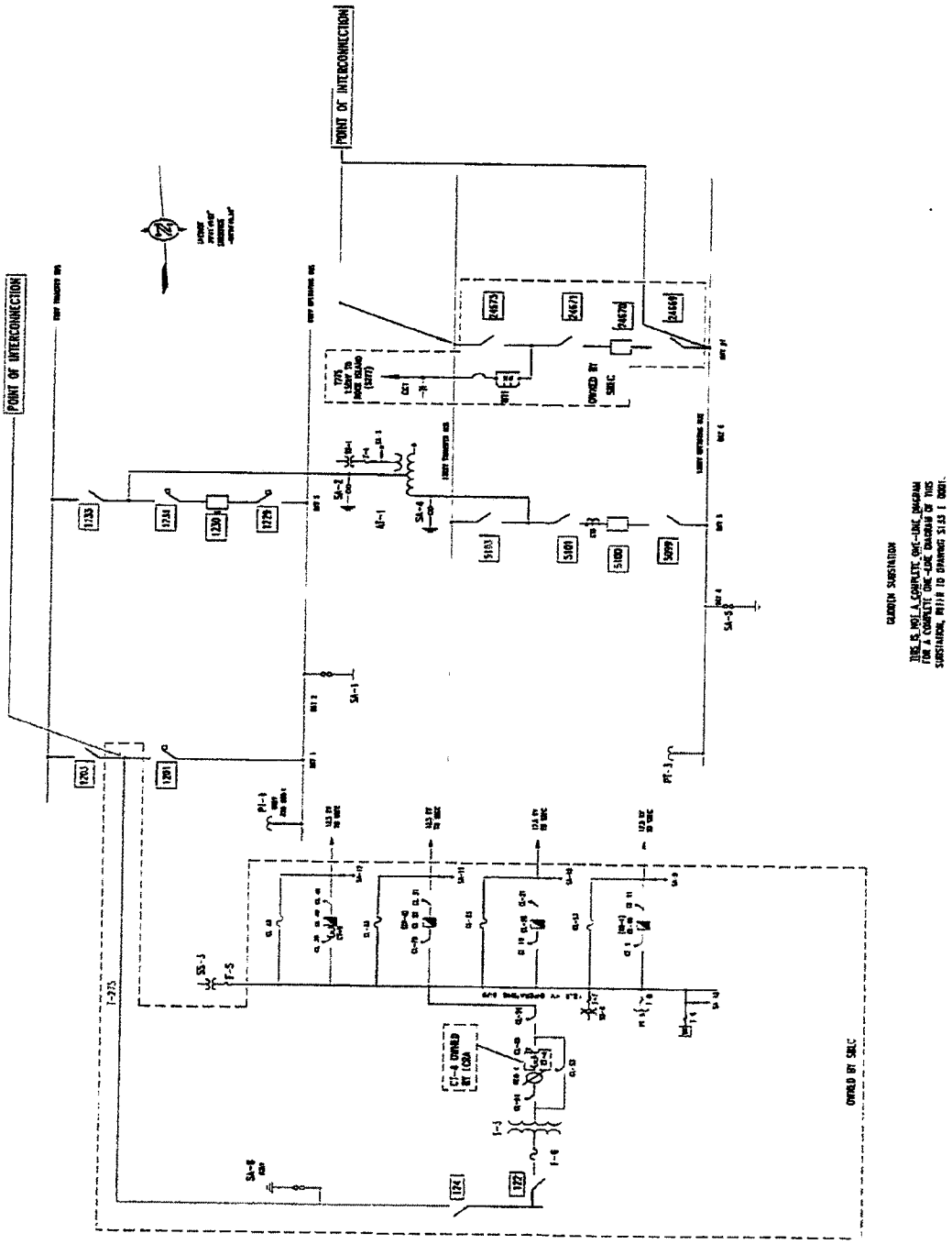
11. Maintenance Responsibilities of Each Party: Each Party will be fully responsible for the maintenance of the equipment it owns.

12. Other Terms and Conditions:

- SBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- SBEC will allow LCRA TSC use of its 12.5 kV bus potential transformers for metering.

GLIDDEN ONE-LINE DIAGRAM

Amendment No. 6



FACILITY SCHEDULE NO. 13
Amendment No. 6

1. **Name:** Sheridan Switch Structure (deleted)