Control Number: 35077

Item Number: 1012

Addendum StartPage: 0

Project No. 35077

Amendment No. 9

INTERCONNECTION AGREEMENT

Between

LCRA Transmission Services Corporation

and

San Bernard Electric Cooperative

August 29, 2019

012

This page intentionally left blank

INTERCONNECTION AGREEMENT
AMENDMENT NO. 9

This Amendment No. 9 ("Amendment No. 9") is made and entered into this 29 day of AUGUST, 2019, between San Bernard Electric Cooperative ("SBEC") and LCRA Transmission Services Corporation ("LCRA TSC"), collectively referred to hereinafter as the Parties.

WHEREAS, 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, as amended by that certain Amendment No. 6 executed as of January 22, 2013, as amended by that certain Amendment No. 7 executed as of July 14, 2017, as amended by that certain Amendment No. 8 executed as of October 31, 2017 (collectively, as amended, the "Agreement");

WHEREAS, through a collaborative planning process, the need to increase capacity of transmission facilities between the Bellville South and Prairie View substations ("Bellville South to Prairie View Transmission Line Upgrade Project") and increase reliability of service at the Frelsburg Substation ("Frelsburg Circuit Breaker Addition Project") was identified and project scope responsibilities determined by the parties;

WHEREAS, LCRA TSC will remove the SBEC-owned 69 kV equipment, at Bellville South Substation, in support of the Bellville South to Prairie View Transmission Line Upgrade Project;

WHEREAS, LCRA TSC will install a 138 kV circuit breaker and associated equipment at Bellville South Substation in support of the Bellville South to Prairie View Transmission Line Upgrade Project;

WHEREAS, LCRA TSC will remove the LCRA TSC-owned Quanex Tap Switch structure from the 69 kV Bellville South to Sunnyside transmission line in support of the Bellville South to Prairie View Transmission Line Upgrade Project;

WHEREAS, the Parties agree to delete Facility Schedule no. 12 to document the decommissioning of the Quanex Switch Structure whereby the Point of Interconnection between the Parties is no longer required;

WHEREAS, LCRA TSC will install a 138 kV circuit breaker, bus work, and associated equipment at Prairie View Substation in support of the Bellville South to Prairie View Transmission Line Upgrade Project;

WHEREAS, LCRA TSC will remove the SBEC-owned 69 kV box structure, 138/69 kV autotransformer and associated equipment at the Prairie View Substation;

WHEREAS, LCRA TSC will install a 138 kV ring bus with circuit breakers, CCVTs, surge arresters and control house in a separate LCRA TSC Yard in support of the Frelsburg Circuit Breaker Addition Project;

WHEREAS, LCRA TSC will remove the SBEC-owned 138 kV bus work in the SBEC Yard at Frelsburg in support of the Frelsburg Circuit Breaker Addition Project;

WHEREAS, SBEC will install or cause to be installed a 138 kV mobile transformer hook-up switch and replace switch 2684 at Frelsburg in support of the Frelsburg Circuit Breaker Addition Project; and,

WHEREAS, the Parties are negotiating the purchase of certain substation assets by LCRA TSC at Bellville South and Prairie View from SBEC;

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. 9 is hereby added to the Agreement in lieu thereof.

2. Exhibit "A" attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 by the Parties.

3. Facility Schedule No. 2 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 2 attached to this Amendment No. 9 is hereby added to the Agreement in lieu thereof.

4. Facility Schedule No. 2 (including the diagrams attached thereto) attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 by the Parties.

5. Facility Schedule No. 5 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 5 attached to this Amendment No. 9 is hereby added to the Agreement in lieu thereof.

6. Facility Schedule No. 5 (including the diagrams attached thereto) attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 by the Parties.

7. Facility Schedule No. 10 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 10 attached to this Amendment No. 9 is hereby added to the Agreement in lieu thereof.

8. Facility Schedule No. 10 (including the diagrams attached thereto) attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 by the Parties.

9. Facility Schedule No. 11 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 11 attached to this Amendment No. 9 is hereby added to the

Agreement in lieu thereof.

10. Facility Schedule No. 11 (including the diagrams attached thereto) attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 by the Parties.

11. Facility Schedule No. 12 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 12 attached to this Amendment No. 9 is hereby added to the Agreement in lieu thereof.

12. Facility Schedule No. 12 (including the diagrams attached thereto) attached to this Amendment No. 9 is effective upon execution of this Amendment No. 9 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 Amendment No. 9 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: _____

Name: Billy Marricle

Title: President/G.M.

Date: 8-29-19

LCRA TRANSMISSION SERVICES CORPORATION

By: _____

Name: Sergio Garza, P.E.

Title: LCRA Vice President, Transmission Design and Protection

Date: AUGUST 29, 2019

LCRA LEGAL

EXHIBIT A

Amendment No. 9

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)	138 kV	Date of 9th Amendment
3	Bernardo (1)	69 kV	7/14/2017
4	Colorado (2)	138 kV	1/22/2013
5	Frelsburg (2)	138 kV	Date of 9th Amendment
6	Glidden (3)	69/138 kV	7/14/2017
7	Hallettsville City (6)	12.5 kV	4/20/2011
8	Macedonia(3)	24.9 kV/138 kV	3/8/2012
9	New Bremen (12)	12.5 kV	4/20/2011
10	Prairie View (5)	138 kV	Date of 9th Amendment
11	Quanex (2)	12.5 kV/138 kV	Date of 9th Amendment
12	Quanex Switch Structure (0) (deleted)		Date of 9th Amendment
13	Sheridan Switch Structure (0) (deleted)	69 kV	1/22/2013
14	Thorstenburg Switch Structure (0) (deleted)	69 kV	11/20/2012
15	Waller (7)	12.5 kV/138 kV	10/31/2017
16	Rock Island (0) (deleted)		3/8/2012
17	Seaway (0) (deleted)		3/8/2012
18	Sheridan (0) (deleted)		3/8/2012
19	Sunnyside (0) (deleted)		3/8/2012
20	Thorstenburg #2 (0) (deleted)		3/8/2012
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			

FACILITY SCHEDULE NO. 2
Amendment 9

1. **Name:** Bellville South Substation

2. **Facility Location:** The Bellville South Substation is located at 1099 Shumann Rd., Bellville, Austin County, Texas 77418.

3. **Points of Interconnection:** There is (1) Point of Interconnection in the Bellville South Substation generally described as:

    - where SBEC's jumpers connect to LCRA TSC's 138 kV slack span at SBEC's dead-end structure, for the incoming 138 kV SBEC transmission line from Quanex Switch, *located outside the substation.*

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

5. **Metering Services Provided by LCRA TSC:** No

6. **Delivery Voltage:** 138 kV

7. **Metered Voltage and Location:** N/A

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

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

    SBEC owns:

    The 138 kV Bellville South to Prairie View transmission line comprised of structures, conductors, OPGW shielding terminating on LCRA TSC's A-Frame structure, OPGW splices along the transmission line, insulators, and connecting hardware.

    LCRA TSC owns:

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

    - All transmission and transformation facilities contained therein
    - The substation property, control house, battery house, ground grid, gravel, fencing and other appurtenances.
    - The fiber patch panel(s), the fiber facility entry cable(s), and the fiber splice box(es) within the substation for the SBEC fiber.

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

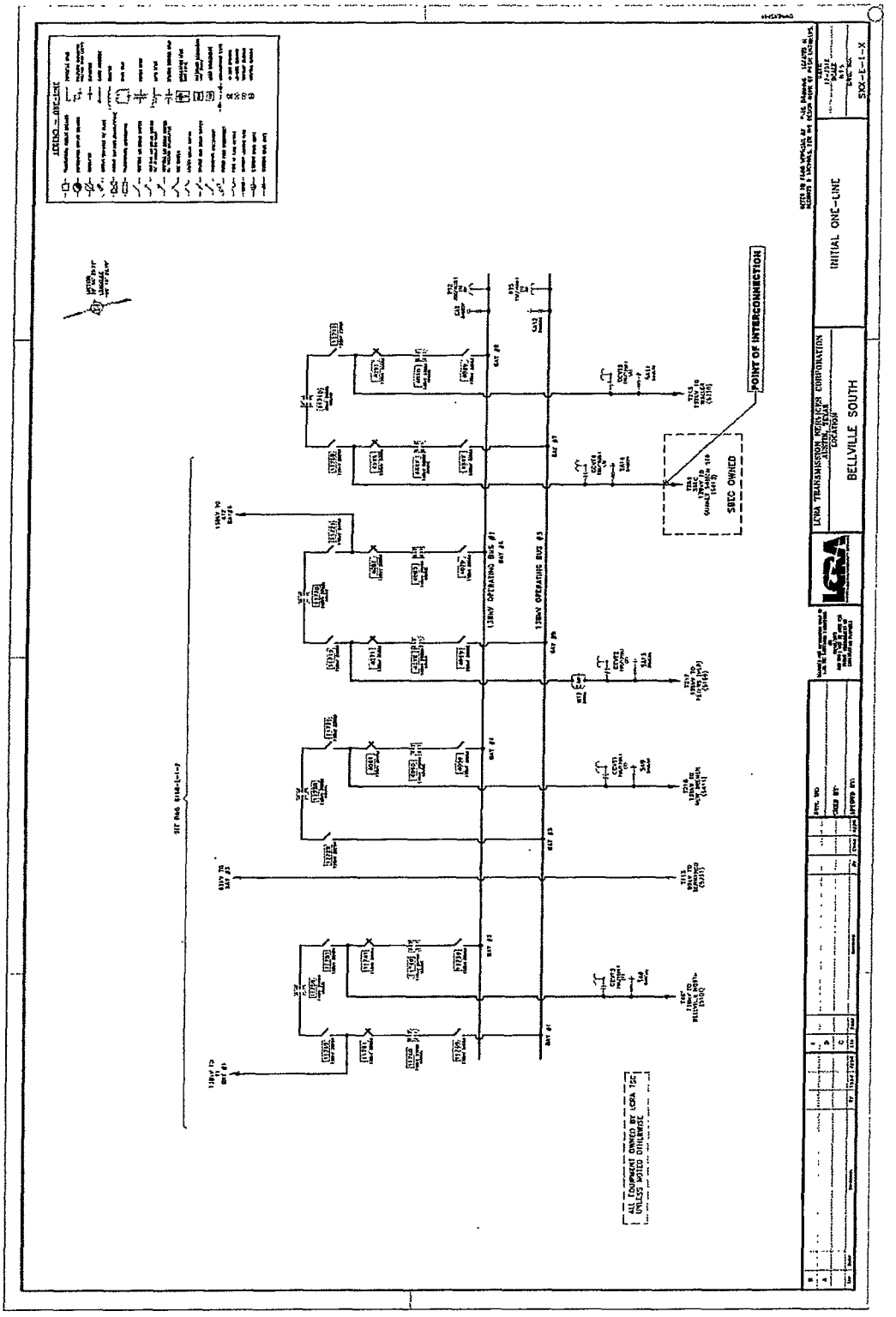
11. **Maintenance Responsibilities of Each Party:** Each Party will be fully responsible for the maintenance of the equipment it owns.

12. Other Terms and Conditions:

- LCRA TSC and SBEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- Bellville South Substation access and physical security will be in accordance with LCRA TSC standards.

BELLVILLE SOUTH ONE-LINE DIAGRAM

Amendment No. 9



FACILITY SCHEDULE NO. 5
Amendment No. 9

1. **Name:** Frelsburg Substation

2. **Facility Location:** The Frelsburg Substation is located at 1807 Brunes Mill Rd., Columbus, Colorado County, Texas 78934.

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

   - where the LCRA TSC jumper from the 138 kV bus attaches to SBEC's transformer disconnect switch 2684.
   - where the LCRA TSC jumper from the 138 kV bus attaches to SBEC's mobile transformer hook-up switch.

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 24.9 kV. The metering current transformer is located in the T1; 24.9 kV transformer bus. The bus potential transformer is located on the 24.9 kV transformer bus.

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

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

   SBEC owns:

   The SBEC portion of the Frelsburg Substation (SBEC Yard) including, but not limited to, the following items:

   - One (1) circuit switcher CS2685 and associated disconnect switch 2684
   - One (1) mobile transformer hook-up switch
   - One (1) power transformer T1 with associated surge arresters SA2
   - One (1) low voltage transformer bus disconnect switch FB8
   - Three (3) single phase regulators REG1 with associated 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 including jumpers, protective relay packages and foundations
   - All distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 24.9 kV operating and transfer bus and associated cabling
   - One (1) bus potential transformer PT1

- Under frequency relay equipment
- Station service
- Control house and battery bank
- The SBEC Yard substation property, ground grid, gravel, fencing and other appurtenances

LCRA TSC owns the following items in the SBEC Yard:

- 138 kV operating bus including structures, insulators, foundations and jumpers
- Two (2) A-Frames
- One (1) metering current transformer CT1
- One (1) dual core CT used for transformer differential protection
- One (1) static tower and associated static wire

LCRA TSC owns:

The LCRA TSC portion of the Frelsburg Substation (LCRA TSC Yard) including, but not limited to, the following items:

- All transmission facilities contained therein
- The LCRA TSC Yard substation property, ground grid, gravel, fencing and other appurtenances
- The interior fence between the SBEC Yard and the LCRA TSC Yard

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:**

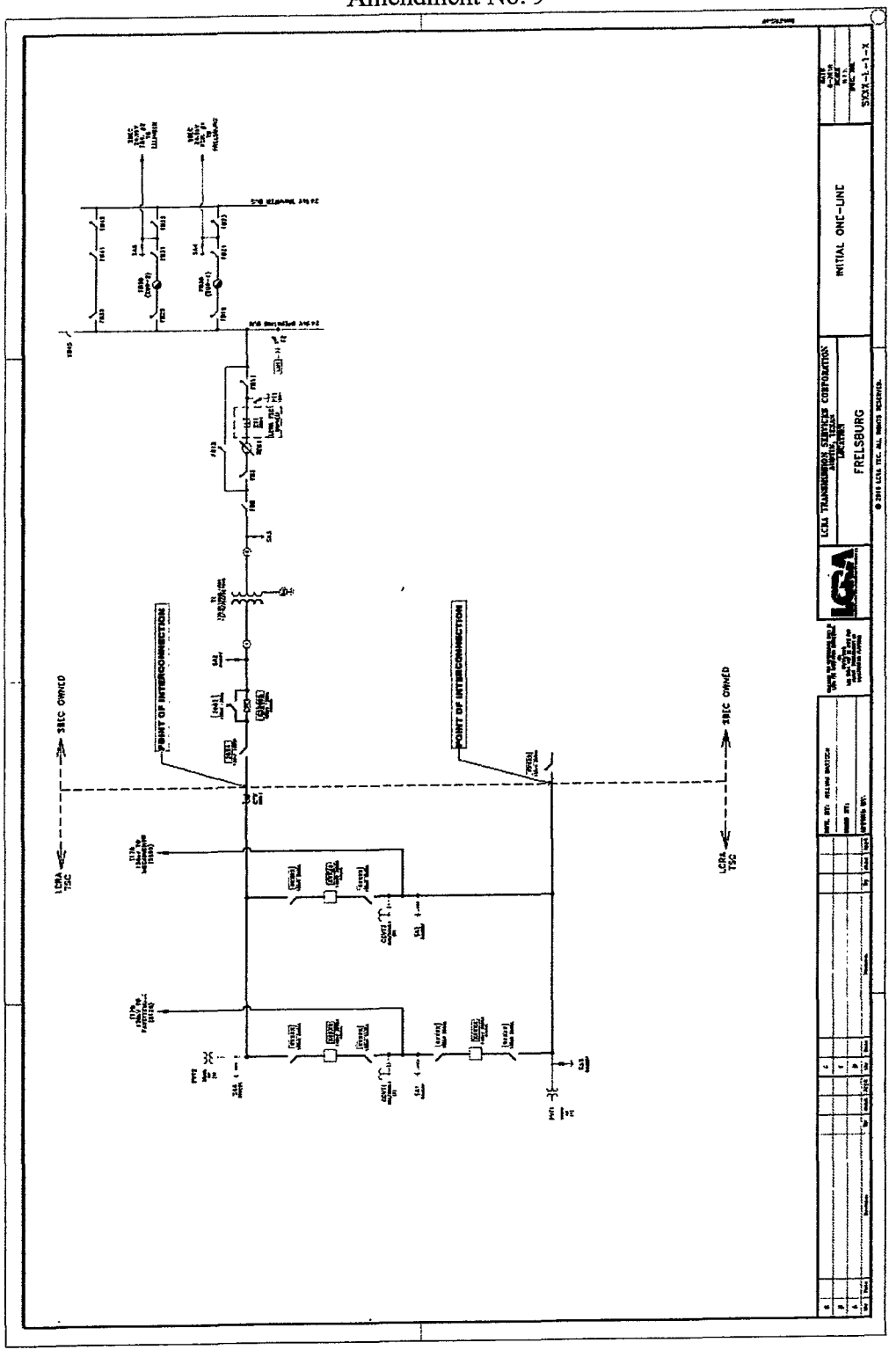
- SBEC and LCRA TSC are to share access to the SBEC Yard by LCRA TSC locks in the gate and in the control house doors.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to SBEC'S circuit switcher CS2685 relaying panel.
- SBEC will provide breaker failure initiate contacts from its circuit switcher CS2685 relaying panel to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.
- LCRA TSC and SBEC 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 and install cable and conduits from the interface junction box located in the LCRA TSC Yard of the substation to the Control House in SBEC Yard for wiring needed to interface the two systems. LCRA TSC will make wiring connections.
- LCRA TSC will supply and install the interface junction box and will provide

trenching, cable and conduits from its facilities to the interface junction box for wiring needed to interface the two systems. LCRA TSC will make all wiring connections.

- SBEC and LCRA TSC ground grids will be installed by each Party but will be connected together at the shared substation boundary by LCRA TSC.
- SBEC and LCRA TSC shield wire systems will be installed by each Party and will be connected together by LCRA TSC.
- LCRA TSC Yard access and physical security will be in accordance with LCRA TSC physical security design guidelines.

FRELSBURG ONE-LINE DIAGRAM

Amendment No. 9



FACILITY SCHEDULE NO. 10
Amendment No. 9

1. **Name:** Prairie View Substation

2. **Facility Location:** The Prairie View Substation is located at 164 Echols St., Prairie View, Waller County, Texas 77446.

3. **Points of Interconnection:** There are five (5) Points of Interconnection in the Prairie View Substation generally described as:

   - where LCRA TSC's jumpers connect to SBEC's 138 kV transmission line, from Waller, located at LCRA TSC's A-Frame structure inside the substation.
   - where LCRA TSC's jumpers connect to SBEC's 138 kV transmission line, from Seaway, located at LCRA TSC's A-Frame structure inside the substation
   - where LCRA TSC's jumpers connect to SBEC's 138 kV transmission line, from Sunnyside, located at LCRA TSC's A-Frame structure inside the substation.
   - where the tubular bus bolts to the four hole pad on SBEC's disconnect switch 3554.
   - where the tubular bus bolts to the four hole pad on SBEC's disconnect switch 10204.

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 T1 transformer and in the T2 transformer. The bus potential transformers both located on the 12.5 kV bus tie.

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

9. **Description of Facilities Owned by Each Party:**
   SBEC owns:
   - The following transmission lines comprised of structures, conductors, insulators, and connecting hardware:
     - 138 kV Prairie View to Seaway transmission line.
     - 138 kV Bellville South to Prairie View transmission line with OPGW shielding and OPGW splices along the transmission line.
     - 138 kV Prairie View to Waller transmission line.

   The Prairie View Substation including, but not limited to, the following items:
   - Two (2) circuit switchers CS3555, and CS10205; associated bypass switches 3557 and 10207; disconnect switches 3554 and 10204
   - Two (2) power transformers T1 and T2 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 including jumpers, protective relay packages and foundations
- All 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
- Under frequency relay equipment
- One (1) control house (18' x 24') with battery bank, battery charger, and other appurtenances
- Two (2) station service SS1 and SS2
- Substation property, ground grid, gravel, perimeter fence and appurtenances

LCRA TSC owns:

- Three (3) 138 kV A-Frame structures, foundations, insulators and jumpers
- 138 kV operating bus including structures, insulators, foundations and jumpers
- Three (3) 138 kV surge arresters SA15, SA16, and SA17
- One (1) 138 kV bus potential transformer PT3
- Ten (10) 138 kV disconnect switches 10189, 10191, 10193, 10198, 10199, 10201, 10203 and three switch numbers to be determined
- Three (3) 138 kV circuit breakers 10190, 10200 and one circuit breaker number to be determined, including foundations, jumpers and protective relay packages
- Two (2) wave traps WT1 and WT3
- Three (3) CCVTs CCVT1, CCVT2, and CCVT3
- Two (2) metering current transformers CT1 and CT2
- Two (2) 138 kV current transformers CT5 and CT6
- The fiber patch panel(s), the fiber facility entry cable(s), and the fiber splice box(es) within the substation for the SBEC fiber
- One (1) control house (24' x 24'-6") with battery bank, battery charger and other appurtenances

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:

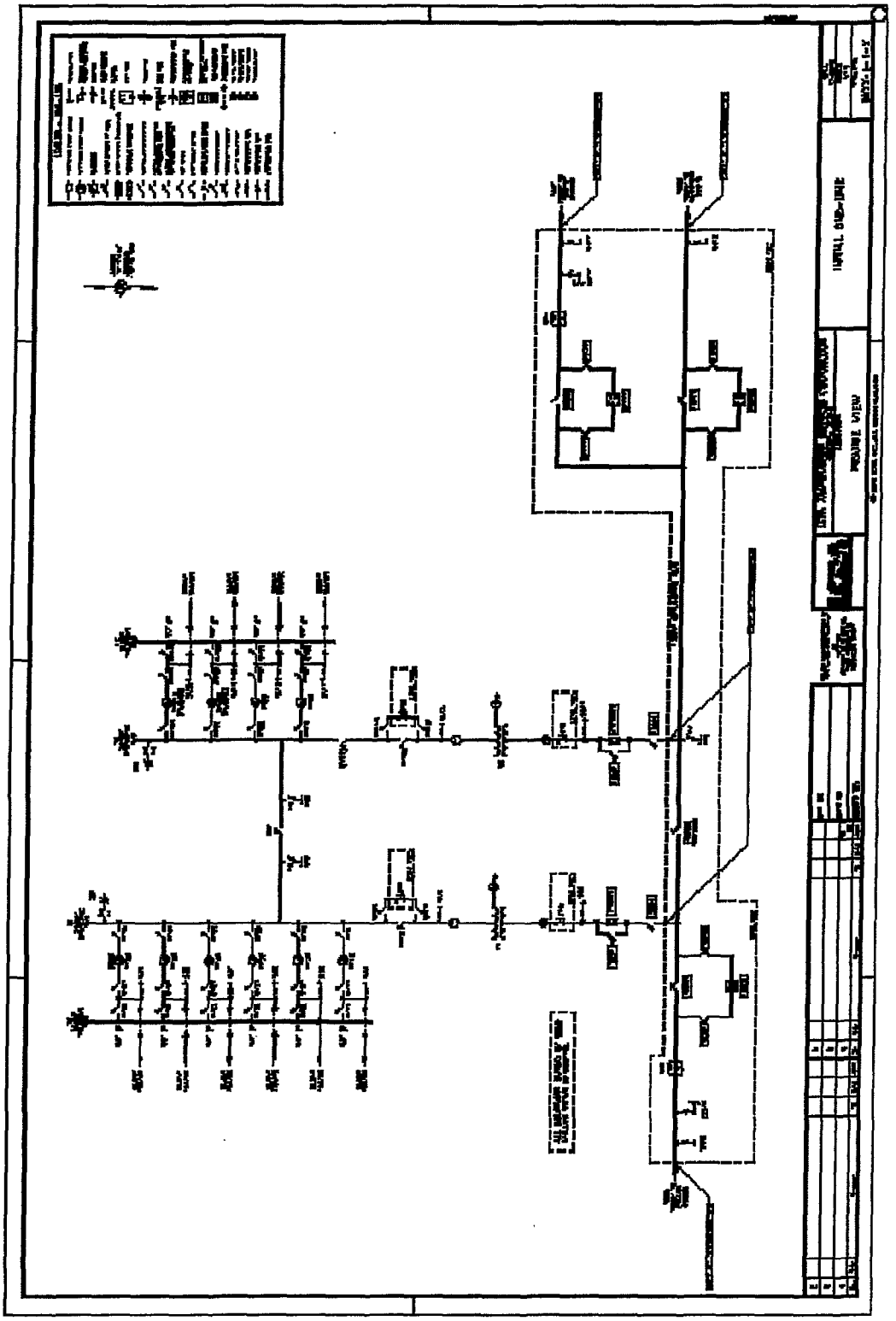
- SBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to SBEC'S circuit switcher CS3555 relaying panel.
- SBEC will provide breaker failure initiate contacts from its circuit switcher

CS10205 relaying panel to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.

- LCRA TSC and SBEC 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 SBEC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- LCRA TSC will provide SBEC with floor space (as available and as necessary) in its control houses for the installation of SBEC required relay panel boards and equipment.

PRAIRIE VIEW ONE-LINE DIAGRAM

Amendment No. 9



FACILITY SCHEDULE NO. 11
Amendment No. 9

1. **Name:** Quanex Substation

2. **Facility Location:** The Quanex Substation is located at 1194 Nelius Road, Bellville, Austin County, Texas 77418.

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

   - where the jumper from switch 772 bolts to the four hole pad on circuit switcher CS-775.
   - where the pipe bus running from the stand holding station service #2 tees into the 12.5 kV operating bus.

4. **Transformation Services Provided by LCRA TSC:** Yes

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

6. **Delivery Voltage:** 12.5/138 kV

7. **Metered Voltage and Location:** The metering voltage is 12.5 kV. The metering current transformers are located inside T2 and in each distribution bay. The bus potential transformer is located on the 12.5 kV transformer bus.

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

9. **Description of Facilities Owned by Each Party:**
   SBEC owns:
   The Quanex Substation including, but not limited to, the following items:
   - 40 foot static pull off structure
   - 138 kV dead-end structures, foundations, insulators and jumpers
   - 138 kV operating bus including structures, insulators, foundations and jumpers
   - One (1) 138 kV surge arrester SA1
   - Four (4) 138 kV switches 772, 774, 776 and 778
   - 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 T-structures, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, bus potential transformer and associated cabling
   - One (1) metering current transformer CT2
   - Under frequency relay equipment
   - Station service SS-1

- Control house (20' 4" X 17') and battery

LCRA TSC owns:

- One (1) circuit switcher CS775 with associated bypass switch 777
- One (1) power transformer T2 with foundation and associated surge arresters
- One (1) 12.5 kV switch QX70 with switch stand
- One (1) mobile hookup with switch QX72
- One (1) 12.5 kV bus potential transformer PT1
- Two (2) metering current transformers CT3 and CT4
- Station service SS2
- Control house (21' X 27') and battery

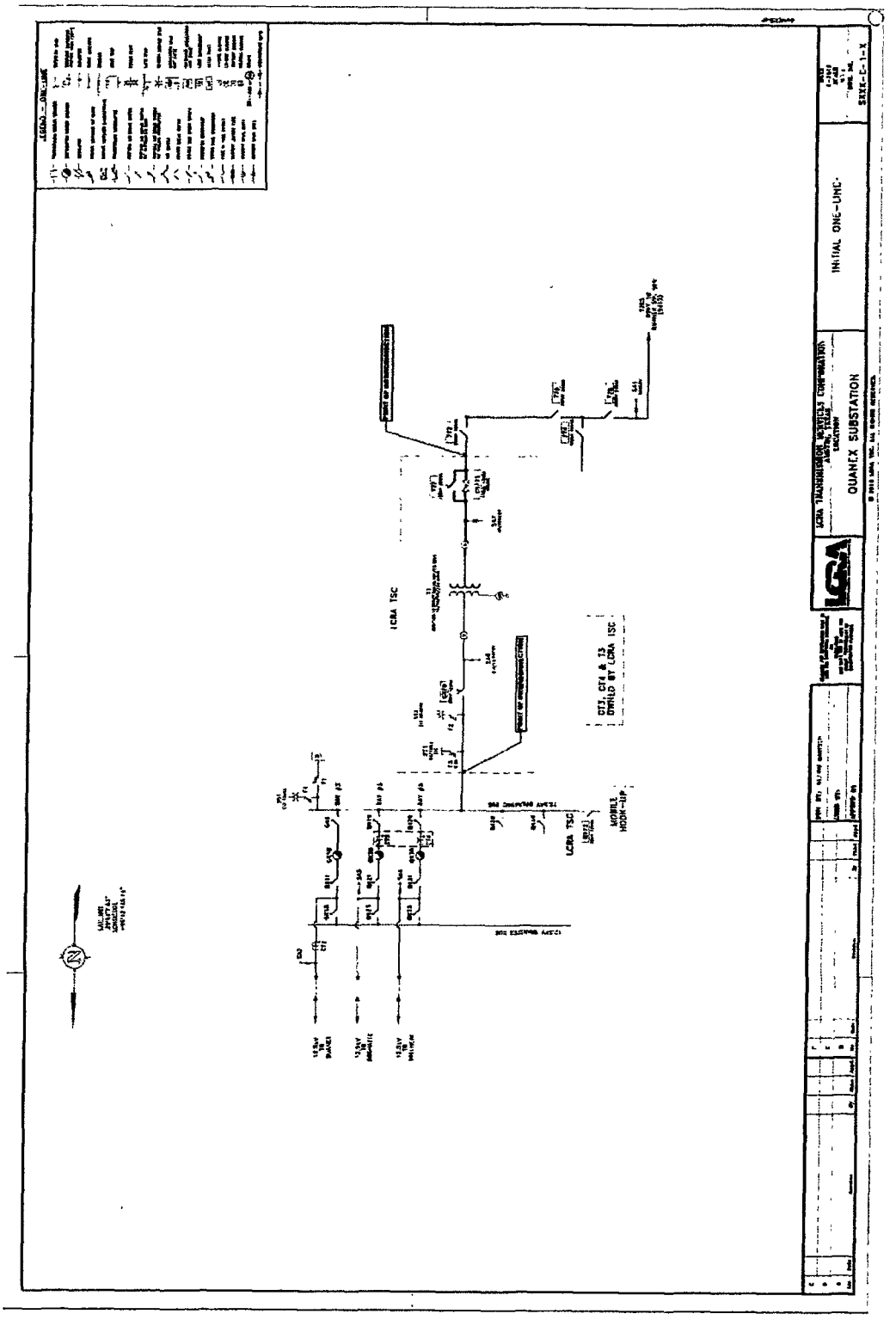
10. **Operational Responsibilities of Each Party:** Each Party is responsible for the operation of the equipment it owns.

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.

QUANEX ONE-LINE DIAGRAM

Amendment No. 9



FACILITY SCHEDULE NO. 12
Amendment No. 9

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

This page intentionally left blank