

Control Number: 35077



Item Number: 788

Addendum StartPage: 0

Project No. 35077

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Amendment No. 8

PUBLIC UTILITY COMMISSION
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INTERCONNECTION AGREEMENT

Between

LCRA Transmission Services Corporation

and

Central Texas Electric Cooperative

December 1, 2017

EIGHTH AMENDMENT TO INTERCONNECTION AGREEMENT

This Eighth Amendment ("Amendment") is made and entered into this ___1st___ day of _December_, 2017, between the Central Texas Electric Cooperative ("CTEC") and LCRA Transmission Services Corporation ("LCRA TSC") collectively referred to hereinafter as the Parties.

WHEREAS, LCRA TSC and CTEC entered into that certain Interconnection Agreement executed August 13, 2009, as amended by that certain Amendment No. 1 executed as of June 22, 2011, as amended by that certain Amendment No. 2 executed as of September 14, 2011, as amended by that certain Amendment No. 3 executed as of September 25, 2012, as amended by that certain Amendment No. 4 executed as of January 7, 2013, as amended by that certain Amendment No. 5 executed as of January 25, 2017, as amended by that certain Amendment No. 6 executed as of February 3, 2017, as amended by that certain Amendment No. 7 executed as of May 19, 2017 (collectively, as amended, the "Agreement");

WHEREAS, LCRA TSC will implement security improvements for the FY18 Physical Security project at Fredericksburg Substation;

WHEREAS, LCRA TSC will install circuit breakers and purchase the 138 kV operating bus from CTEC at the Kendall CTEC Substation related to the Kendall CTEC Circuit Breaker Addition project;

WHEREAS, LCRA TSC will implement security improvements for the FY18 Physical Security project at Pittsburg Substation;

WHEREAS, LCRA TSC will implement security improvements for the FY18 Physical Security project at CTEC Mason Substation; and

WHEREAS, LCRA TSC will implement security improvements for the FY18 Physical Security project at Gillespie 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 Exhibit "A" attached to this Eighth Amendment is hereby added to the Agreement in lieu thereof.
2. Exhibit "A" attached to this Eighth Amendment will become effective upon execution of this Eighth Amendment 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 Eighth Amendment is hereby added to the Agreement in lieu thereof.

4. Facility Schedule No. 4 (including the diagrams attached thereto) attached to this Eighth Amendment will become effective upon execution of this Eighth Amendment 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 Eighth Amendment is hereby added to the Agreement in lieu thereof.
6. Facility Schedule No. 5 (including the diagrams attached thereto) attached to this Eighth Amendment will become effective upon execution of this Eighth Amendment by the Parties.
7. Facility Schedule No. 8 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 8 attached to this Eighth Amendment is hereby added to the Agreement in lieu thereof.
8. Facility Schedule No. 8 (including the diagrams attached thereto) attached to this Eighth Amendment will become effective upon execution of this Eighth Amendment by the Parties.
9. Facility Schedule No. 13 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 13 attached to this Eighth Amendment is hereby added to the Agreement in lieu thereof.
10. Facility Schedule No. 13 (including the diagrams attached thereto) attached to this Eighth Amendment will become effective upon execution of this Eighth Amendment by the Parties.
11. Facility Schedule No. 14 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 14 attached to this Eighth Amendment is hereby added to the Agreement in lieu thereof.
12. Facility Schedule No. 14 (including the diagrams attached thereto) attached to this Eighth Amendment will become effective upon execution of this Eighth 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.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Eighth Amendment to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

CENTRAL TEXAS ELECTRIC
COOPERATIVE

By: Robert A. Loth III

Name: Robert A. Loth III

Title: Chief Executive Officer

Date: December 1, 2017 _____

LCRA TRANSMISSION SERVICES
CORPORATION

By: Sergio Garza, P.E.

Name: Sergio Garza, P.E.

Title: LCRA Vice President, Transmission
Design and Protection

Date: Dec. 01, 2017



EXHIBIT A
Eighth Amendment

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF INTERCONNECTION
1	Buchanan CTEC (6)	69 kV	January 7, 2013
2	Castell (1)	138 kV	September 14, 2011
3	Eckert (2)	4.16 kV	January 7, 2013
4	Fredericksburg (1)	69 kV	Date of 8 th Amendment
5	Kendall CTEC (1)	138 kV	Date of 8 th Amendment
6	Live Oak CTEC (1)	138 kV	August 13, 2009
7	Nimitz (9)	12.5 kV	January 7, 2013
8	Pittsburg (2)	138 kV and 12.5 kV	Date of 8 th Amendment
9	Rim Rock (6)	12.5 kV	August 13, 2009
10	Wolf Creek (1)	138 kV	May 19, 2017
11	Jack Furman (1)	138 kV	June 22, 2011
12	Sunrise Beach (1)	69 kV	August 13, 2009
13	CTEC Mason (1)	138 kV	Date of 8 th Amendment
14	Gillespie (1)	138 kV	Date of 8 th Amendment
15	Hollmig (1)	138 kV	September 14, 2011
16	Nebo (1)	69 kV	January 7, 2013
17	Blumenthal (1)	138 kV	May 19, 2017
18	San Saba (1)	138 kV	February 3, 2017
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FACILITY SCHEDULE NO. 4
Eighth Amendment

1. **Name:** Fredericksburg Substation
2. **Facility Location:** The Fredericksburg Substation is located at 1116S. State Hwy. 16, Fredericksburg, Gillespie County, Texas 78624.
3. **Points of Interconnection:** There is one (1) Point of Interconnection in the Fredericksburg Substation generally described as:
 - where the incoming 69 kV CTEC transmission line from Goehmann Lane Substation terminates at the dead end structure in the substation.
4. **Transformation Services Provided by LCRA TSC:** No
5. **Metering Services Provided by LCRA TSC:** No
6. **Delivery Voltage:** 69 kV
7. **Metered Voltage and Location:** N/A
8. **One Line Diagram Attached:** Yes
9. **Description of Facilities Owned by Each Party:**

CTEC owns:

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - Fredericksburg to Goehmann Lane transmission line

LCRA TSC owns:

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

- Line protection equipment for the CTEC owned Fredericksburg to Goehmann Lane transmission line
- 69 kV dead-end structures, foundations, insulators and jumpers
- One (1) 69 kV surge arrester SA15
- One (1) 69 kV bus potential transformer PT3
- One (1) 69 kV switch 2411
- One (1) 69 kV circuit breaker 2410 including foundation, jumpers and protective relay package
- One (1) auto transformer AT2 with foundation, jumpers, protective relaying and associated surge arresters
- One (1) 138 kV circuit breaker 9810 including foundation, jumpers and protective relay package

- One (1) 138 kV switch 9809
- 138 kV bus including structures, insulators, foundations and jumpers
- One (1) control house (24' x 39') with batteries, battery charger and appurtenances
- Two (2) station service SS1 and SS2 (not shown on one-line drawing)
- Substation property, ground grid, gravel, fencing 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.

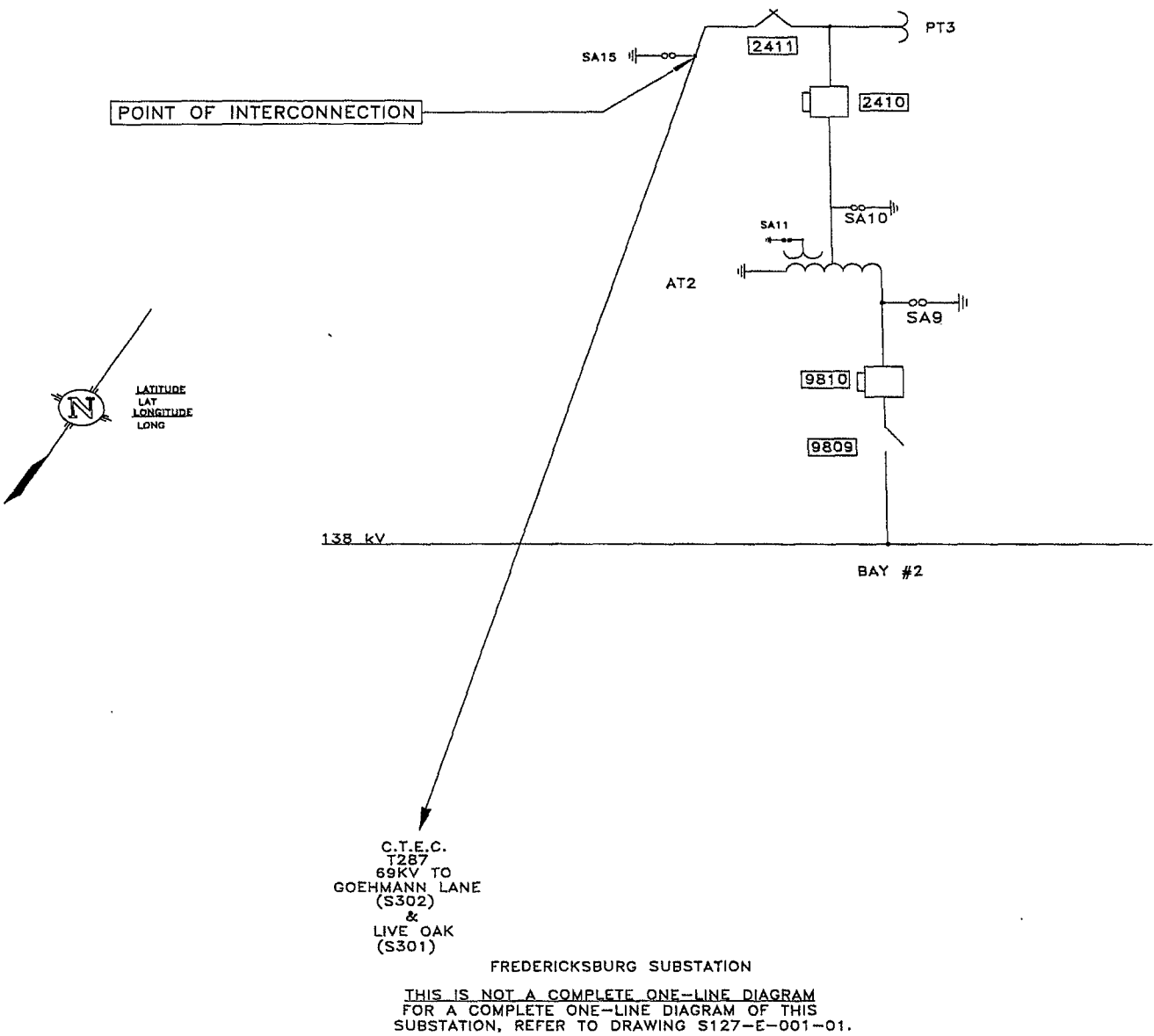
12. Other Terms and Conditions:

- LCRA TSC will share access to the Fredericksburg Substation by allowing CTEC to place a hardened lock in series with LCRA TSC's lock in the chain securing the gate.
- LCRA TSC will share access to the Fredericksburg Substation control house. Access is obtained by calling LCRA TSC's System Operations Control Center using the intercom at the door of the control house.
- For the facilities that it owns, LCRA TSC will utilize its access and physical security standards.

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FREDERICKSBURG ONE-LINE DIAGRAM

Eighth Amendment



FACILITY SCHEDULE NO. 5

Eighth Amendment

1. **Name:** Kendall CTEC Substation
2. **Facility Location:** The Kendall CTEC Substation is located at 50 Flat Rock Creek, Comfort, Kendall County, Texas 78013.
3. **Points of Interconnection:** There is one (1) Point of Interconnection in the Kendall CTEC Substation generally described as:
 - where the LCRA TSC 138 kV bus extension attaches to the four hole pad on CTEC switch 3174.
4. **Transformation Services Provided by LCRA TSC:** No
5. **Metering Services Provided by LCRA TSC:** Yes, per Wholesale Metering Service Agreement between the Parties.
6. **Delivery Voltage:** 138 kV
7. **Metered Voltage and Location:** The metering voltage is 24.9 kV. The metering current transformers are located in the T1; 24.9 kV transformer bus. The bus potential transformer is on the 24.9 kV operating bus.
8. **One Line Diagram Attached:** Yes
9. **Description of Facilities Owned by Each Party:**

CTEC owns:

The Kendall CTEC substation including but not limited to, the following items:

- One (1) circuit switcher CS3175 with foundation, protective relaying and associated bypass switch 3187
- One (1) 138 kV circuit switcher disconnect switch 3174
- One (1) power transformer T1 with foundation, jumpers, protective relaying and 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 structure, insulators, disconnect switches, surge arresters and 24.9 kV operating and transfer bus
- One (1) 24.9 kV transformer bus disconnect switch KL5
- Three (3) single phase regulators REG1 with associated bypass and disconnect

switches

- One (1) station service SS1 with fuse F1
- One (1) control house (21' x 24') with batteries, battery charger and appurtenances
- Substation ground grid, gravel, fencing and other appurtenances on property leased from LCRA TSC

LCRA TSC owns:

- 138 kV bus including structures, insulators, foundations and jumpers
- 138 kV dead-end structures, foundations, insulators and jumpers
- Two (2) 138 kV circuit breakers 28480 and 28490 with foundations, jumpers and protective relaying
- Six (6) 138 kV disconnect switches 28479, 28481, 28486, 28489, 28491 and 28496
- Three (3) 138 kV surge arresters SA3, SA4 and SA5
- Two (2) 138 kV coupling capacitor voltage transformers CCVT1 and CCVT2
- One (1) 138 kV bus differential and breaker failure relaying scheme
- One (1) power voltage transformer PVT1
- One (1) meter panel with meters
- One (1) metering current transformer CT1
- One (1) 24.9 kV bus potential transformer PT1
- One (1) underfrequency relay panel
- One (1) control house (21' x 27') with batteries, battery charger and appurtenances
- Substation property which has been leased to CTEC

- 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 will share access to the Substation by allowing CTEC to place a hardened lock in series with LCRA TSC's lock in the chain securing the gate.
 - LCRA TSC will share access to the Substation control house. Access is obtained by calling LCRA TSC's System Operations Control Center using the intercom at the door of the control house.
 - LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential relaying panel to the CTEC's circuit switcher CS3175 relaying panel.
 - CTEC will provide breaker failure initiate contacts from its circuit switcher CS3175 relaying panel to the LCRA TSC's 138 kV bus differential relaying panel and breaker failure relaying scheme.
 - CTEC will install and provide relaying current transformers and associated

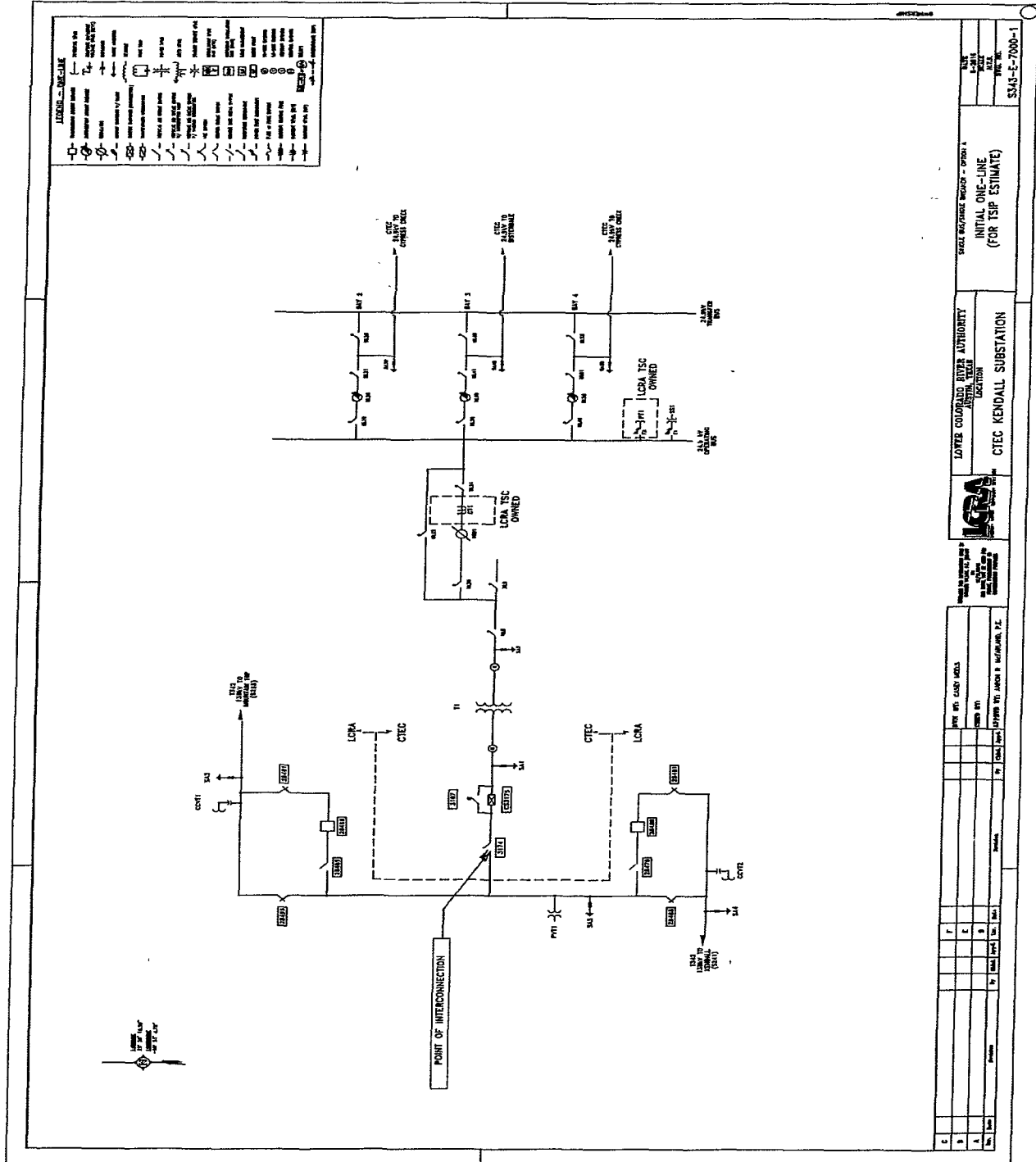
cabling and wiring from CTEC's power transformer T1 to LCRA TSC's 138 kV bus differential relaying panel.

- CTEC will coordinate bus differential and circuit switcher breaker failure relaying schemes and settings.
- CTEC will install one 138 kV 2000A VAB Switch disconnect on the high-side of the CTEC existing circuit switcher.
- CTEC will replace underrated circuit switcher with one 138 kV 2000A 40kAIC circuit switcher.
- CTEC will modify or replace T1 Diff Panel to include Buss Diff/Breaker Failure relay and control connections.
- LCRA TSC and CTEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- For the facilities that it owns, LCRA TSC will utilize its access and physical security standards.

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KENDALL CTEC ONE-LINE DIAGRAM

Eighth Amendment



FACILITY SCHEDULE NO. 8

Eighth Amendment

1. **Name:** Pittsburg Substation
2. **Facility Location:** The Pittsburg Substation is located at 1504 Birmingham Ave., Llano, Llano County, Texas 78643.
3. **Points of Interconnection:** There are two (2) Points of Interconnection in the Pittsburg Substation generally described as:
 - where CTEC's pipe, from switch 11834, attaches to LCRA TSC's 138 kV operating bus #1.
 - where the pipe jumper between CTEC 12.5 kV switches PG33 and PG32 attaches to LCRA TSC's wire jumper between the LCRA TSC underground conductors and LCRA TSC's surge arrester SA37.
4. **Transformation Services Provided by LCRA TSC:** No
5. **Metering Services Provided by LCRA TSC:** Yes, per Wholesale Metering Service Agreement between the Parties.
6. **Delivery Voltage:** 138 kV and 12.5 kV
7. **Metered Voltage and Location:** The metering voltage is 12.5 kV. The metering current transformers are located in bus tie bay #1-3 and bus tie bay #2-8, along with metering CT21 inside T4. The bus potential transformers are located on both 12.5 kV operating bus #1 and 12.5 kV operating bus #2.
8. **One Line Diagram Attached:** Yes
9. **Description of Facilities Owned by Each Party:**
CTEC owns:
 - 138 kV bay 1 dead end structure, foundations, insulators and jumpers
 - Transformer T4 bus support structure, foundations, insulators, and jumpers
 - One (1) circuit switcher CS11835 and associated disconnect switch 11834 and bypass switch 11837
 - One (1) power transformer T4 with internal metering CT21 and with associated surge arresters, foundation, jumpers and protective relaying
 - One (1) power transformer T3 (12.5/24.5 kV) and associated surge arresters, disconnect switches, bypass switch, jumpers, foundation and protective relaying
 - Four (4) distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
 - Five (5) distribution and total circuit breakers PG10, PG20, PG40, PG50 and PG130 including jumpers and protective relaying
 - Six (6) distribution and total bays (bays 1-1 thru 1-5 and 1-13) including A-

frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, and associated cabling

LCRA TSC owns: The Pittsburg Substation including, but not limited to, the following items:

- 138 kV dead-end structures, foundations, insulators and jumpers (except bay 1)
- 138 kV operating bus including structures, insulators, foundations and jumpers
- One (1) 138 kV bus differential and breaker failure relaying scheme
- 12.5 kV grade level bus tie / mobile hookup cables and pad mounted transfer switch
- 12.5 kV bus potential transformer PT6 with fuse F5
- Two (2) metering current transformers CT3 and CT8 (not shown on one-line)
- Two (2) control houses (20' x 27'), (24' x 51') with batteries, battery charger and appurtenances
- One (1) meter panel with meters
- Two (2) station service (not shown on partial one line drawing)
- One (1) underfrequency relay panel
- Substation property, ground grid, gravel, fencing and other appurtenances

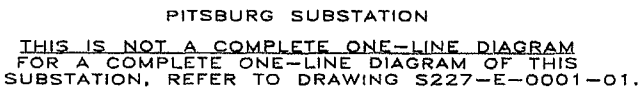
10. Operational Responsibilities of Each Party: Each Party is responsible for the operation of the equipment it owns.

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:

- LCRA TSC will share access to the Pittsburg Substation by allowing CTEC to place a hardened lock in series with LCRA TSC's lock in the chain securing the gate.
- LCRA TSC will share access to the Pittsburg Substation control house. Access is obtained by calling LCRA TSC's System Operations Control Center using the intercom at the door of the control house.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential relaying panel to the CTEC's circuit switcher CS11835 relaying panel.
- CTEC will provide breaker failure initiate contacts from its circuit switcher CS11835 relaying panel to the LCRA TSC's 138 kV bus differential relaying panel and breaker failure relaying scheme.
- LCRA TSC and CTEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap.
- For the facilities that it owns, LCRA TSC will utilize its access and physical security standards.

Eighth Amendment



FACILITY SCHEDULE NO. 13
Eighth Amendment

1. **Name:** CTEC Mason Substation (aka Fredonia Tap)
2. **Facility Location:** The Central Texas Electric Cooperative CTEC Mason Substation is located 3 miles east of the City of Mason at 3226 E. State Hwy 29, Mason County, Texas.
3. **Points of Interconnection:** There is two (2) Point of Interconnection in the CTEC Mason Substation generally described as:
 - where the LCRA TSC jumpers, running from the LCRA TSC 69 kV bus to CTEC's 69 kV box structure, connects to the CTEC 69 kV string bus running in the CTEC 69 kV box structure. (LCRA TSC 69 kV bus runs to LCRA TSC switch 22609).
 - where the LCRA TSC jumpers running from LCRA TSC switch 27649 attach to CTEC's 69 kV string bus.
4. **Transformation Services Provided by LCRA TSC:** No
5. **Metering Services Provided by LCRA TSC:** Yes, per Wholesale Metering Services Agreement between the Parties.
6. **Delivery Voltage:** 69 kV
7. **Metered Voltage and Location:** The metering voltage is 24.9 kV. The metering current transformers are owned by LCRA TSC and located between the station voltage regulators and the 24.9 kV operating bus. The potential transformers are owned by CTEC and located on the 24.9 kV operating bus.
8. **One Line Diagram Attached:** Yes
9. **Description of Facilities Owned by Each Party:**

CTEC owns:

The CTEC Mason Substation including but not limited to the following items:

 - The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - CTEC Mason to Fredonia 69 kV transmission line
 - One (1) A-frame dead end structure for CTEC Mason to Fredonia 69 kV transmission line
 - Three (3) bus supports to raise the 69 kV string bus
 - One (1) 69 kV bus differential relaying scheme
 - One (1) power transformer T1 with associated surge arresters, foundation, jumpers and protective relaying
 - Three (3) single phase regulators REG1 with associated disconnect and bypass

- switches, foundations, insulators and jumpers
- 69 kV box structure including insulators, 69 kV operating bus (string bus), jumpers and foundations (except for LCRA TSC insulators and jumpers at the Point of Interconnection on the 69 kV box structure)
- One (1) 69 kV circuit switcher CS22615 and associated disconnect and bypass switches 22614 and 22617
- One (1) 69 kV bus potential transformer PT1
- One (1) 69 kV current transformer CT4
- Two (2) 69 kV surge arresters SA1 and SA16
- Six (6) 69 kV switches 883, 22618, 22623, 27629, 27631 and 27633
- One (1) 69 kV circuit breaker 27630 including jumpers, foundation and protective relay package
- All distribution and total bays including box structure, insulators, disconnect switches, 24.9 kV operating and transfer bus and associated cabling
- One (1) control house (12' x 15') with battery bank, charger and appurtenances
- One (1) station service SS1 with fuse F3
- Substation property, ground grid, gravel, fencing and other appurtenances

LCRA TSC owns:

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - CTEC Mason to Fort Mason 138 kV transmission line
 - CTEC Mason to Castell / Pittsburg 138 kV transmission line
- Two (2) 138 kV dead end structures, foundations and insulators
- 138 kV ring bus including structures, foundations, jumpers and protective relaying
- Four (4) 138 kV circuit breakers 22500, 22530, 22540 and 27660 including jumpers, foundations, and protective relaying
- Nine (9) 138 kV switches 22499, 22501, 22529, 22531, 22536, 22539, 22541, 27659 and 27661
- Three (3) 138 kV surge arrester SA10, SA11 and SA12
- Two (2) coupling capacitor voltage transformer CCVT2 and CCVT3
- Two (2) auto transformers AT2 and AT3 with associated surge arresters, jumpers, foundations and protective relaying
- Two (2) 69 kV circuit breakers 22610 and 27650 including jumpers, foundations and protective relaying
- Three (3) 69 kV switches 22609, 22611 and 27649
- One (1) per phase, 69 kV insulator and jumpers mounted to CTEC box structure, adjacent to Point of Interconnection with CTEC 69 kV operating bus (string bus)
- One (1) supervisory Interface Panel / RTU Panel and associated cabling
- Metering/Underfrequency Panel and associated cabling
- One (1) metering current transformer CT1
- One (1) 24.9 kV bus potential transformer PT2 with fuse F2
- One (1) control house (24' x 42') with battery bank, charger and appurtenances

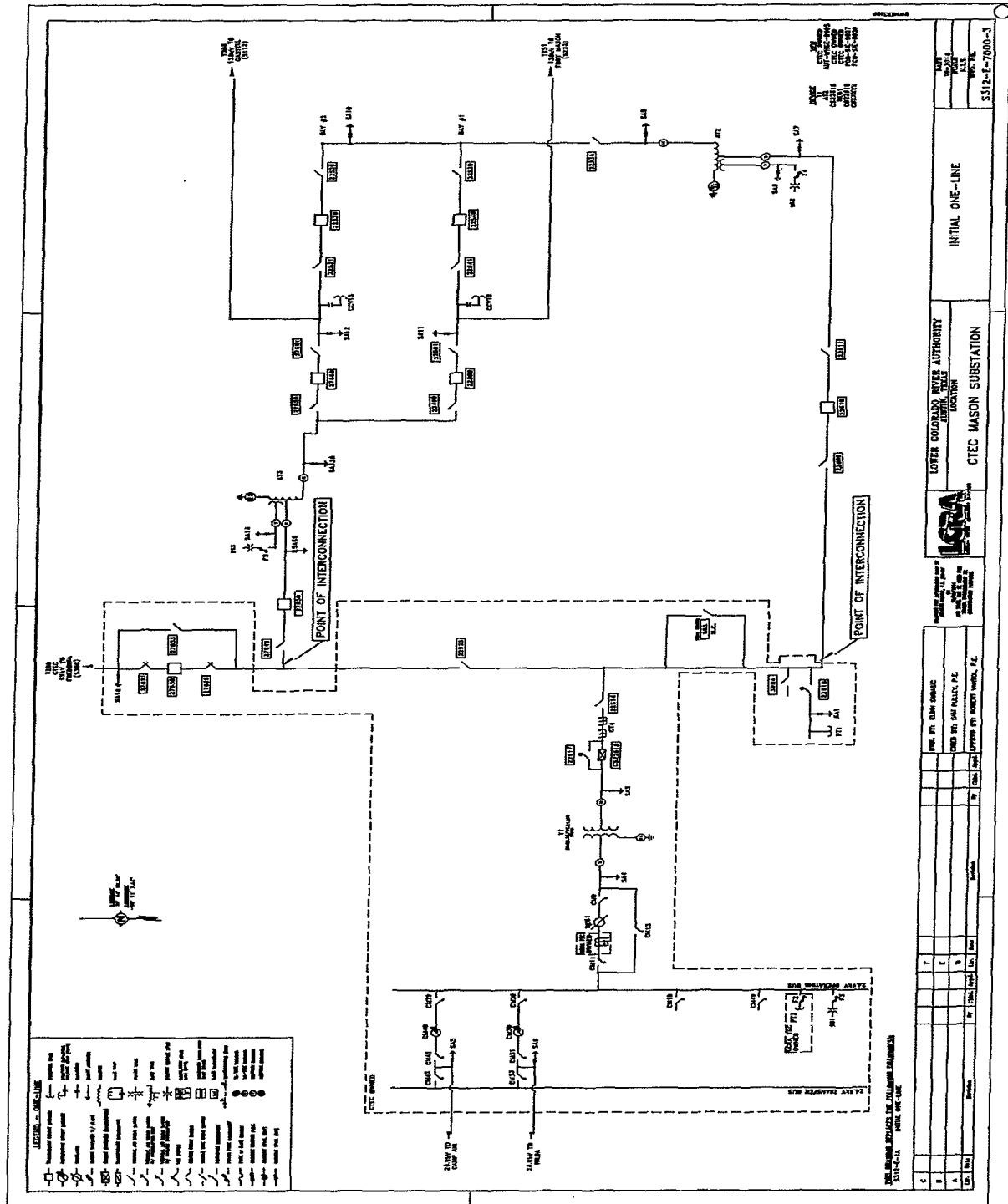
- Two (2) station service SS2 and SS3 with fuse F4 and F5
10. **Operational Responsibilities of Each Party:** Each Party is responsible for the operation of the equipment it owns.
 11. **Maintenance Responsibilities of Each Party:** Each Party will be fully responsible for the maintenance of the equipment it owns.
 12. **Other Terms and Conditions:**
 - CTEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in CTEC's control house door.
 - LCRA TSC will share access to its CTEC Mason Substation control house. Access is obtained by calling LCRA TSC's System Operations Control Center using the intercom at the door of the control house.
 - LCRA TSC will move the Meter/Under Frequency, RTU and SIP panels from the CTEC control house to the new LCRA TSC control house.
 - CTEC will provide tripping and close inhibit contacts from its 69kV bus differential relaying panel to the LCRA TSC circuit breaker 27650 relaying panel.
 - CTEC will provide tripping and close inhibit contacts from its 69 kV bus differential relaying panel to the LCRA TSC circuit breaker 22610 relaying panel.
 - CTEC will provide breaker failure tripping and close inhibit contacts from its CB27630 & CS22615 relaying panels to the LCRA TSC circuit breaker CB27650 relaying panel.
 - CTEC will provide breaker failure tripping and close inhibit contacts from its CB27630 & CS22615 relaying panels to the LCRA TSC circuit breaker CB22610 relaying panel.
 - LCRA TSC will provide breaker failure initiate contacts from its circuit breaker 27650 relaying panel to the CTEC's 69 kV bus differential relaying panel and breaker failure relaying scheme.
 - LCRA TSC will provide breaker failure initiate contacts from its circuit breaker 22610 relaying panel to the CTEC's 69 kV bus differential relaying panel and breaker failure relaying scheme.
 - CTEC will provide fuse blocks at its 69kV PT distribution panel for connection of relay potentials to LCRA TSC auto-transformer AT2 and AT3 differential relaying panels.
 - LCRA TSC will supply and provide relaying current transformers from its CB22610 and CB27650 to CTEC's 69 kV bus differential relaying panel.
 - LCRA TSC and CTEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap.
 - LCRA TSC and CTEC shall each pay for the equipment that they each own.
 - CTEC will pay for and own the new dead end structure for the CTEC Mason to Fredonia 69 kV transmission line, along with CB27630 and associated equipment.
 - CTEC will pay for and own the three (3) new 69 kV bus support structures.

- For the facilities that it owns, LCRA TSC will utilize its access and physical security standards.

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CTEC MASON ONE-LINE DIAGRAM

Eighth Amendment



FACILITY SCHEDULE NO. 14

Eighth Amendment

1. **Name:** Gillespie Substation
2. **Location:** The Gillespie Substation is located 1.7 miles north of Fredericksburg, Texas at 2826 N. US Hwy 87, Fredericksburg, Gillespie County, Texas 78624.
3. **Points of Interconnection:** There is one (1) Point of Interconnection in the Gillespie Substation generally described as:
 - where the jumper from the LCRA TSC 138 kV Operating Bus #2 connects to the four hole pad on switch 22654
4. **Transformation Services Provided by LCRA TSC:** No
5. **Metering Services Provided by LCRA TSC:** Yes, per Wholesale Metering Service Agreement between the Parties.
6. **Delivery Voltage:** 138 kV
7. **Metered Voltage and Location:** The metering voltage is 12.5 kV. The metering current transformer is owned by LCRA TSC and located in the totalizing bay. The potential transformers are owned by CTEC and located on the 12.5 kV operating bus.
8. **One-Line Diagram Attached:** Yes
9. **Description of Facilities Owned by Each Party:**

CTEC owns:

 - One (1) circuit switcher CS22655 with associated disconnect and bypass switches 22654 and 22657, foundation and protective relaying
 - One (1) power transformer T2 with foundations, jumpers, associated surge arresters and protective relaying
 - All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
 - All T2 distribution circuit breakers including jumpers, protective relay packages and foundations
 - All T2 distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, bus potential transformer, 12.5 kV operating and transfer bus, and associated cabling
 - One (1) regulator REG1 with associated disconnect and bypass switches
 - One (1) station service SS2 with associated fuse F1

LCRA TSC owns:

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

 - All facilities within the Gillespie Substation except those listed as being owned by CTEC

- 138 kV Operating Bus #2 including structures, insulators, foundations and jumpers
- 138 kV bus differential and breaker failure relaying scheme
- The jumper from the 138 kV Operating Bus #2 to the Point of Interconnection at the four hole pad on switch 22654
- One (1) meter panel with meters
- One (1) metering current transformer CT1 in the CTEC T2 totalizing bay
- Substation property, ground grid, gravel, fencing 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.

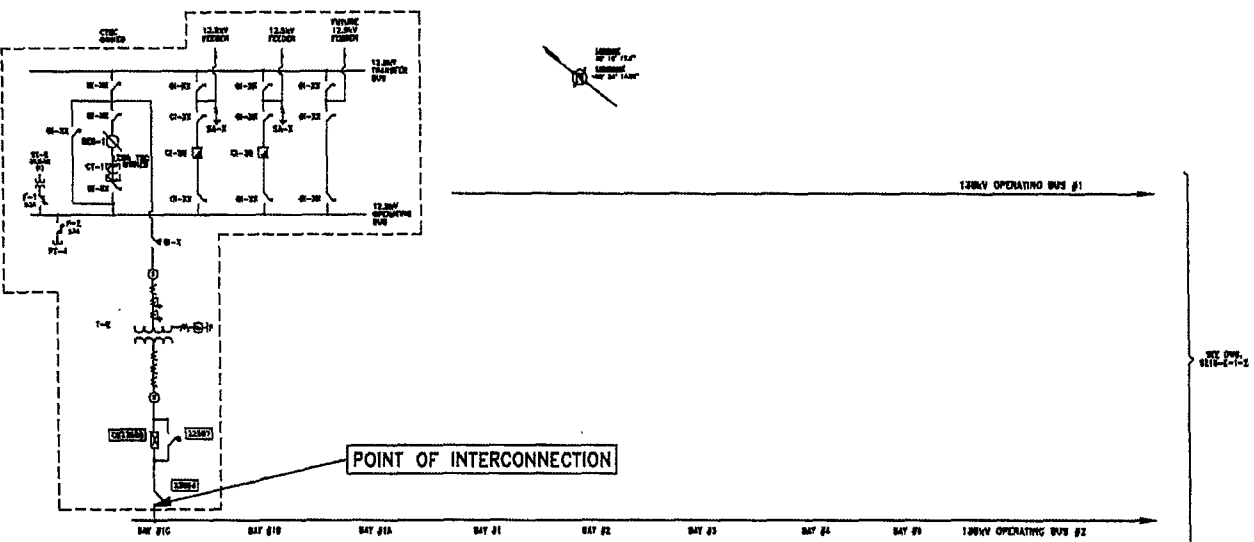
12. Other Terms and Conditions:

- LCRA TSC will share access to the Gillespie Substation by allowing CTEC to place a hardened lock in series with LCRA TSC's lock in the chain securing the gate.
- LCRA TSC will share access to the Gillespie Substation control house. Access is obtained by calling LCRA TSC's System Operations Control Center using the intercom at the door of the control house.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential relaying panel to the CTEC's circuit switcher CS22655 relaying panel.
- CTEC will provide breaker failure initiate contacts from its circuit switcher CS22655 relaying panel to the LCRA TSC's 138 kV bus differential relaying panel and breaker failure relaying scheme.
- LCRA TSC and CTEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap.
- For the facilities that it owns, LCRA TSC will utilize its access and physical security standards.

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GILLESPIE ONE-LINE DIAGRAM

Eighth Amendment



GILLESPIE SUBSTATION
THIS IS A PARTIAL ONE LINE DRAWING. FOR A
COMPLETE ONE LINE SEE DRAWING S218-E-1-1