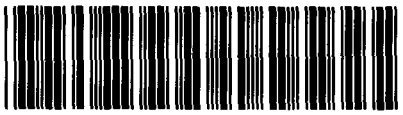

Control Number: 35077

Item Number: 895

Addendum StartPage: 0

Project No. 35077

Amendment No. 5

INTERCONNECTION AGREEMENT

Between

LCRA Transmission Services Corporation

and

Pedernales Electric Cooperative, Inc.

November 19, 2018

895

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FIFTH AMENDMENT TO
INTERCONNECTION AGREEMENT

This Fifth Amendment ("Amendment") is made and entered into this 19 day of NOVEMBER, 2018, between the Pedernales Electric Cooperative, Inc. ("PEC") and LCRA Transmission Services Corporation ("LCRA TSC") collectively referred to hereinafter as the Parties.

WHEREAS, LCRA TSC and PEC entered into that certain Interconnect Agreement executed April 12, 2010, as amended by that certain Amendment No. 1 executed as of April 6, 2011, as amended by that certain Amendment No. 2 executed as of October 14, 2014, as amended by that certain Amendment No. 3 executed as of February 2, 2017, and as amended by that certain Amendment No. 4 executed as of October 31, 2017 collectively, as amended, (the "**Agreement**");

WHEREAS, the Parties entered into an Amended and Restated Memorandum of Understanding Regarding the Leander-to-Round Rock 138-kV Project dated February 13, 2015 (the "**MOU**") which set forth principles and responsibilities between the Parties regarding the CCN filing and subsequent build-out of two new load-serving substations (now known as Ridgmar and Spanish Oak);

WHEREAS, the Parties are entering into a Purchase Agreement in which PEC is purchasing transformation related equipment from LCRA TSC at Ridgmar and Spanish Oak Substations as contemplated by the MOU;

WHEREAS, the Parties now desire to amend this Agreement to add new transmission points of interconnection at Leander Substation and points of interconnection for PEC's transformation equipment, pursuant to the Purchase Agreement, at Ridgmar and Spanish Oak Substations;

WHEREAS, PEC will convert the existing 138-kV operate and transfer bus to a breaker and a half configuration at Leander Substation; and

WHEREAS, the PEC Pipeline Substation was added to the Meter Location Schedules and Leander Substation was deleted from the Meter Location Schedules as details are added to Leander Facility Schedule because of added Points of Interconnection at Leander 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" is deleted in its entirety and the Exhibit "A" attached to this Fifth Amendment is hereby added to the Agreement in lieu thereof.

2. Exhibit "A" attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.

3. Facility Schedule No. 44 (including the diagrams attached thereto) attached to this Fifth Amendment is hereby added to the Agreement.

4. Facility Schedule No. 44 (including the diagrams attached thereto) attached to this

Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.

5. Facility Schedule No. 45 (including the diagrams attached thereto) attached to this Fifth Amendment is hereby added to the Agreement.

6. Facility Schedule No. 45 (including the diagrams attached thereto) attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.

7. Facility Schedule No. 46 (including the diagrams attached thereto) attached to this Fifth Amendment is hereby added to the Agreement.

8. Facility Schedule No. 46 (including the diagrams attached thereto) attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.

9. The Meter Location Schedule is deleted in its entirety and the amended Meter Location Schedule attached to this Fifth Amendment is hereby added to the agreement in lieu thereof.

10. The Meter Location Schedule attached to this Fifth Amendment will become effective upon execution of this Fifth Amendment by the Parties.

11. The Leander Substation MLS Section 18 is hereby deleted by this Fifth Amendment.

12. The Pipeline Substation MLS Section 32 attached to this Fifth Amendment is hereby added to the Agreement.

13. The Pipeline Substation MLS Section 32 attached to this Fifth Amendment will become effective upon execution of this Fifth 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.

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

PEDERNALES ELECTRIC COOPERATIVE, INC.

By: _____

Name: Brian Gedrich

Title: Vice President, Engineering

Date: NOVEMBER 19, 2018

LCRA TRANSMISSION SERVICES CORPORATION

By: _____

Name: Sergio Garza, P.E.

Title: LCRA Vice President, Transmission Design and Protection

Date: NOV 16 2018

EXHIBIT A
Fifth Amendment

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF INTERCONNECTION
1	Andice (2)	138 kV	April 12, 2010
2	Antler (2)	138 kV	October 14, 2014
3	Avery Ranch (3)	138 kV	April 6, 2011
4	Bee Creek (2)	138 kV	October 14, 2014
5	Bergheim (4)	138 kV	October 31, 2017
6	Buda Split (1)	138 kV	April 12, 2010
7	Burnet (4)	12.5/69/138 kV	October 31, 2017
8	Buttercup (2)	138 kV	October 14, 2014
9	Camp Gary (9)	12.5 kV	April 12, 2010
10	Canyon (3)	138 kV	October 14, 2014
11	Copperas Cove (2)	138 kV	October 14, 2014
12	E. Babe Smith (1)	138 kV	February 2, 2017
13	Escarpment (2)	138 kV	April 12, 2010
14	Fairland (2)	138 kV	October 31, 2017
15	Fairoaks (2)	138 kV	April 12, 2010
16	Friendship (2)	138 kV	April 12, 2010
17	Gabriel (1)	138 kV	October 31, 2017
18	Glasscock (12)	24.9 kV	February 2, 2017
19	Goforth (2)	138 kV	April 12, 2010
20	Granite Mountain (2)	138 kV	April 12, 2010
21	Graphite Mine (1)	138 kV	April 12, 2010
22	Horseshoe Bay (2)	138 kV	October 31, 2017
23	Inks Dam (0) Terminated	12.5 kV	October 14, 2014
24	Lago Vista (4)	138 kV	October 31, 2017
25	Lakeway (1)	138 kV	February 2, 2017
26	Manchaca (2)	138 kV	October 14, 2014
27	Marshall Ford (6)	138 kV	October 31, 2017
28	Mc Carty Lane East (3)	138 kV	October 31, 2017
29	Miller Creek (1)	138 kV	April 12, 2010
30	Mountain Top (4)	138 kV	October 14, 2014
31	Phillips Johnson City (3)	12.5 kV	April 6, 2011
32	River Oaks (1)	138 kV	October 14, 2014
33	Rohr (1)	138 kV	April 12, 2010
34	Segovia (1)	69 kV	April 12, 2010
35	'Sherwood Shores (2)	138 kV	October 31, 2017
36	Spicewood (2)	138 kV	February 2, 2017

EXHIBIT A
Fifth Amendment
(continued)

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF INTERCONNECTION
37	Turnersville (4)	138 kV	April 6, 2011
38	Wirtz (6)	69/138 kV	October 31, 2017
39	Kent Street (2)	138 kV	October 14, 2014
40	Starcke (1)	138 kV	February 2, 2017
41	Dobyville (1)	138 kV	April 12, 2010
42	Buckner Boys Ranch (1)	138 kV	April 6, 2011
43	Esperanza (1)	138 kV	October 31, 2017
44	Leander (2)	138 kV	Date of 5th Amendment
45	Ridgmar (1)	138 kV	Date of 5th Amendment
46	Spanish Oak (1)	138 kV	Date of 5th Amendment
47			
MLS Section 1	Balcones (0)		October 14, 2014
MLS Section 2	Bertram (0)		February 2, 2017
MLS Section 3	Blanco (0)		October 14, 2014
MLS Section 4	Blockhouse (0)		October 14, 2014
MLS Section 5	Buda (0)		February 2, 2017
MLS Section 6	Cedar Valley (0)		October 14, 2014
MLS Section 7	Centex (0)		October 14, 2014
MLS Section 8	Cranes Mill (0)		October 14, 2014
MLS Section 9	Devils Hill (0)		October 14, 2014
MLS Section 10	Dripping Springs (0)		October 14, 2014
MLS Section 11	Fischer (0)		October 14, 2014
MLS Section 12	Flatrock (0)		February 2, 2017
MLS Section 13	Henly (0)		October 14, 2014
MLS Section 14	Highway 32 (0)		October 14, 2014

EXHIBIT A
Fifth Amendment
(continued)

FACILITY SCHEDULE NO.	LOCATION OF POINT(S) OF INTERCONNECTION (# of Points)	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF INTERCONNECTION
MLS Section 15	Hunter (0)		October 14, 2014
MLS Section 16	Johnson City (0)		October 14, 2014
MLS Section 17	Kyle (0)		October 14, 2014
MLS Section 18	Leander (0) (Deleted)		Date of 5th Amendment
MLS Section 19	Lehigh (0)		October 14, 2014
MLS Section 20	Nameless (0)		February 2, 2017
MLS Section 21	Paleface (0)		October 14, 2014
MLS Section 22	Rutherford (0)		October 14, 2014
MLS Section 23	Sattler (0)		October 14, 2014
MLS Section 24	Seward Junction (0)		October 14, 2014
MLS Section 25	Whitestone (0)		February 2, 2017
MLS Section 26	Wimberley (0)		October 14, 2014
MLS Section 27	Rocksprings (0)		October 14, 2014
MLS Section 28	New Barksdale (0)		October 14, 2014
MLS Section 29	Old Junction (0)		October 14, 2014
MLS Section 30	New Junction (0)		October 14, 2014
MLS Section 31	Purgatory Road (0)		October 14, 2014
MLS Section 32	Pipeline (0)		Date of 5th Amendment

FACILITY SCHEDULE NO. 44
Fifth Amendment

1. **Name:** Leander Substation (PEC)

2. **Facility Location:** The Leander Substation is located at 10060 RR 2243 Leander, Williamson County, Texas 78641.

3. **Points of Interconnection:** There are two (2) Points of Interconnection in the Leander Substation generally described as:
   - Where the PEC 138 kV operating bus jumper attaches to the four hole pad on LCRA TSC's switch32999.
   - Where the PEC 138 kV jumper attaches to the four hole pad on LCRA TSC's switch 33011.

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 metered voltage is 24.9 kV. The metering current transformers are located inside PEC transformers T2, T3, and T4 and the metering potential transformers are located on the PEC 24.9 kV operating bus for T2, T3, and T4.

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

9. **Description of Facilities Owned by Each Party:**
   PEC owns: The Leander substation, including, but is not limited to, the following equipment:
   - 138 kV operating bus No. 1 and No. 2 including structures, insulators, foundations and jumpers
   - 138 kV bus #1 bus differential & breaker failure relaying scheme
   - 138 kV bus #2 bus differential & breaker failure relaying scheme
   - 138 kV A-Frames in Bay 8
   - Station service
   - Control houses (control house #1 and control house #2) with batteries, battery charger and appurtenances in each. PEC's control house #2 will be split design and include provisions for 18 panels in LCRA TSC's section of the house.
   - Substation property ground grid, gravel, fencing and other appurtenances

   LCRA TSC Owns:
   - The following transmission lines comprised of conductors, insulators, OPGW, and connecting hardware:
     - Leander to Ridgmar 138 kV transmission line attached to PEC's east A-Frame in Bay 8

- Two (2)138 kV circuit breakers (33000 and 33010) with foundations, jumpers and protective relaying panels, RTU cabinet, and SIP panels associated with the Leander to Ridgmar 138 kV line
- Four (4) 138 kV disconnect switches (32999, 33001, 33009, and 33011)
- Two (2) Metering panels in control house #1
- Telecom equipment including INET radio system panel in control house #1, OPGW fiber splice can attached to PEC's east A-Frame in Bay 8, fiber facility entry cable to control house #2 fiber patch panel in control house #2

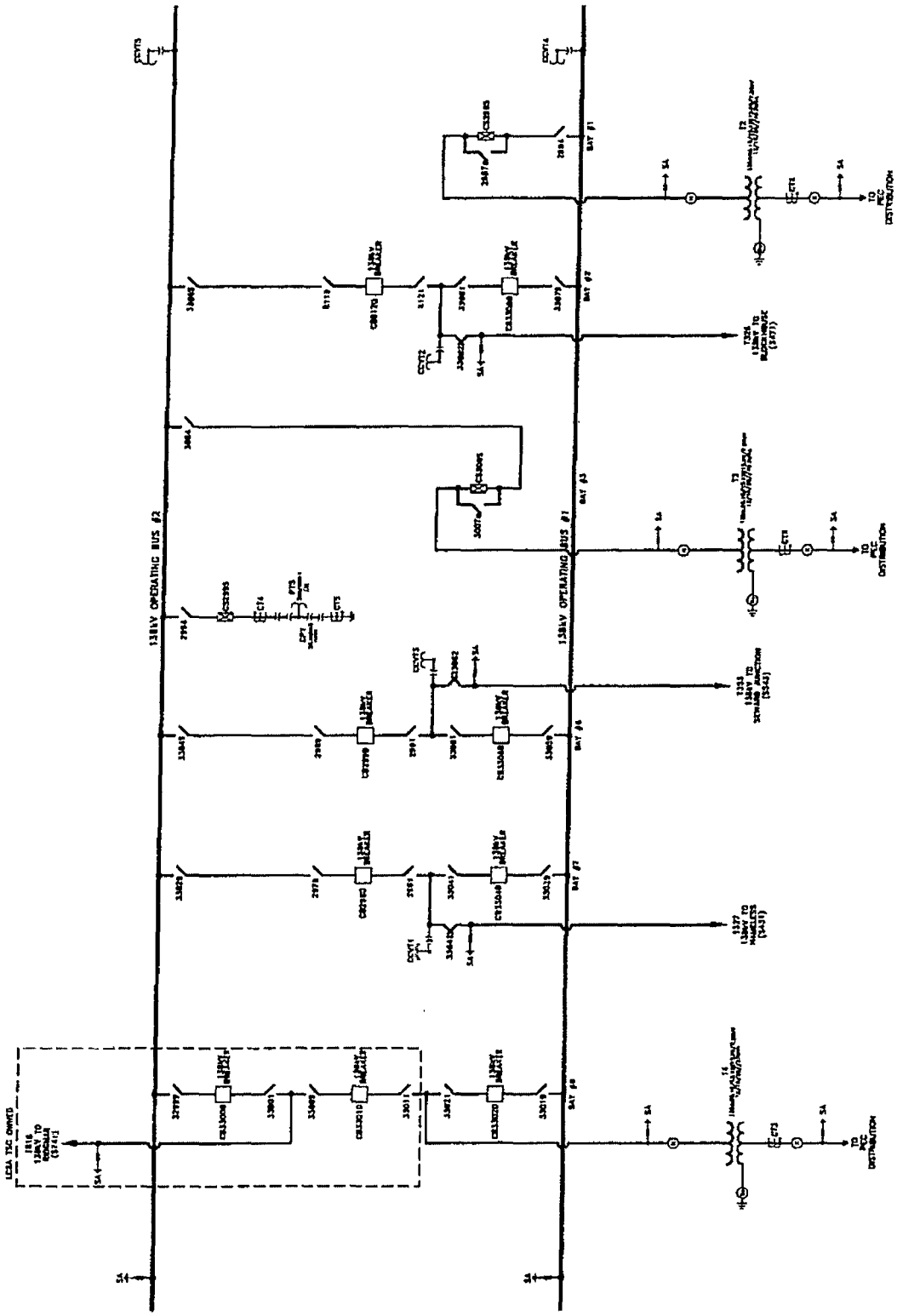
10. **Operational Responsibilities of Each Party:** Each Party will be fully responsible for the operation of the equipment it owns.

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:**
    - PEC and LCRA TSC are to share access to the substation via PEC and LCRA TSC locks in the substation entrance gate; along with locks on the control house doors.
    - PEC will provide and share the following facilities and equipment with LCRA TSC:
        - Three (3) 24.9 kV bus potentials, per 24.9 kV bus, for LCRA TSC metering
        - Three (3) currents, per power transformer, from bushing mounted, metering grade accuracy current transformers that are located on the low voltage side of all transformers for LCRA TSC metering
        - Access to 125 VDC and 120 VAC power in both control houses
        - Tripping and close inhibit contacts from its 138 kV bus differential and transformer bus differential relaying panels to LCRA TSC's circuit breakers
    - LCRA TSC and PEC will coordinate their respective designs so that PEC's Bay 8 A-frame allows LCRA TSC termination of T616, including OPGW, on the east side of the A-Frame.
    - LCRA TSC will provide and share the following facilities and equipment with PEC:
        - Three (3) currents from bushing mounted, relaying grade accuracy current transformers located on the line side of LCRA TSC breaker 33010 for PEC's 138 kV transformer bus differential relaying.
        - Three (3) currents from bushing mounted, relaying grade accuracy current transformers located on the line side of LCRA TSC breaker 33000 for PEC's 138 kV bus #2 differential relaying.
        - Breaker failure contacts from its circuit breaker relaying panel(s) to PEC's 138 kV transformer bus differential, bus #2 differential, & breaker failure relaying panel(s).

LEANDER ONE-LINE DIAGRAM

Fifth Amendment



FACILITY SCHEDULE NO. 45
Fifth Amendment

1. **Name:** Ridgmar Substation

2. **Facility Location:** The Ridgmar Substation is located near the intersection of Ronald Reagan Blvd and RM-2243, Leander, Williamson County, Texas

3. **Points of Interconnection:** There is one (1) Point of Interconnection at the Ridgmar Substation generally described as:
   - where the LCRA TSC 138 kV transformer bus attaches to the four hole pad on PEC 138 kV switch 30844

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 metered voltage is 24.9 kV. The metering current transformers are located inside transformer T1 and the metering potential transformers are located on the 24.9 kV operating bus for T1.

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

9. **Description of Facilities Owned by Each Party:**
   PEC owns:
   - One (1) 138 kV circuit switcher disconnect switch with foundation, stand, and jumpers
   - One (1) 138 kV circuit switcher, with bypass switch, foundation, stand, jumpers and protective relaying
   - One (1) Power transformer with associated surge arresters, foundation, jumpers and protective relaying
   - One (1) 138 kV mobile disconnect switch with foundation, stand, jumpers, and mobile connection
   - All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
   - All distribution, bus tie and total 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
   - Modulation transformer, with OMU, fused disconnect, and surge arrester
   - Three (3) 24.9 kV bus potential transformers with associated fused disconnects
   - One (1) Station service with fused disconnect

LCRA TSC owns: The Ridgmar Substation including, but not limited to, the following equipment:

- 138 kV A-Frame dead end structures, foundations, insulators and jumpers
- 138 kV ring bus including foundations, structures, insulators, bus, and jumpers
- 138 kV coupling capacitor voltage transformers CCVT1 and CCVT2
- 138 kV surge arresters SA1, SA2 and SA3
- 138 kV power voltage transformer PVT1
- Three (3) 138 kV circuit breakers 30840, 30850, and 30860 with foundation, jumpers and protective relaying
- Six (6) 138 kV disconnect switches 30839, 30841, 30849, 30851, 30859, and 30861 with foundations, stands, and jumpers
- 138 kV transformer bus differential and breaker failure relaying scheme
- Meter panel with primary and backup meters
- RTU and SIP panels
- One (1) control house with batteries, battery charger and appurtenances. LCRA TSC's control house will be split design and include provisions for 18 panels in PEC's section of the house.
- All substation property, grading, ground grid, gravel, fencing and other physical security

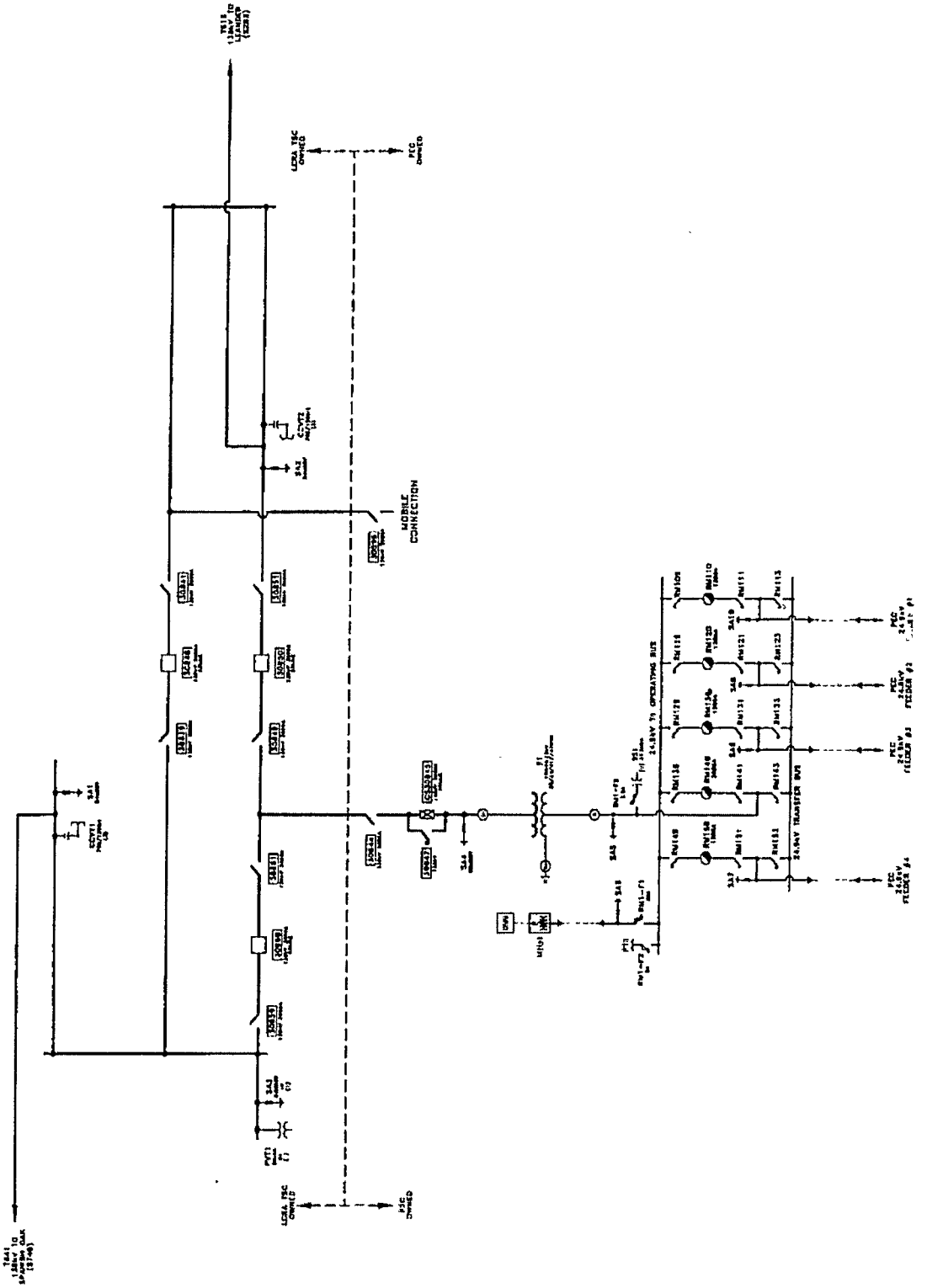
10. **Operational Responsibilities of Each Party:** Each Party will be fully responsible for the operation of the equipment it owns.

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:**
    - PEC and LCRA TSC are to share access to the substation via PEC and LCRA TSC locks in the substation entrance gate.
    - LCRA TSC will share access to the Ridgmar Substation control house in accordance with LCRA TSC physical security design guidelines.
    - PEC will provide and share the following facilities and equipment with LCRA TSC:
        - Three (3) 24.9 kV bus potentials, per 24.9kV bus, for LCRA TSC metering
        - Three (3) currents, per power transformer, from bushing mounted, metering grade accuracy current transformers that are located on the low voltage side of all transformers for LCRA TSC metering
        - Breaker failure contacts from its 138 kV transformer relaying panel(s) to 138 kV transformer bus differential & breaker failure relaying panel(s)
        - Access to station service transformer for 120VAC power
    - LCRA TSC will provide and share the following facilities and equipment with PEC:
        - Access to 125 VDC and 120 VAC power
        - Tripping and close inhibit contacts from its transformer bus differential and breaker failure relaying panel

RIDGMAR ONE-LINE DIAGRAM

Fifth Amendment



FACILITY SCHEDULE NO. 46
Fifth Amendment

1. **Name:** Spanish Oak Substation

2. **Facility Location:** The Spanish Oak Substation is located approximately .5 miles east of Ronald Reagan Blvd on County Road 272, Cedar Park, Williamson County, Texas

3. **Points of Interconnection:** There is one (1) Point of Interconnection at the Spanish Oak Substation generally described as:
   - where the LCRA TSC 138 kV transformer bus jumper attaches to the four hole pad on PEC's 138 kV switch 30234

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 current transformers are located inside transformer T1, the metering potential transformers are located on the 24.9 kV T1 operating bus.

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

9. **Description of Facilities Owned by Each Party:**
   PEC owns: The following equipment in the Spanish Oak Substation (PEC yard) including, but not limited to:
   - One (1) 138 kV circuit switcher disconnect switch with foundation, stand, and jumpers
   - One (1) 138 kV circuit switcher with bypass switch, foundation, stand, jumpers, and protective relaying
   - One (1) Power transformer with associated surge arresters, foundation, jumpers and protective relaying
   - One (1) 138 kV mobile disconnect switch with foundation, stand, jumpers, and mobile connection
   - All distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
   - All distribution, bus tie and total 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
   - Three (3) 24.9 kV bus potential transformers with associated fused disconnect
   - One (1) Station service with fused disconnect
   - One (1) control house with batteries, battery charger and appurtenances

- One (1) Modulation transformer, with OMU, fused disconnect, and surge arrester
- For PEC yard only: Substation property, ground grid, gravel, fencing and other appurtenances

LCRA TSC owns: The Spanish Oak Substation (LCRA TSC yard) including, but not limited to, the following equipment:

- 138 kV A-Frame dead end structures, foundations, insulators and jumpers
- 138 kV ring bus including foundations, structures, insulators, bus, and jumpers
- 138 kV coupling capacitor voltage transformers CCVT1 and CCVT2
- 138 kV surge arresters SA1, SA2 and SA3
- 138 kV power voltage transformer PVT1
- 138 kV buswork and jumper that cross the interior fence to the POI
- 138 kV mobile connection buswork and jumper that cross the interior fence to PEC's mobile connection buswork
- Three (3) 138 kV circuit breakers 30230, 30240 and 30260 with foundations, jumpers and protective relaying
- Eight (8) 138 kV disconnect switches 30229, 30231, 30239, 30241, 30249, 30251, 30259, and 30261 with foundations, stands, and jumpers
- 138 kV transformer bus differential and breaker failure relaying scheme(s)
- Meter panel with primary and backup meters
- RTU and SIP panels
- One (1) control house with batteries, battery charger and appurtenances
- For LCRA TSC yard only: Substation property, ground grid, gravel, fencing and other appurtenances
  The interior fence between the PEC yard and the LCRA TSC yard

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

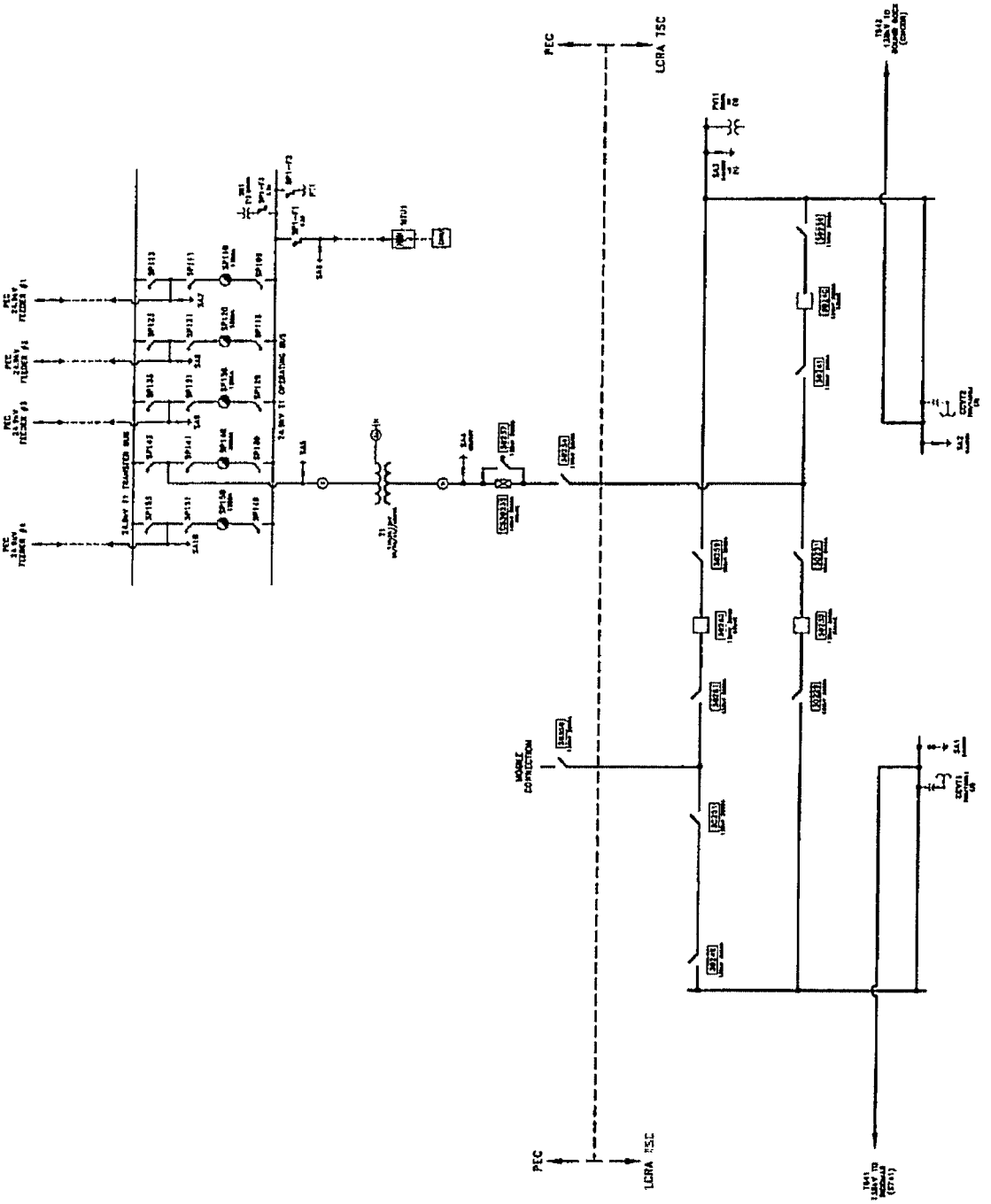
11. **Maintenance Responsibilities of Each Party:** Each Party will be fully responsible for the maintenance of the equipment it owns.

12. **Other Terms and Conditions:**
    - PEC will share access to the Spanish Oak Substation (PEC yard) by allowing LCRA TSC to place a lock on the gate.
    - LCRA TSC will share access to the Spanish Oak Substation (LCRA TSC yard) by allowing PEC to place a lock in series with LCRA TSC's lock in the chain securing the gate.
    - LCRA TSC will share access to the Spanish Oak Substation (LCRA TSC yard) control house in accordance with LCRA TSC security design guidelines.
    - PEC will provide and share the following facilities and equipment with LCRA TSC:
        - Three (3) 24.9 kV bus potentials, per 24.9 kV bus, for LCRA TSC metering

    - Three (3) currents, per power transformer, from bushing mounted, metering grade accuracy current transformers that are located on the low voltage side of all transformers for LCRA TSC metering
    - Breaker failure contacts from its 138 kV transformer relaying panel(s) to 138 kV transformer bus differential & breaker failure relaying panel(s)
    - Access to station service transformer for 120VAC power
- LCRA TSC will provide and share the following facilities and equipment with PEC:
    - Tripping and close inhibit contacts from its transformer bus differential and breaker failure relaying panels
    - Access to station service transformer for 120VAC power
- Spanish Oak Substation (LCRA TSC yard) access and physical security will be in accordance with LCRA TSC physical security design guidelines.

SPANISH OAK ONE-LINE DIAGRAM

Fifth Amendment



METERING LOCATION SCHEDULE
Fifth Amendment

(The purpose of this schedule is only to identify metering equipment ownership at locations where there are no Points of Interconnection)
At all substations where LCRA TSC is providing metering services using PEC supplied metering current transformers or potential transformers, it does so with the full permission of PEC.

1 **Balcones Substation (S-331):**

a. PEC owns the Balcones Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) Underfrequency and DDIO-1 panel 1 in control house #1
- One (1) SIP panel 5 in control house #2
- One (1) RTU panel 6 in control house #2
- One (1) Metering panel 13 in control house #2
- One (1) DDIO-2 in panel 5 in control house #3 (panel also contains PEC SEL-2030)
- One (1) Metering panel 15 in control house #3
- One (1) INET communications radio, power supply and console
- One (1) Communications antenna and mounting
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 24.9 kV bus potential transformers PT5 and PT6 for LCRA TSC metering
- Two (2) 12.5 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Four (4) metering bushing current transformers from transformers T1, T2, T3 and T4 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

2 **Bertram Substation (S-339):**

a. PEC owns the Bertram Substation, and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) Telecom panel 221
- One (1) RTU panel 222
- One (1) SIP panel 223

- One (1) Meter panel 225
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
- One (1) transformer T1 metering bushing current transformer for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

3 Blanco Substation (S-324)

a. PEC owns the Blanco Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) RTU panel 21
- One (1) SIP panel 22
- One (1) Telecom panel 23
- One (1) Metering panel 24
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 12.5 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- One (1) transformer T2 metering bushing current transformer for LCRA TSC metering
- One (1) circuit breaker BN20 metering bushing current transformer for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

4 Blockhouse Substation (S-471)

a. PEC owns the Blockhouse Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 26
- One (1) underfrequency panel 27
- One (1) supervisory interface panel, panel 29

- One (1) RTU panel 30
- One (1) communications terminal board
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 24.9 kV bus potential transformers PT1 and PT3 for LCRA TSC metering
   - Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

5 Buda Substation (S-242):

a. PEC owns the Buda Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) RTU panel L3
   - One (1) SIP panel L4
   - One (1) SIP panel L5
   - One (1) Jem II metering panel L6
   - One (1) Telecom panel L7
   - One (1) Jem I metering panel M
   - Communications terminal board
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 24.9 kV bus potential transformers PT1 and PT3 for LCRA TSC metering
   - Two (2) 24.9 kV metering current transformers from T1 and T3
   - One (1) circuit breaker 5480, 138 kV metering bushing current transformer for LCRA TSC net metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

6 Cedar Valley Substation (S-338)

a. PEC owns the Cedar Valley Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) meter panel, Panel 29
- One (1) RTU panel 30
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1and T2 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

7 **Centex Substation (S-327):**

a. PEC owns the Centex Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) billing metering wall panel with SEL-734 meters 1 and 2
- Four (4) metering current transformers CT1, CT2, CT3 and CT4
- One (1) Polnet line sharing switch for meter communications
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 4.16 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Four (4) metering current transformers CT1, CT2, CT3 and CT4 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

8 **Cranes Mill Substation (S-330):**

a. PEC owns the Cranes Mill Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering current transformer CT1
- One (1) metering panel 7
- One (1) underfrequency equipment mounted in panel 1

- One (1) RTU panel 13
- One (1) SIP panel 14
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 12.5 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
   - One (1) metering bushing current transformer from transformer T2 for LCRA TSC metering
   - One (1) circuit breaker CM50 metering bushing current transformer for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

9 Devil's Hill Substation (S-329):

a. PEC owns the Devil's Hill Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) RTU panel 29
   - Two (2) SIP panels 30 and 31
   - One (1) Telecom panel 32
   - One (1) Meter panel 33
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
   - Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

10 Dripping Springs Substation (S-325):

a. PEC owns the Dripping Springs Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) metering panel 21

- One (1) RTU panel 23
- One (1) SIP panel 22
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
   - Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

11 Fischer Substation (S-328):

a. PEC owns the Fischer Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) metering panel 16
   - One (1) RTU panel 8
   - One (1) SIP panel 7
   - One (1) Communications terminal board
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
   - Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

12 Flatrock Substation (S-345):

a. PEC owns the Flatrock Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) metering panel with one primary and one backup meter
   - One (1) GE IBOX RTU with SIP

- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

13 Henly Substation (S-468):

a. PEC owns the Henly Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) metering panel 26
   - One (1) RTU panel 20
   - One (1) SIP, panel 19
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - One (1) 12.5 kV bus potential transformer PT1 for LCRA TSC metering
   - One (1) metering bushing current transformer from transformer T1 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

14 Highway 32 Substation (S-317):

a. PEC owns the Highway 32 Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
   - One (1) metering panel 5 (Control house #1)
   - One (1) Remote Access panel 11 (Control house #1)
   - One (1) RTU panel 14 (Control house #2)
   - Two (2) SIP panels 12 and 13 (Control house #2)
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering

- One (1) metering bushing current transformer from transformer T1 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

15 Hunter Substation (S-326):

a. PEC owns the Hunter Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC and 12.5 kV recloser HT60 which is owned by NBU.

b. LCRA TSC owns:
- One (1) metering panel 15
- Two (2) metering current transformers CT1 and CT2
- Four (4) current transformer disconnect and bypass switches HT65, HT69, HT71 and HT73
- One (1) RTU panel 14
- One (1) SIP panel 13
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 12.5 kV bus potential transformer PT1 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

16 Johnson City Substation (S-332):

a. PEC owns the Johnson City Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 28
- One (1) SIP panel 29
- One (1) RTU panel 30
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 12.5 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Two (2) metering current transformers from breakers JC40 and JC130 for LCRA TSC metering

- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

17 Kyle Substation (S-318):

a. PEC owns the Kyle Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 13
- One (1) RTU panel 11
- –One (1) SIP panel 12
- One (1) communications panel 14
- One (1) communications terminal board
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
- One (1) 24.9 kV metering current transformer in breaker KY10 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

18 Leander Substation (S-283): MLS SECTION DELETED

- Deleted from MLS and details added to Leander Facility Schedule in Amendment 5 because LCRA TSC added Points of Interconnection at Leander Substation.

19 Lehigh Substation (S-581):

a. PEC owns the Lehigh Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 35
- Two (2) SIP panels 32 and 33
- One (1) RTU panel 31
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:

- Two (2) 24.9 kV bus potential transformers PT2 and PT3 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1and T3 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

20 Nameless Substation (S-431):

a. PEC owns the Nameless Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:

-
- One (1) metering panel 8
- One (1) SIP panel 18
- One (1) RTU panel 19
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:

- Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1 (1 per each phase) and T2 (1 per each phase) for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

21 Paleface Substation (S-168):

a. PEC has a perpetual easement for 1.659 acres of land from LCRA TSC upon which it owns all equipment therein (including the following), except for the equipment listed as being owned by LCRA TSC.

- 138 kV operating and transfer bus support structure between the PEC bus and the LCRA TSC bus

b. LCRA TSC owns the Paleface Substation and all equipment therein except for the equipment owned by PEC on the 1.659 acre of land for which LCRA TSC has granted a perpetual easement and owns the following:

- One (1) metering panel 8 in PEC Control House #1
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA

TSC:

- Two (2) 24.9 kV bus potential transformers PT4 and PT5 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

22 Rutherford Substation (S-310):

a. PEC owns the Rutherford Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:

- One (1) metering panel 4
- One (1) RTU panel 221
- One (1) SIP panel 222
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:

- Two (2) 24.9 kV bus potential transformers PT1 and PT3 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

23 Sattler Substation (S-320):

a. PEC owns the Sattler Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:

- Metering/Underfrequency panel 1
- One (1) metering current transformer CT1
- One (1) current transformer disconnect switch SA25
- One (1) RTU panel 13
- One (1) SIP panel 12
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:

- One (1) 12.5 kV bus potential transformer PT2 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

24 Seward Junction Substation (S-543):

a. PEC owns the Seward Junction Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 35
- One (1) panel 31
- One (1) SIP panel 32
- One (1) telecommunications panel 37
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 24.9 kV bus potential transformers PT1and PT2 for LCRA TSC metering
- One (1) metering bushing current transformer from transformers T1 for LCRA TSC metering
- One (1) 24.9 kV metering bushing current transformer CT2 from total breaker SJ110 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

25 Whitestone Substation (S-319):

a. PEC owns the Whitestone Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 11
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Two (2) 24.9kV metering bushing current transformers from total breakers WS70 and WS80
- Access to 125 VDC and 120 VAC power

- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

26 Wimberley Substation (S-322):

a. PEC owns the Wimberley Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 27
- One (1) RTU panel 30
- One (1) SIP panel 28
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- Two (2) 24.9 kV bus potential transformers PT1 and PT2 for LCRA TSC metering
- Two (2) metering bushing current transformers from transformers T1 and T2 for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

27 Rocksprings Substation (S-438):

a. PEC owns the Rocksprings Substation and all other equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel, Panel 13
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
- One (1) distribution circuit breaker RS10 metering bushing current transformer for LCRA TSC metering
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

28 New Barksdale Substation (S-694):

a. PEC owns the New Barksdale Substation and all equipment therein except for

the equipment listed as being owned by LCRA TSC or owned by ETT.

b. LCRA TSC owns:
   - One (1) metering panel 4
   - One (1) metering current transformer CT1
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
   - Access to 125 VDC and 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

29 Old Junction MP (S-416):

a. PEC owns nothing at this site.

b. LCRA TSC owns:
   - One (1) pole mounted meter box
   - One (1) metering current transformer CT1
   - One (1) metering potential transformer PT1
   - Cable and conduit and other appurtenances to connect LCRA TSC equipment

30 New Junction Substation (S-370):

a. PEC owns the New Junction Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC or owned by AEP.

b. LCRA TSC owns:
   - One (1) metering panel 1
   - One (1) 24.9 kV metering current transformer CT1
   - One (1) 24.9 kV metering potential transformer PT1

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
   - Access to 120 VAC power
   - Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
   - Access to PEC's station service as needed

31 Purgatory Road Substation (S-705):

a. PEC owns the Purgatory Road Substation and all equipment therein except for

the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 24
- One (1) telecom panel 25
- One (1) RTU panel 21
- One (1) SIP panel 22
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 12.5 kV bus potential transformer PT1 for LCRA TSC metering
- One (1) metering current transformer from transformer T1
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed

32 Pipeline Substation (S-738):

a. PEC owns the Pipeline Substation and all equipment therein except for the equipment listed as being owned by LCRA TSC.

b. LCRA TSC owns:
- One (1) metering panel 30
- One (1) RTU/SIP panel 21
- One (1) telecom panel 22
- Cable and conduit and other appurtenances to connect LCRA TSC equipment

c. PEC will provide and share the following facilities and equipment with LCRA TSC:
- One (1) 24.9 kV bus potential transformer PT1 for LCRA TSC metering
- One (1) metering current transformer from transformer T1
- Access to 125 VDC and 120 VAC power
- Floor space (as available and as necessary) in PEC's control house for the installation of LCRA TSC required meter panel and equipment
- Access to PEC's station service as needed