

Control Number: 35077



Item Number: 213

Addendum StartPage: 0

Project No. 35077

First Amendment to

### INTERCONNECTION AGREEMENT

Between

**Bluebonnet Electric Cooperative** 

and

**LCRA Transmission Services Company** 

October 13, 2009

## FIRST AMENDMENT TO INTERCONNECTION AGREEMENT

This First Amendment ("Amendment") to the Interconnection Agreement, executed November 17, 2008 between The Bluebonnet Electric Cooperative ("BBEC") and the LCRA Transmission Services Corporation ("Corporation") (the "Agreement") is made and entered into this 13<sup>TH</sup> day of 12<sup>TD</sup> d

- 1. Exhibit "A" attached to the Agreement is deleted in its entirety and the Exhibit "A" attached to this First Amendment is hereby added to the Agreement in lieu thereof.
- 2. Facility Schedules No. 2, 3, 10, 14, 17, 20, 22, 26 and 35 (including the diagrams attached thereto) are deleted in their entirety and Facility Schedules No. 2, 10, 14, 17, 20, 22, 26 and 35 attached to this First Amendment are hereby added to the Agreement in lieu thereof.
- 3. Facility Schedules No. 2, 3, 10, 14, 17, 20, 22, 26 and 35 (including the diagrams attached thereto) attached to this First Amendment will become effective upon execution of this First Amendment by the Parties.
- 4. The Paige One-Line Diagram attached to Facility Schedule No. 23 of the Agreement is deleted in its entirety and the Paige One-Line Diagram attached to this First Amendment is hereby added to Facility Schedule No. 23 of the Agreement in lieu thereof.
- 5. The Paige One-Line Diagram attached to this First Amendment will become effective upon execution of this First 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 First Amendment to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

BLUEBONNET ELECTRIC COOPERATIVE	LCRA TRANSMISSION SERVICES	
By: In Kocia	CORPORATION  By: Ray Afferd	
Name: Eric Kocian P.E.	Name: Ray Pfefferkorn, P.E.	
Title: Manager of Electric Operations and Engineering	Title: LCRA Transmission Engineering Manager	
Date:	Date: 10/6/09	
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#### Amendment No. 1 EXHIBIT A

FACILITY SCHEDULI	POINT(S) OF	INTERCONNECTION VOLTAGE (KV)	EFFECTIVE DATE OF
NO.	INTERCONNECTION (# of Points)		INTERCONNECTION
1	Alum Creek (12)	12.5 kV	11/17/2008
2	Bastrop City (10)	12.5 kV	(Date of Amendment)
3	Bastrop West (15)	12.5 kV	(Date of Amendment)
4	Bluebonnet (2)	138 kV	11/17/2008
5	Brenham North (1)	138 kV	11/17/2008
6	Butler (1)	138 kV	11/17/2008
7	Cedar Hill (9)	12.5 kV	
8	Chappell Hill (1)	138 kV	11/17/2008
9	Colton (9)	138 kV 12.5 kV	11/17/2008
10	Dale (8)	12.5 kV	11/17/2008
11	Deanville (5)	138 kV	(Date of Amendment)
12	Fayetteville (1)		11/17/2008
13	Giddings (15)	138 kV	11/17/2008
14	Harris Branch (18)	12.5 kV	11/17/2008
15	Lexington (7)	24.9 kV	(Date of Amendment)
16	Lockhart (9)	12.5 kV & 138 kV	11/17/2008
17	Luling City (6)	12.5 kV	11/17/2008
18	Luling Magnolia (6)	12.5 kV	(Date of Amendment)
19	Magnolia Mercer (3)	12.5 kV	11/17/2008
20	Manor (2)	12.5 kV	11/17/2008
21		138 kV	(Date of Amendment)
22	McCarty Lane East (9)	12.5 kV	11/17/2008
23	Mendoza (9)	12.5 kV	(Date of Amendment)
24	Paige (1)	138 kV	(Date of Amendment)
25	Pisek (1)	138 kV	11/17/2008
26	Plum (4)	12.5 kV	11/17/2008
27	Red Rock (1)	138 kV	(Date of Amendment)
28	Redwood (4)	12.5 kV	11/17/2008
	Reedville (1)	69 kV	11/17/2008
29	Salem (1)	138 kV	11/17/2008
30	Smithville (10)	69 kV & 12.5 kV	11/17/2008
31	Swiftex (12)	12.5 kV	11/17/2008
32	Warda (6)	24.9 kV	11/17/2008
33	Webberville (12)	24.9 kV	11/17/2008
34	Welcome (1)	138 kV	11/17/2008
	Wolf Lane (2)	138 kV	(Date of Amendment)
	Pooley Road (6)	12.5 kV	
	Shadow Glen (1)	138 kV	11/17/2008 11/17/2008

### Amendment No. 1 FACILITY SCHEDULE NO. 2

- 1. Name: Bastrop City Substation
- Facility Location: The Bastrop City Substation is located at 2500 Main Street, Bastrop, Bastrop County, Texas 78602.
- 3. Points of Interconnection: There are Ten (10) Points of Interconnection in the Bastrop City Substation generally described as:
  - where the incoming distribution line connects to the tubular bus between switches BA-101 and BA-103 at breaker BA-100.
  - where the jumper from breaker BA-100, passing through CT-16, connects to the 4 hole pad on switch BA-99.
  - where the jumper from breaker BA-100 connects to the 4 hole pad on switch BA-101.
  - where the incoming distribution line connects to the tubular bus between switches BA-111 and BA-113 at breaker BA-110.
  - where the jumper from breaker BA-110, passing through CT-11, connects to the 4 hole pad on switch BA-109.
  - where the jumper from breaker BA-110 connects to the 4 hole pad on switch BA-111.
  - where the jumper from switch BA-119 connects to the 12.5 kV operating bus at breaker BA-120.
  - where the jumper from switch BA-123 connects to the 12.5 kV transfer bus at breaker BA-120.
  - where the jumper from switch BA-129 connects to the 12.5 kV operating bus at breaker BA-130.
  - where the jumper from switch BA-133 connects to the 12.5 kV transfer bus at breaker BA-130.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 12.5 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformers are located in the total bay and in each distribution bay. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### BBEC owns:

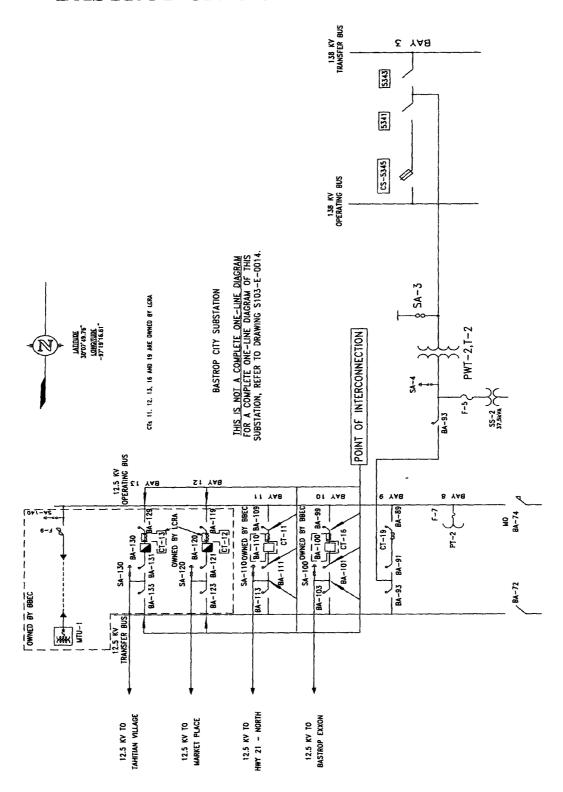
- Four (4) distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- Four (4) distribution circuit breakers BA-100, BA-110, BA-120, BA-130 including jumpers and protective relay packages
- Six (6) low voltage disconnect switches in bays 12 and 13
- Two (2) surge arresters SA-120 and SA-130
- Four (4) distribution circuit breaker foundations in bays 10, 11, 12 and 13
- One (1) modulation transformer MTU-1and associated surge arrester and fuse

#### LCRA TSC owns:

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

- One (1) circuit switcher CS-5345 and associated disconnect switches 5341 and 5343
- One (1) power transformer PWT-2, T-2 with associated surge arresters
- Six (6) distribution and total bays including A-frames, trusses, insulators, disconnect switches (except bays 12 and 13), surge arresters (except bays 12 and 13), 12.5 kV operating and transfer bus, bus potential transformer, metering current transformers and associated cabling
- One (1) transformer bus disconnect switch BA-93
- Underfrequency relay panel
- Control house
- Battery house/office building and battery bank
- Station service
- 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

## Amendment No 1 BASTROP CITY ONE-LINE DIAGRAM



### Amendment No 1 FACILITY SCHEDULE NO. 3

- 1. Name: Bastrop West Substation
- 2. Facility Location: The Bastrop West Substation is located at 110 S. Schaefer Blvd, Unit A, Bastrop, Bastrop County, Texas 78602.
- 3. Points of Interconnection: There are fifteen (15) Points of Interconnection in the Bastrop West Substation generally described as:
  - where the incoming distribution line connects to the tubular bus between switches BW-21 and BW-23 at breaker BW-20.
  - where the jumper from breaker BW-20 connects to the 4 hole pad on switch BW-19.
  - where the jumper from breaker BW-20 connects to the 4 hole pad on switch BW-21
  - where the incoming distribution line connects to the tubular bus between switches BW-31 and BW-33 at breaker BW-30.
  - where the jumper from breaker BW-30 connects to the 4 hole pad on switch BW-
  - where the jumper from breaker BW-30 connects to the 4 hole pad on switch BW-31.
  - where the incoming distribution line connects to the tubular bus between switches BW-51 and BW-53 at breaker BW-50.
  - where the jumper from breaker BW-50 connects to the 4 hole pad on switch BW-49.
  - where the jumper from breaker BW-50 connects to the 4 hole pad on switch BW-51.
  - where the incoming distribution line connects to the tubular bus between switches BW-81 and BW-83 at breaker BW-80.
  - where the jumper from breaker BW-80 connects to the 4 hole pad on switch BW-79.
  - where the jumper from breaker BW-80 connects to the 4 hole pad on switch BW-81.
  - where the incoming distribution line connects to the tubular bus between switches BW-91 and BW-93 at breaker BW-90.
  - where the jumper from breaker BW-90 connects to the 4 hole pad on switch BW-89.
  - where the jumper from breaker BW-90 connects to the 4 hole pad on switch BW-91.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes

- 6. Delivery Voltage: 12.5 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformer is located inside transformer PWT-1, T-1. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- Description of Facilities Owned by Each Party:

#### BBEC owns:

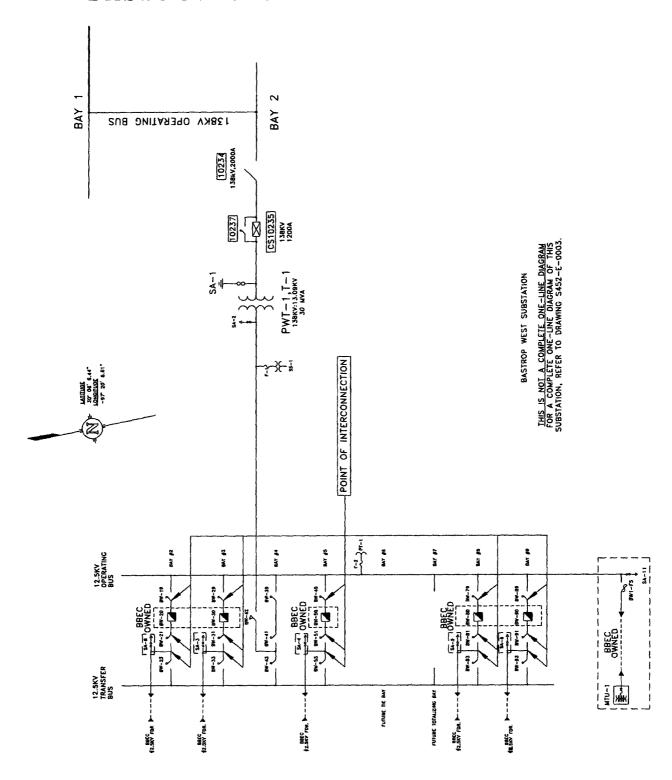
- Five (5) distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- Five (5) distribution circuit breakers BW-20, BW-30, BW-50, BW-80, BW-90 including jumpers, surge arresters, protective relay packages and foundations
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse

#### LCRA TSC owns:

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

- One (1) circuit switcher CS-10235 with associated disconnect switch 10234 and bypass switch 10237
- One (1) power transformer PWT-1, T-1 with associated surge arresters
- Eight (8) distribution and total bays including A-frames, trusses, insulators, disconnect switches, 12.5 kV operating and transfer bus, bus potential transformer, metering current transformer and associated cabling
- Underfrequency relay panel
- Control house and battery bank
- Station service
- 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

## Amendment No 1 BASTROP WEST ONE-LINE DIAGRAM



#### Amendment No 1 FACILITY SCHEDULE NO. 10

- 1. Name: Dale Substation
- 2. Facility Location: The Dale Substation is located at 3051 FM 1854, Dale, Caldwell County, Texas 78616.
- 3. Points of Interconnection: There are eight (8) Points of Interconnection in the Dale Substation generally described as:
  - where the incoming distribution line connects to the tubular bus between switches DA-11 and DA-13 at breaker DA-10.
  - where the jumper from breaker DA-10 connects to the 4 hole pad on switch DA-9.
  - where the jumper from breaker DA-10 connects to the 4 hole pad on switch DA-11.
  - where the incoming distribution line connects to the tubular bus between switches DA-41 and DA-43 at breaker DA-40.
  - where the jumper from breaker DA-40 connects to the 4 hole pad on switch DA-39.
  - where the jumper from breaker DA-40 connects to the 4 hole pad on switch DA-41.
  - where the jumper from switch DA-29 connects to the 12.5 kV operating bus at breaker DA-30.
  - where the jumper from switch DA-33 connects to the 12.5 kV transfer bus at breaker DA-30.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 12.5 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformer is located in the 12.5 kV regulator bay. The bus potential transformer is located on the 12.5 kV operating bus for PWT-1, T-1.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### BBEC owns:

• Three (3) distribution circuits including dead-end insulators that attach to the

dead-end structure, conductor, and hardware

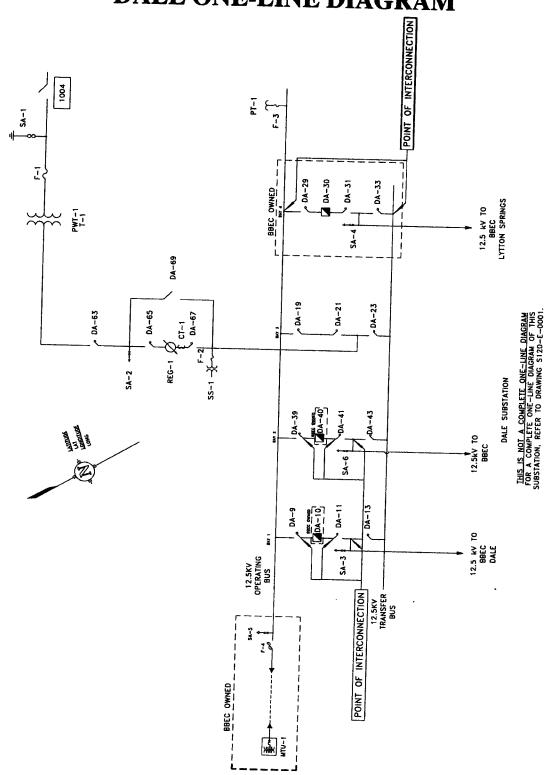
- Three (3) distribution circuit breakers DA-10, DA-30 and DA-40 including jumpers, protective relay packages and foundations
- One (1) distribution bay including A-frame (1), trusses, insulators and associated foundations, mounting hardware and jumpers
- Three (3) 12.5 kV switches DA-29, DA-31 and DA-33
- One (1) 12.5 kV surge arrester SA-4
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse

#### LCRA TSC owns:

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

- One (1) 69 kV switch 1004
- One (1) 69 kV fuse F-1
- Four (4) single phase power transformers PWT-1, T-1 with associated surge
- Three (3) distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, current metering transformer, bus potential transformer and associated cabling
- Three (3) single phase regulators REG-1 and associated bypass switches
- Station service
- Control house with battery
- Operational Responsibilities of Each Party: Each Party is responsible for the 10. operation of the equipment it owns.
- Maintenance Responsibilities of Each Party: Each Party will be fully responsible for 11. the maintenance of the equipment it owns.
- 12. Other Terms and Conditions: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

# Amendment No 1 DALE ONE-LINE DIAGRAM



#### Amendment No 1 FACILITY SCHEDULE NO. 14

- 1. Name: Harris Branch Substation
- Facility Location: The Harris Branch Substation is located at 650 Greg Manor Road, Manor, Travis County, Texas 78653.
- 3. Points of Interconnection: There are eighteen (18) Points of Interconnection in the Harris Branch Substation generally described as:
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-21 and HB-23 at breaker HB-20.
  - where the jumper from breaker HB-20 connects to the 4 hole pad on switch HB-19.
  - where the jumper from breaker HB-20 connects to the 4 hole pad on switch HB-21.
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-31 and HB-33 at breaker HB-30.
  - where the jumper from breaker HB-30 connects to the 4 hole pad on switch HB 29.
  - where the jumper from breaker HB-30 connects to the 4 hole pad on switch HB-31
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-51 and HB-53 at breaker HB-50.
  - where the jumper from breaker HB-50 connects to the 4 hole pad on switch HB-49.
  - where the jumper from breaker HB-50 connects to the 4 hole pad on switch HB-51.
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-81 and HB-83 at breaker HB-80.
  - where the jumper from breaker HB-80 connects to the 4 hole pad on switch HB-79.
  - where the jumper from breaker HB-80 connects to the 4 hole pad on switch HB-81.
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-91 and HB-93 at breaker HB-90.
  - where the jumper from breaker HB-90 connects to the 4 hole pad on switch HB-89.
  - where the jumper from breaker HB-90 connects to the 4 hole pad on switch HB-91.
  - where the pipe running from the underground distribution riser connects to the tubular bus between switches HB-121 and HB-123 at breaker HB-120.

- where the jumper from breaker HB-120 connects to the 4 hole pad on switch HB-119.
- where the jumper from breaker HB-120 connects to the 4 hole pad on switch HB-121.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 24.9 kV
- 7. Metered Voltage and Location: The metering voltage is 24.9 kV. The metering current transformer for PWT-1, T-1 is located in the total bay. The metering current transformer for PWT-2, T-2 is located inside the transformer. The bus potential transformers are located on the 24.9 kV operating bus.
- 8. One Line Diagram Attached: Yes
- Description of Facilities Owned by Each Party:

#### BBEC owns:

- Seven (7) underground distribution circuits including insulators, conductors, and hardware
- Six (6) distribution circuit breakers HB-20, HB-30, HB-50, HB-80, HB-90, HB-120 including jumpers and protective relay packages
- All underground distribution risers and pipes connecting to switches in distribution bays.
- Eight (8) distribution circuit breaker foundations
- Two (2) modulation transformers MTU-1 and MTU-2 and associated surge arresters and fuses

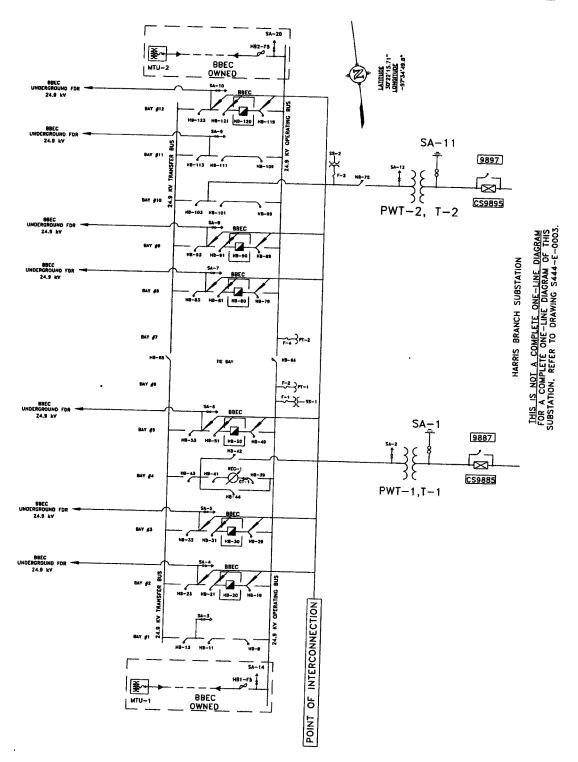
#### LCRA TSC owns:

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

- Two (2) power transformers PWT-1, T-1 and PWT-2, T-2 with associated surge arresters
- Two (2) circuit switchers CS-9885 and CS-9895 and associated bypass switches 9887 and 9897
- Twelve (12) distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 24.9 kV operating and transfer bus, bus potential transformers, metering current transformers and associated cabling
- Three (3) single phase regulators REG-1 and associated bypass switches
- Underfrequency relay panel
- Control house and battery bank
- Station service.

- 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

# Amendment No 1 HARRIS BRANCH ONE-LINE DIAGRAM



#### Amendment No. 1 FACILITY SCHEDULE NO. 17

- 1. Name: Luling City Substation
- 2. Facility Location: The Luling City Substation is located at 1795 North Hackberry Street, Luling, Caldwell County, Texas 78648.
- 3. Points of Interconnection: There are six (6) Points of Interconnection in the Luling City Substation generally described as:
  - where the incoming distribution line connects to the tubular bus between switches LC-101 and LC-103 at breaker LC-100.
  - where the jumper from breaker LC-100, passing through CT-17, connects to the 4 hole pad on switch LC-99.
  - where the jumper from breaker LC-100 connects to the 4 hole pad on switch LC-101.
  - where the incoming distribution line connects to the tubular bus between switches LC-111 and LC-113 at breaker LC-110.
  - where the jumper from breaker LC-110, passing through CT-18, connects to the 4 hole pad on switch LC-109.
  - where the jumper from breaker LC-110 connects to the 4 hole pad on switch LC-111.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 12.5 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformers for PWT-2, T-3 are located in the total bay and in each distribution bay. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### BBEC owns:

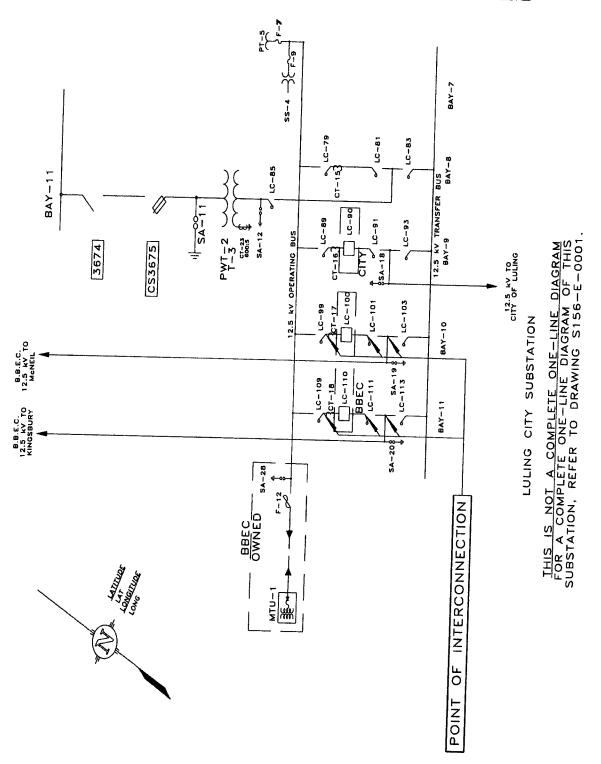
- Two (2) distribution circuits including dead end insulators that attach to the dead end structure, conductors and hardware
- Two (2) distribution circuit breakers LC-100 and LC-110 including jumpers, protective relay packages and foundations
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse

#### LCRA TSC owns:

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

- One (1) circuit switcher CS-3675 and associated switch 3674
- One (1) power transformer PWT-2, T-3 with associated surge arresters
- One (1) transformer bus disconnect switch LC-85
- Five (5) distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, bus potential transformer, metering current transformers and associated cabling
- Underfrequency relay panel
- Control house and battery bank
- Telecom house
- Station service
- 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

# Amendment No 1 LULING CITY ONE-LINE DIAGRAM



#### Amendment No. 1 FACILITY SCHEDULE NO. 20

- 1. Name: Manor Substation
- Facility Location: The Manor Substation is located at 13711 East US Highway 290, Manor, and Travis County, Texas 78653.
- 3. Points of Interconnection: There is one (1) Points of Interconnection in the Manor Substation generally described as:
  - where the 138 kV Operating Bus #1 expansion terminal bolts to the four hole pad of switch 1504.
- 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 inside T-1. The bus potential transformer is located on the 24.9 kV operating bus.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### BBEC owns:

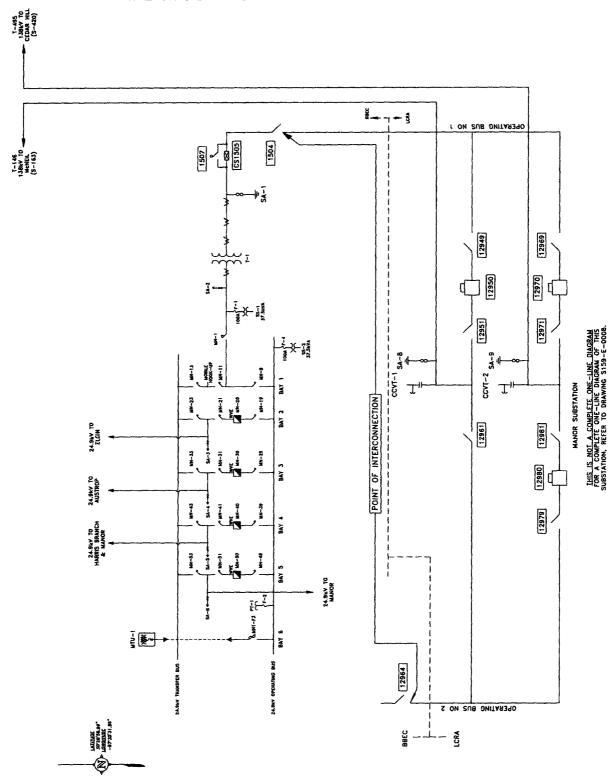
The Manor Substation including, but not limited to, the following items:

- One (1) circuit switcher CS-1505 with associated disconnect and bypass switches 1504 and 1507
- One (1) power transformer T-1 and associated surge arresters
- One (1) 138 kV switch 12964
- 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, bus potential transformer and associated cabling
- One (1) modulation transformer MTU-1 and associated fuse
- One (1) mobile transformer hook-up
- Control house (small) and battery bank
- Two (2) station service SS-1 and SS-2

#### LCRA TSC owns:

- One (1) 2-bay 138 kV dead-end structure, foundations, insulators and jumpers
- 138 kV Operating Bus #1 and Operating Bus #2 including structures, insulators, hardware, foundations and jumpers
- Three (3) 138 kV circuit breakers 12950, 12970 and 12980 including jumpers and protective relay packages
- Seven (7) 138 kV switches 12949, 12951, 12961, 12969, 12971, 12979 and 12981
- Two (2) 138 kV surge arresters SA-8 and SA-9
- Two (2) 138 kV CCVTs, CCVT-1 and CCVT-2
- Control house (large) with 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

## Amendment No. 1 MANOR ONE-LINE DIAGRAM



#### Amendment No. 1 FACILITY SCHEDULE NO. 22

- 1. Name: Mendoza Substation
- Facility Location: The Mendoza Substation is located at 1194 Williamson Road, Lockhart, Caldwell County, Texas 78644.
- 3. Points of Interconnection: There are nine (9) Points of Interconnection in the Mendoza Substation generally described as:
  - where the incoming distribution line connects to the tubular bus between switches MZ-31 and MZ-33 at breaker MZ-30.
  - where the jumper from breaker MZ-30 connects to the 4 hole pad on switch MZ-29.
  - where the jumper from breaker MZ-30 connects to the 4 hole pad on switch MZ-31.
  - where the incoming distribution line connects to the tubular bus between switches MZ-41 and MZ-43 at breaker MZ-40.
  - where the jumper from breaker MZ-40 connects to the 4 hole pad on switch MZ-39.
  - where the jumper from breaker MZ-40 connects to the 4 hole pad on switch MZ-41
  - where the incoming distribution line connects to the tubular bus between switches MZ-61 and MZ-63 at breaker MZ-60.
  - where the jumper from breaker MZ-60 connects to the 4 hole pad on switch MZ-59.
  - where the jumper from breaker MZ-60 connects to the 4 hole pad on switch MZ-61.
- 4. Transformation Services Provided by LCRA TSC: Yes
- 5. Metering Services Provided by LCRA TSC: Yes
- 6. Delivery Voltage: 12.5 kV
- 7. Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current transformer for PWT-1, T-1 is located in the total bay. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

BBEC owns:

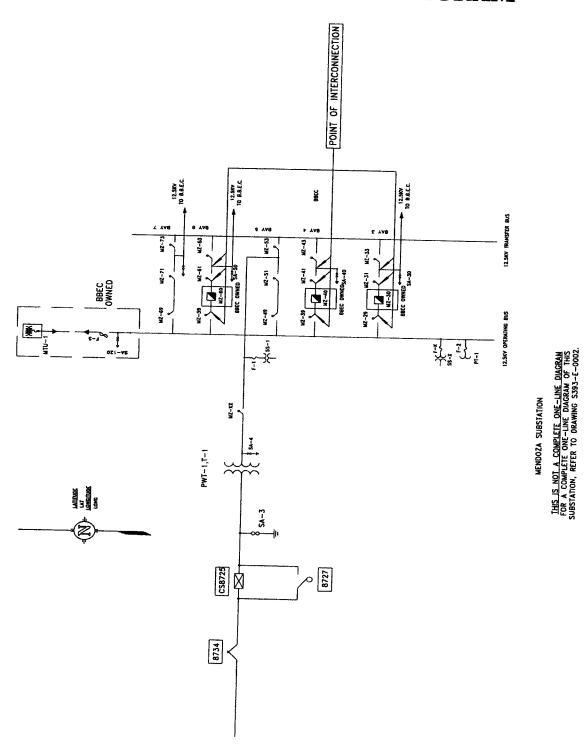
- Three (3) distribution circuits including dead end insulators that attach to the dead end structure, conductors and hardware
- Three (3) distribution circuit breakers MZ-30, MZ-40, MZ-60 including jumpers and protective relay packages
- Four (4) distribution circuit breaker foundations in bays 3,4,6 and 7
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse

#### LCRA TSC owns:

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

- One (1) power transformer PWT-1, T-1 with associated surge arresters
- One (1) circuit switcher CS-8725 and associated switches 8727 and 8734
- Five (5) distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, bus potential transformer and associated cabling
- Underfrequency relay panel
- Control house and battery bank
- Two (2) station service SS-1 and SS-2
- 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

# Amendment No. 1 MENDOZA ONE-LINE DIAGRAM



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Amendment No 1 PAIGE ONE-LINE DIAGRAM ≟⊰⊱ ä LCRA | BBEC [[고 ) SA-1 CS2465 LCRA | BBEC \*NORMALLY OPEN 2462 POINT OF INTERCONNECTION 2468 ş 2466 \* NORMALLY LOCKED & CLOSED \*NORMALLY OPEN 2472 MO 2461 2474 \*NORMALLY OPEN T-151 138 kv TO -WINCHESTER (S-189)

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#### Amendment No. 1 FACILITY SCHEDULE NO. 26

- 1. Name: Red Rock Substation
- Facility Location: The Red Rock Substation is located at 122 FM 812, Red Rock, 2. Bastrop County, Texas 78662.
- Points of Interconnection: There is one (1) Point of Interconnection in the Red Rock 3. Substation generally described as:
  - where the 138 kV Operating Bus A-tap attaches to the bus extension going to switch 8546.
- Transformation Services Provided by LCRA TSC: No 4.
- Metering Services Provided by LCRA TSC: Yes 5.
- 6. Delivery Voltage: 138 kV
- Metered Voltage and Location: The metering voltage is 12.5 kV. The metering current 7. transformer is located inside transformer PWT-1, T-1. The bus potential transformer is located on the 12.5 kV operating bus.
- 8. One Line Diagram Attached: Yes
- Description of Facilities Owned by Each Party: 9.

#### BBEC owns:

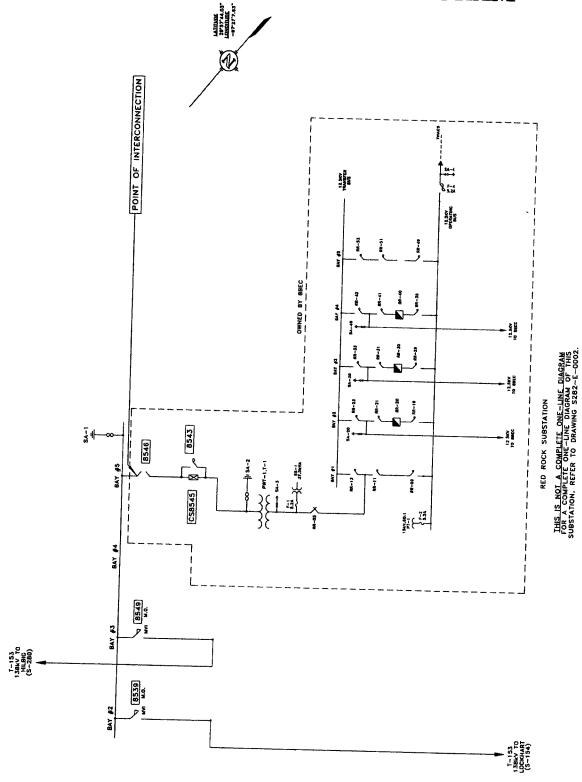
- One (1) 138 kV bay including A-frames, bus extensions, trusses, insulators, conductors, hardware and foundations
- One (1) circuit switcher CS-8545 with associated disconnect and bypass switches 8546 and 8543
- One (1) power transformer PWT-1, T-1 and associated surge arresters
- All distribution circuits 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 A-frames, trusses, insulators, disconnect switches, surge arresters, 12.5 kV operating and transfer bus, bus potential transformer and associated cabling
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse
- Backup Generator
- Station service

#### LCRA TSC owns:

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

- Two (2) 138 kV bays including A-frames, trusses, insulators, conductors, hardware and foundations
- One (1) 138 kV dead-end structure, foundations, insulators and jumpers (where the Lockhart transmission line terminates in the substation)
- Two (2) 138 kV motor operated switches with interrupters MO-8539 and MO-8549
- One (1) 138 kV surge arrester SA-1
- One (1) 138 kV operating bus including structures, foundations and jumpers
- Control house
- Battery bank and battery charger
- Operational Responsibilities of Each Party: Each Party is responsible for the 10. operation of the equipment it owns.
- Maintenance Responsibilities of Each Party: Each Party will be fully responsible for 11. the maintenance of the equipment it owns.
- Other Terms and Conditions: BBEC and LCRA TSC are to share access to the 12. substation by LCRA TSC locks in the gate and in the control house doors.

# RED ROCK ONE-LINE DIAGRAM



#### Amendment No. 1 FACILITY SCHEDULE NO. 35

- 1. Name: Wolf Lane Substation
- 2. Facility Location: The Wolf Lane Substation is located at 1216 Pearce Lane, Cedar Creek, Bastrop County, Texas 78612.
- 3. Points of Interconnection: There are four (4) Points of Interconnection in the Wolf Lane Substation generally described as:
  - where the bridle jumper from the 138 kV operating bus connects to circuit switcher CS-4155 in bay 4.
  - where the bridle jumper from the 138 kV transfer bus connects to switch 4157 in bay 4.
  - where the bridle jumper from the 138 kV operating bus connects to circuit switcher CS-4165 in bay 5.
  - where the bridle jumper from the 138 kV transfer bus connects to switch 4167 in bay 5.
- 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 transformers for PWT-1, T-2 and PWT-3, T-4 are located in the total bays. The bus potential transformers are located on the 24.9 kV operating buses.
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

#### BBEC owns:

- Two (2) circuit switchers CS-4155 and CS-4165
- Four (4) 138 kV switches 4156, 4157, 4166 and 4167
- Two (2) power transformers PWT-1, T-2, PWT-3, T-4 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, bus tie switches, surge arresters, 24.9 kV operating and transfer buses, bus potential transformer and associated cabling
- One (1) modulation transformer MTU-1 and associated surge arrester and fuse
- Two (2) station service SS-2 and SS-3

#### LCRA TSC owns:

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

- 138 kV wire bus including structures, insulators, hardware, foundations and bridle jumpers
- Five (5) 138 kV bays including A-frames, trusses, insulators, conductors, hardware and foundations
- One (1) 138 kV bus potential transformer PT-1
- One (1) 138 kV surge arrester SA-1
- One (1) 24.9 kV current metering transformer CT-1
- Underfrequency relay (in BBEC panel 14)
- Control house 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: BBEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.

Amendment No. 1
WOLF LANE ONE-LINE DIAGRAM

