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Amendment No. 11 to

INTERCONNECTION AGREEMENT

Between

Guadalupe Valley Electric Cooperative, Inc.

and

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LCRA Transmission Services Corporation

Dated March 10, 2017

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ELEVENTH AMENDMENT TO INTERCONNECTION AGREEMENT

This Eleventh Amendment ("Amendment") is made and entered into this 10th day of March, 2017, between the Guadalupe Valley Electric Cooperative, Inc. ("GVEC") and LCRA Transmission Services Corporation ("LCRA TSC") collectively referred to hereinafter as the Parties.

WHEREAS, LCRA TSC and GVEC entered into that certain Interconnect Agreement executed February 8, 2011; as amended by that certain Amendment No. 2, executed as of October 13, 2011; as amended by that certain Amendment No. 2, executed as of October 13, 2011; as amended by that certain Amendment No. 3, executed as of November 30, 2011; as amended by that certain Amendment No. 4, executed as of December 19, 2011, as amended by that certain Amendment No. 5, executed as of February 16, 2012, as amended by that certain Amendment No. 6, executed as of April 25, 2013, as amended by that certain Amendment No. 7, executed as of July 29, 2013, as amended by that certain Amendment No. 8, executed as of December 19, 2014, as amended by that certain Amendment No. 9, executed as of February 23, 2015, as amended by that certain Amendment No. 10, executed as of October 20, 2016, (collectively, as amended, the "Agreement"); and,

WHEREAS, LCRA TSC and GVEC are entering into a contemporaneous agreement and bill of sale whereby GVEC is acquiring certain LCRA TSC assets at Highway 123, Deer Creek, Schumansville, LCRA Nixon, and Seguin West Substations which cause those facility schedules to change; and

WHEREAS, LCRA TSC and GVEC have agreed to a change at the Gillett Substation interconnection.

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 Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 2. Exhibit "A" attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 3. Facility Schedule No. 7 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 7 attached to this Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 4. Facility Schedule No. 7 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 5. Facility Schedule No. 9 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 9 attached to this Eleventh Amendment is hereby added to the

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Agreement in lieu thereof.

- 6. Facility Schedule No. 9 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 7. Facility Schedule No. 11 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 11 attached to this Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 8. Facility Schedule No. 11 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 9. Facility Schedule No. 24 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 24 attached to this Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 10. Facility Schedule No.['] 24 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 11. Facility Schedule No. 25 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 25 attached to this Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 12. Facility Schedule No. 25 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.
- 13. Facility Schedule No. 26 (including the diagrams attached thereto) is deleted in its entirety and Facility Schedule No. 26 attached to this Eleventh Amendment is hereby added to the Agreement in lieu thereof.
- 14. Facility Schedule No. 26 (including the diagrams attached thereto) attached to this Eleventh Amendment will become effective upon execution of this Eleventh Amendment by the Parties.

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Except as otherwise expressly provided for herein, the Agreement will continue in full force and effect in accordance with its terms.

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

GUADALUPE VALLEY ELECTRIC COOPERATIVE, INC.

By

Name: Sean Alvarez

Title: Chief Operating Officer and Senior Executive, Engineering and Operations

Date: 3/10/17

LCRA TRANSMISSION SERVICES CORPORATION

Name: Stuart Nelson

Title: Senior Vice President, Transmission Business Development

Date:_____

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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GUADALUPE VALLEY ELECTRIC COOPERATIVE, INC.

By: _____

Name: Sean Alvarez

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Title: Chief Operating Officer and Senior Executive, Engineering and Operations

Date: _____

LCRA TRANSMISSION SERVICES CORPORATION

Mu By: ~

Name: Stuart Nelson

Title: Senior Vice President, Transmission Business Development

Date: 3/10/2017

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Exhibit A

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Amendment No. 11

i	FACILITY	LOCATION OF POINT(S)	INTERCONNECTION	EFFECTIVE DATE OF
	SCHEDULE	OF INTERCONNECTION	VOLTAGE (KV)	INTERCONNECTION
	NO.	(# of Points)		
	1	Cuero (18)	12.5 kV	2/23/2015
	2	Geronimo (4)	138 kV	7/29/2013
ĺ	3	Gonżales (2)	138 kV	2/8/2011
	4	Hallettsville (2)	▶ 138 kV	12/19/2014
	5	FM 237 Yorktown (1)	138 kV	12/19/2014
	6	Marion (2)	138 kV	8/26/2011
[7	LCRA Nixon (1)	138 kV	Date of 11 th Amendment
	8	Parkway (6)	138 kV	2/8/2011
	9	Schumansville (1)	138 kV	Date of 11 th Amendment
ſ	10	Seguin (6)	138 kV	February 23, 2015
5	11	Seguin West (2)	138 kV	Date of 11 th Amendment
	12	Sweet Home (6)	24.9 kV	2/8/2011
	13	Thompsonville (3)	4.16 kV	2/8/2011
ſ	14	Waelder (6)	12.5 kV	2/8/2011
[15	Weiderstein (2)	138 kV	2/8/2011
	16	Yoakum-Gartner (11)	12.5 kV	2/8/2011
	17	York Creek (1)	138 kV	2/8/2011
	18	Cheapside (2)	138 kV	2/8/2011
	19	Pilot Grove (3)	138 kV	2/23/2015
	_ 20	Nordheim West (1)	138 kV	12/19/2014
	21	Lost Creek (2)	138 kV	· 12/19/2014
	22	Mont (1)	138 kV	2/16/2012
	23	Lindenau (1)	138 kV	2/16/2012
	24	Highway 123 (1)	138 kV	Date of 11 th Amendment
	25	Gillett (1)	138 kV	Date of 11 th Amendment
	26	Deer Creek (3)	69 kV/138 kV	Date of 11 th Amendment
	27 .	Shiner (3)	12.5 kV	2/23/2015
	28	Moulton South (1)	138 kV	10/20/2016
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FACILITY SCHEDULE NO. 7 Amendment No. 11

- 1. Name: LCRA Nixon Substation
- 2. Facility Location: The LCRA Nixon Substation is located at 2654 FM 2922, Nixon, Gonzales County, Texas 78140.
- **3. Points of Interconnection:** There is one (1) Point of Interconnection in the LCRA Nixon Substation generally described as:
 - where the aluminum pipe bus from the four hole pad on GVEC's 138 kV switch '9039 attaches to LCRA TSC's 138 kV operating bus #1.

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- 4. Transformation Services Provided by LCRA TSC: No
- 5. Metering Services Provided by LCRA TSC: No
- 6. **Delivery Voltage:** 138 kV
- 7. Metered Voltage and Location: N/A
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

GVEC owns:

- One (1) 138 kV circuit breaker 9040 including foundation, jumpers and protective relaying
- Two (2) 138 kV disconnect switches 9039 and 9041

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- Pipe bus from LCRA TSC's 138 kV operating bus #1 to GVEC's switch 9039
- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - LCRA Nixon to Cost (via Smiley) 69 kV transmission line
 - LCRA Nixon to GVEC Nixon 69 kV transmission line
- Two (2) 69 kV dead-end structures, foundations, insulators and jumpers
- Nine (9) 69 kV disconnect switches 9019, 9021, 9023,9029, 9031, 9033, 9038, 25209 and 25211
- 69 kV operating bus #1 including structures, insulators, foundations and jumpers
- Three (3) 69 kV circuit breakers 9020, 9030 and 25210 including foundations, jumpers and protective relaying
- One (1) 69 kV motor operated switch MO9018
- One (1) 69 kV bus differential and breaker failure relaying scheme
- Five (5) A-Frames
- Five (5) A-Frame upper trusses

- Five (5) A-Frame lower trusses
- One (1) 69 kV surge arresters SA1
- One (1) 138/69 kV auto transformer AT1 with associated surge arresters
- One (1) 69 kV bus potential transformers PT1
- One (1) station service SS1 with associated fuse F2

LCRA TSC owns:

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

- Two (2) 138 kV dead-end structures, foundations, insulators and jumpers
- 138 kV operating bus #1 including structures, insulators, foundations and jumpers
- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - LCRA Nixon to Deer Creek 138 kV transmission line
 - LCRA Nixon to Nixon AEP 138 kV transmission line
- Two (2) 138 kV coupling capacitor voltage transformers CCVT4 and CCVT5
- Three (3) 138 kV surge arresters SA2, SA3 and SA4
- Two (2) 138 kV circuit breakers 7500 and 7595 with foundations, jumpers and protective relaying
- Six (6) 138 kV disconnect and bypass switches 7499, 7501, 7503, 7593, 7594 and 7596
- One (1) 138 kV bus differential & breaker failure relaying scheme
- One (1) 69 kV capacitor bank CP1
- One (1) single phase capacitor bank neutral current transformer CT3
- One (1) capacitor bank potential transformer PT3
- One (1) capacitor bank current transformer CT2
- One (1) capacitor bank surge arrester SA5
- One (1) capacitor bank circuit switcher CS9025 with disconnect switch 9024
- One (1) control house with battery bank, battery charger and appurtenances
- One (1) station service SS2 from GVEC distribution (not shown on one line diagram)
- Substation property, ground grid, gravel, fencing and other appurtenances
- 48-fiber OPGW with splice cans and patch panels
- **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:
 - GVEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
 - GVEC will supply and allow LCRA TSC use of its 138 kV circuit breaker 9040 relaying bushing current transformers for LCRA TSC's 138 kV bus differential relaying scheme.

- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to GVEC's 138 kV circuit breaker 9040 relaying panel.
- GVEC will provide breaker failure initiate contacts from its circuit breaker 9040 relaying panel to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.
- LCRA TSC and GVEC shall design, provide, and coordinate their respective protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- LCRA TSC will provide GVEC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- LCRA TSC will provide GVEC with floor space (as necessary) in its control house for the installation of GVEC required relay panel boards and equipment.
- GVEC will provide LCRA TSC access to its station service SS1 as needed.
- LCRA TSC will provide GVEC access to its station service SS2 as needed.

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LCRA NIXON ONE-LINE DIAGRAM

Amendment No. 11

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FACILITY SCHEDULE NO. 9 Amendment No 11

- 1. Name: Schumansville Substation
- 2. Facility Location: The Schumansville Substation is located at 500 W. Zipp Rd., New Braunfels, Guadalupe County, Texas 78130.
- **3. Points of Interconnection:** There is one (1) Point of Interconnection in the Schumansville Substation generally described as:
 - where the GVEC jumper attaches to the LCRA TSC Schumansville to Sheriffs Posse 138 kV transmission line at the GVEC dead end structure inside the Schumansville Substation.
- 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 each 24.9 kV distribution bay; in the T1 transformer bus and internal to T2. 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:

GVEC owns:

The Schumansville Substation including, all equipment and facilities except those listed as being owned by LCRA TSC.

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - o Schumansville to McQueeney 138 kV transmission line
- One (1) 138 kV jumper from substation equipment to Point of Interconnection at LCRA TSC's 138 kV Schumansville to Sheriffs Posse transmission line
- Substation property, ground grid, gravel, fencing and other appurtenances

LCRA TSC owns:

- The following transmission line including dead end insulators and hardware:
 138 kV Schumansville to Sheriffs Posse transmission line
- One (1) EPS meter panel (Panel 1) with meters
- One (1) billing meter panel (Panel 6)

• One (1) RTU panel (Panel 16)

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- One (1) SIP panel (Panel 20)
- Two (2) 24.9 kV bus potential transformers PT1 and PT2 with associated fuses F2 and F4
- Seven (7) metering current transformers CT1, CT4, CT5, CT6, CT7, CT8 and CT9
- **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:

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- GVEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- GVEC will provide and allow LCRA TSC use of power transformer T2's bushing current transformer for metering.

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SCHUMANSVILLE ONE-LINE DIAGRAM

LCRA TSC – GVEC-11th Amendment

FACILITY SCHEDULE NO. 11 Amendment No 11

- 1. Name: Seguin West Substation
- 2. Facility Location: The Seguin West Substation is located at 1405 New Braunfels St., Seguin, Guadalupe County, Texas 78155.
- **3. Points of Interconnection:** There are two (2) Points of Interconnection in the Seguin West Substation generally described as:
 - where the LCRA TSC jumper from switch 9739 bolts to the four hole pad on the GVEC 138 kV operating bus.
 - where the LCRA TSC jumper from switch 9743 bolts to the four hole pad on the GVEC 138 kV transfer bus.
- 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 transformer is located inside T2. 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:

GVEC owns:

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - o Seguin West to Caterpillar 138 kV transmission line
 - Seguin West to Seguin 138 kV transmission line
- Three (3) 138 kV dead end structures (bays #2, #3 and #4), foundations, insulators and jumpers
- Two (2) 138 kV coupling capacitor voltage transformers CCVT1 and CCVT2
- Two (2) 138 kV wave traps and tuners WT1 and WT2
- One (1) 138 kV bus potential transformer PT1
- One (1) 138 kV surge arrester SA1
- One (1) 138 kV bus differential and breaker failure relaying scheme
- 138 kV operating and transfer bus including structures, insulators, foundations and jumpers

- Two (2) 138 kV circuit breakers 9760 and 9770 including foundations, jumpers and protective relaying
- One (1) circuit switcher CS9755 including foundation, stand, jumpers and protective relaying
- Nine (9) 138 kV switches 9744, 9749, 9751, 9753, 9761, 9763, 9769, 9771 and 9773 including foundations, stands and jumpers
- Two (2) 138 kV motor operated switches MO9758 and MO9759 including interrupter, foundation, stand and jumpers
- One (1) power transformer T2 with associated surge arresters, foundation, jumpers and protective relaying
- All T2 distribution circuits including dead end insulators that attach to the dead end structure, conductors, and hardware
- All T2 distribution circuit breakers including jumpers and protective relaying
- All T2 distribution and total bays including A-frames, trusses, insulators, disconnect switches, surge arresters and 24.9 kV operating and transfer bus
- One (1) load management system LM1 with fuses F5 and F7
- One (1) station service SS2 and associated fuses F3 and F6

LCRA TSC owns:

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

- Two (2) 138 kV switches 9739 and 9743
- One (1) 138 kV circuit switcher CS9745 with bypass switch 9747, foundation, stand and protective relaying
- One (1) power transformer T1 with associated surge arresters, foundation, jumpers and protective relaying
- One (1) 24.9 kV bus potential transformer PT3 and associated fuse F4
- One (1) 24.9 kV bus disconnect switch SW55
- One (1) underfrequency relay panel
- One (1) control house with battery, battery charger and appurtenances
- One (1) station service SS1 and associated fuse F1
- Substation property, ground grid, gravel, fencing and 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: GVEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
 - GVEC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to LCRA TSC's 138 kV circuit switcher CS9745 relaying panel.
 - LCRA TSC will provide breaker failure initiate contacts from its circuit switcher CS9745 relaying panel to GVEC's 138 kV bus differential & breaker failure

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relaying panel.

- LCRA TSC and GVEC shall design, provide, and coordinate their respective
- protection system equipment so that adjacent zones of protection overlap, in accordance with ERCOT Nodal Operating Guides.
- LCRA TSC will provide GVEC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- LCRA TSC will provide GVEC with floor space (as necessary) in its control house for the installation of GVEC required relay panel boards and equipment.
- GVEC will provide LCRA TSC access to its station service SS2 as needed.
- LCRA TSC will provide GVEC access to its station service SS1 as needed.

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SEGUIN WEST ONE-LINE DIAGRAM

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Amendment No 11



FACILITY SCHEDULE NO. 24 Amendment No 11

- 1. Name: Highway 123 Substation
- 2. Facility Location: The Highway 123 Substation is located off of Lange Road, Guadalupe County, Texas.
- **3. Points of Interconnection:** There is one (1) Point of Interconnection in the Highway 123 Substation generally described as:
 - where the GVEC jumper attaches to the LCRA TSC 138 kV Highway 123 to Cushman transmission line at the GVEC dead end structure inside the Highway 123 Substation.
- 4. Transformation Services Provided by LCRA TSC: No
- 5. Metering Services Provided by LCRA TSC: No
- 6. Delivery Voltage: 138 kV
- 7. Metered Voltage and Location: N/A
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

GVEC owns:

The Highway 123 Substation including, but not limited to the following items:

- The following 138 kV transmission lines comprised of conductors, insulators, and connecting hardware:
 - Highway 123 to Hickory Forest 138 kV transmission line
 - Highway 123 to New Berlin 138 kV transmission line
- One (1) 138 kV jumper from substation equipment to Point of Interconnection at LCRA TSC's 138 kV Highway 123 to Cushman transmission line
- Two (2) 138 kV dead-end structures, foundations, insulators and jumpers for the GVEC transmission lines
- One (1) 138 kV dead-end structures, foundations, insulators and jumpers for the LCRA TSC transmission line
- 138 kV operating buses #1 and #2 including structures, insulators, foundations and jumpers
- Two (2) 138 kV bus differential & breaker failure relaying schemes
- Four (4) 138 kV surge arresters SA1, SA2, SA3 and SA4
- Three (3) 138 kV coupling capacitor voltage transformers CCVT1, CCVT2 and CCVT3
- One (1) 138 kV power voltage transformer PVT1 (station service)

- Twelve (12) 138 kV disconnect switches 24729, 24731, 24739, 24741, 24759, 24771, 24779, 24781, 24789, 24791, 24801 and 24809
- Six (6) 138 kV circuit breakers 24730, 24740, 24770, 24780, 24790 and 24800 including foundations, jumpers and protective relaying
- One (1) control house with battery, battery charger and appurtenances
- Substation property ground grid, gravel, fencing and other appurtenances

LCRA TSC owns: .

- The following 138 kV transmission lines comprised of conductors, insulators, and connecting hardware:
 - • Highway 123 to Cushman 138 kV transmission line
- One (1) RTU and communications equipment^{*}
- **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:

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- GVEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- GVEC will provide LCRA TSC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- GVEC will provide LCRA TSC with floor space (as necessary) in its control house for the installation of LCRA TSC equipment.

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LCRA TSC – GVEC-11th Amendment Page 18 of 25

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FACILITY SCHEDULE NO. 25 Amendment No. 11

- 1. Name: 'Gillett Substation
- 2. Facility Location: The Gillett Substation is located at 3623 County Road 170 Nixon, Gonzales County, Texas 78140.
- **3. Points of Interconnection:** There is one (1) Point of Interconnection in the Gillett Substation generally described as:
 - where GVEC's jumpers from GVEC switch 25119 attaches to the four hole pad on LCRA TSC's 138 kV Operating Bus.
- 4. Transformation Services Provided by LCRA TSC: No
- 5. Metering Services Provided by LCRA TSC: No
- 6. Delivery Voltage: 138 kV
- 7. Metered Voltage and Location: N/A
- 8. One Line Diagram Attached: Yes

9. Description of Facilities Owned by Each Party:

GVEC owns:

- One (1) 138 kV transmission line from Nopal Substation to Gillett Substation including insulators, jumpers, dead end hardware, and OPGW
- One (1) 138 kV dead end structure and foundations
- 144-fiber OPGW with splice cans and patch panels
- Three (3) 138 kV switches 25119, 25121 and 25123
- One (1) 138 kV circuit breaker 25120 with foundation, jumpers and protective relaying
- One (1) 138 kV coupling capacitor voltage transformer CCVT3
- One (1) 138 kV surge arrester SA2

LCRA TSC owns:

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

- Two (2) 138 kV dead end structure and foundations
- Two (2) 138 kV transmission lines from AEP Nixon and Milton Substations including insulators, jumpers, dead end hardware, and OPGW
- One (1) power potential transformer PVT1
- Two (2) 138 kV motor operated switches 25126 and 25128 with relaying panel
- One (1) 138 kV surge arrester SA1
- One (1) remote terminal unit

- One (1) control house (24' x 42'), battery bank and battery charger
- 48-fiber OPGW with splice cans and patch panels
- 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:

- GVEC and LCRA TSC are to share access to the Gillett substation by LCRA TSC locks in the gate and in the control house doors.
- GVEC will share fibers with LCRA TSC from its OPGW network as necessary and available for system operation, protection and communications access to the GVEC Nopal Substation.
- LCRA TSC will provide GVEC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- LCRA TSC will provide GVEC with floor space (as necessary) in its control house for the installation of GVEC required relay panel boards and equipment.

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GILLETT ONE-LINE DIAGRAM Amendment No. 11



FACILITY SCHEDULE NO. 26 Amendment No. 11

- 1. Name: Deer Creek Substation
- 2. Facility Location: The Deer Creek Substation is located at 11808 Alternate 90 Seguin, Guadalupe County, Texas 78115.
- **3. Points of Interconnection:** There are three (3) Points of Interconnection in the Deer Creek Substation generally described as:
 - where the LCRA TSC 138 kV operating bus terminal connector bolts to the four hole pad on GVEC switch 25099.
 - where the LCRA TSC 138 kV operating bus terminal connector bolts to the four hole pad on GVEC switch 25089.
 - where the GVEC 69 kV operating bus terminal connector bolts to the four hole pad on LCRA TSC switch 25069.
- 4. Transformation Services Provided by LCRA TSC: No
- 5. Metering Services Provided by LCRA TSC: No-
- 6. Delivery Voltage: 69 kV/138 kV
- 7. Metered Voltage and Location: N/A
- 8. One Line Diagram Attached: Yes
- 9. Description of Facilities Owned by Each Party:

GVEC owns:

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - Deer Creek to Seguin 138 kV transmission line
 - Deer Creek to Nash Creek 69 kV transmission line
- One (1) 138 kV A-frame dead end structure, insulators, hardware and foundations
- Four (4) 138 kV switches 25089, 25099, 25101 and 25103
- Two (2) 138 kV circuit breaker 25090, 25100 including foundation, jumpers, and protective relaying
- One (1) 138 kV coupling capacitor voltage transformer CCVT1
- Two (2) 138 kV surge arresters: SA2 (T606) and SA6 (AT1)
- One (1) 69 kV A-frame dead end structure, insulators, hardware and foundations
- Two (2) 69 kV circuit breaker 25060 and 25080 including foundation, jumpers, and protective relaying
- One (1) 69 kV Operating Bus #1 including supports, foundations, insulators and hardware

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- One (1) 69 kV bus differential & breaker failure relaying scheme
- Four (4) 69 kV switches 25059, 25061, 25063 and 25079
- One (1) 69kV coupling capacitor voltage transformer CCVT6
- Three (3) 69 kV surge arresters: SA5 (69 kV bus PTs); SA7 (AT1) and SA9 (T377)
- One (1) 69 kV bus potential transformer PT1
- One (1) 138/69 kV auto transformer AT1 with foundation, jumpers and protective relaying
- One (1) 15.3 kV MCOV surge arrester SA8 (AT1 tertiary)
- One (1) station service SS1 with high-side fuses F1; and 200A 240/120 Vac fused disconnect switch (FDS-1)
- 144-fiber OPGW with splice can and patch panel to Capote Substation

LCRA TSC owns:

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

- The following transmission lines comprised of conductors, insulators, and connecting hardware:
 - O Deer Creek to AEP Darst Creek 69 kV transmission line
- One (1) 138 kV A-frame dead end structure, insulators, hardware and foundations
- One (1) 2 bay-69 kV A-frame dead end structure, insulators, hardware and foundations
- One (1) 138 kV operating bus including supports, foundations, insulators and hardware
- Two (2) 138 kV surge arresters SA1 (138 kV PVT1) and SA3 (T605)
- One (1) 138 kV power potential transformer PVT1 and 200A 240/120 Vac fused disconnect switch (FDS-2)
- One (1) 69 kV circuit breaker 25070 with foundation, jumpers and protective relaying
- Three (3) 69 kV switches 25069, 25071 and 25073
- One (1) 69 kV surge arrester SA4 (T538)
- One (1) 138 kV circuit breaker 25110 with foundation, jumpers and protective relaying
- Three (3) 138 kV switches 25109, 25111 and 25113
- One (1) 138 kV coupling capacitor voltage transformer CCVT2
- One (1) 138 kV bus differential & breaker failure relaying scheme
- One (1) control house with battery, battery charger, AC/DC panels, and appurtenances
- 48-OPGW with splice can and patch 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.

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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:

- GVEC and LCRA TSC are to share access to the substation by LCRA TSC locks in the gate and in the control house doors.
- GVEC will provide tripping and close inhibit contacts from its 69 kV bus differential & breaker failure relaying panel to LCRA TSC's circuit breaker 25070 relaying panel.
- LCRA TSC will provide tripping and close inhibit contacts from its 138 kV bus differential & breaker failure relaying panel to GVEC's circuit breakers 25100 and 25090 relaying panels.
- LCRA TSC will provide breaker failure initiate contacts from its 69 kV circuit breaker 25070 relaying panel to GVEC's 69 kV bus differential & breaker failure relaying panel.
- GVEC will provide breaker failure initiate contacts from its 138 kV circuit breakers 25100 and 25090 relaying panel to LCRA TSC's 138 kV bus differential & breaker failure relaying panel.
- GVEC will allow LCRA TSC use of its station service transformer (SS1), with LCRA TSC supplying the conduit and cable from GVEC's station service transformer low-side disconnect switch (FDS-1) to the LCRA TSC control house.
- LCRA TSC will provide GVEC access to 125 VDC and 120 VAC power. Circuits must have over current protection devices (OCPD) sized according to NEC standards.
- LCRA TSC will provide GVEC with floor space (as necessary) in its control house for the installation of GVEC required relay panel boards and equipment.
- LCRA TSC and GVEC will share fibers with each other from their OPGW networks as necessary and available for system operation and protection.

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DEER CREEK ONE-LINE DIAGRAM

Amendment No. 11

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