

Control Number: 35077



Item Number: 1174

Addendum StartPage: 0



November 10, 2020

Filing Clerk
Public Utility Commission of Texas
1701 N. Congress Avenue
P.O. Box 13326
Austin, TX 78711-3326



RE: Project No. 35077 – Pedernales Electric Cooperative, Inc.’s Transmission Contract Filing Pursuant to Subst. Rule 25.195(e)

Attached is an amendment to that certain Standard Generation Interconnection Agreement between Pedernales Electric Cooperative, Inc. (“PEC”) and North Fork Energy Storage, LLC (“Generator”), dated April 28, 2020, for filing at the Public Utility Commission pursuant to Substantive Rule 25.195(e). This amendment to the Interconnection Agreement updates Exhibit C and does not contain deviations from the Commission-approved Standard Generation Interconnection Agreement (“SGIA”).”

Respectfully submitted,

Charles DeWitt

Enclosure

**FIRST AMENDMENT
to the
Interconnection Agreement**

This First Amendment to the ERCOT Standard Generation Interconnection Agreement (the "Amendment") is dated as of October 26, 2020 by and between Pedernales Electric Cooperative, Inc. (hereinafter called "PEC") and North Fork Energy Storage, LLC (hereinafter called "Generator") is effective as of Nov. 2, 2020

RECITALS

WHEREAS, PEC and Generator entered into that ERCOT Standard Generation Interconnection Agreement dated as April 28, 2020 (the "Agreement"), and

WHEREAS, PEC and Generator wish to amend the Agreement to remove and replace Exhibit C, Interconnection Details, in its entirety

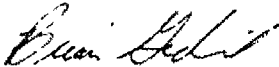
NOW, THEREFORE, and in consideration of the mutual covenants herein contained, the receipt and sufficiency of which are hereby acknowledged, PEC and Generator agree to amend the Agreement as follows:

1. Exhibit C, Interconnection Details, is removed and replaced in its entirety with the Exhibit C attached hereto and incorporated herein
2. All other terms and conditions of the Agreement not hereby modified shall continue in full force and effect

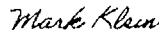
Pedernales Electric Cooperative, Inc

North Fork Energy Storage, LLC

By



By



Name: Brian Gedrich

Name: Mark Klein

Title: Vice President, Engineering

Title: Chief Operating Officer

Date: NOVEMBER 2, 2020

Date: October 29, 2020



**Exhibit “C”
Interconnection Details**

- 1) Name: North Fork Energy Storage, LLC (North Fork Energy Storage) Interconnection
- 2) Point of Interconnection Location: The Point of Interconnection will be at the first transmission pole located outside PEC’s Andice Substation (“TSP substation”) located in Williamson County, TX as shown in Exhibit C1, Exhibit C2, and Exhibit C3.
- 3) Delivery Voltage: 138-kV
- 4) Number and Size of Generating Units: The Plant is a Battery Energy Storage System (“BESS”) facility with one Point of Interconnection to the grid. The nominal Plant rating will be approximately 100.49-MVA of AC power with a maximum rating of 100 MW at the Point of Interconnection comprised of 33 inverter units.
- 5) Type of Generating Unit

Unit ID	IA (MW)	# Inverters	Inverter Rating (MW)	Inverter Manufacturer	Inverter Model #
1	100.49	33	3.045	Power Electronics	FS3510M

- 6) Metering and Telemetry Equipment:
 - A) Generator acknowledges that the Plant will engage in wholesale energy storage in accordance with the PUCT Rules and ERCOT Requirements for a Wholesale Storage Load (“WSL”) and that the installation will require two meter points at the North Fork Substation. One meter point will be on the 138-kV side of the Generator Step Up (GSU) transformer to meter power flow across the point of interconnection (POI). One meter point will be on the 34.5-kV side of the GSU in order to meter the power flow delivered to the storage device. Meter data from the two meters will be used to determine the auxiliary power load consumed by the facility.
 - B) The Transmission Service Provider shall, in accordance with ERCOT Requirements and Good Utility Practices, install, own, operate, inspect, test, calibrate, and maintain primary and back up ERCOT Polled Settlement (EPS) meters located at North Fork Substation. The location of the meters are denoted on the one-line attached as Exhibit C1.
 - C) Generator shall provide suitable space within the North Fork Substation for the TSP-specified enclosure for the EPS meters.
 - D) The Generator shall install, for TSP’s use, adequately rated instrument transformers to accurately meter the Generator’s facilities. The location of the instrument transformers is denoted on the one-line attached as Exhibit C1.
 - E) Generator shall, no fewer than one hundred twenty (120) days prior to the In-Service Date, provide, for TSP’s review and approval, the necessary equipment specifications,

- factory test reports, vendor cut-sheets and any other engineering drawings for the aforementioned instrument transformers to be installed by Generator and used by TSP.
- F) The Generator shall provide the cable and suitable conduit paths between the Generator's instrument transformers and the Generator's control building for TSP's use in metering the WSL.
 - G) Generator shall provide access to and maintenance of the TSP-specified enclosure for the EPS meters.
 - H) A Remote Terminal Unit (RTU) shall be provided by the Transmission Service Provider at Andice Substation and will have a dedicated communication port available to provide applicable breaker status and other telemetry data to ERCOT as required by the ERCOT Nodal Operating Guides.
 - I) An RTU shall be provided by the Generator at the Generator's interconnection substation as part of the GIF and will have dedicated communication port(s) available to provide breaker status and other telemetered data to ERCOT as required by the ERCOT Nodal Operating Guides.
- 7) Generator Interconnection Facilities (GIF): The GIF shall consist of the following major equipment, at a minimum:
- A) Generator's interconnection substation including control building, 138-kV step up transformer(s), transformer protection, and 138-kV circuit breaker(s).
 - B) RTU and communication to provide breaker/switch status, telemetry and energy data from the GIF to ERCOT as required by the ERCOT Nodal Operating Guides.
 - C) One 138-kV breaker with associated appurtenances needed to connect the Generator.
 - D) Three (3) 34.5-kV metering current transformers and three (3) 34.5-kV metering accuracy voltage transformers for TSP's WSL metering.
 - E) Three (3) 138-kV metering current transformers and three (3) 138-kV metering accuracy voltage transformers for TSP's EPS metering.
 - F) Suitable conduit paths from the Generator's control building to the Generator owned metering current transformers and metering accuracy voltage transformers with review and acceptance of design by TSP.
 - G) A 138-kV bus.
 - H) Control house for relay and communications panels with space for TSP's EPS and WSL metering and communications equipment.
 - I) OPGW from North Fork's substation to the POI. Generator shall dress out the OPGW in a manner acceptable to the TSP to facilitate one (1) splice with the TSP owned fiber at the POI and one (1) splice with the TSP owned WSL meter.
 - J) Fiber patch panel at the Generator's site, the Generator will install fiber jumpers from to the TSP EPS and WSL meters.

Transmission structures and right-of-way from the POI to the North Fork Substation.

- 8) Transmission Service Provider Interconnection Facilities: The Transmission Service Provider will provide the following major facilities for the TIF.
- A) At Andice:
 - 1) An A-frame structure.
 - 2) One (1) 138-kV breaker with associated appurtenances needed to connect the Generator into a ring bus configuration at Andice substation.

- 3) Bus extensions, as needed.
 - 4) 138-kV conductor from the Andice substation A-frame to the POI consisting of one 795 kcmil Drake ACSR conductor per phase, and
 - 5) OPGW (144 strands) from the POI to the TSP control house at Andice including an OPGW splice box and rack at the POI.
 - 6) One steel transmission pole at the POI.
- B) At North Fork:
- 1) Metering Facilities which will include the following:

- (i) Two (2) metering panels;
- (ii) Two (2) EPS meters (one primary meter and one backup meter);
- (iii) Two (2) WSL meters (one primary meter and one backup meter);

9) Communications Facilities:

- A) The Generator shall, in accordance with ERCOT requirements and Good Utility Practice, provide communication facilities that are, or may in the future be, necessary for effective interconnected operation of the Plant and GIF with the transmission system, including but not limited to OPGW from PEC Control house at Andice to Generator Control house at North Fork.
- B) The Generator shall provide the dedicated channels or fiber pairs for necessary items including Generator's 138-kV radial circuit protective relaying, TSP's EPS and WSL metering, and Remedial Action Scheme communications.

10) System Protection Equipment:

- A) Generators shall provide line protection panel(s) for Generator's equipment at North Fork, which will coordinate with the PEC line panel(s) at the Andice Substation;
- B) Generator shall be responsible for the proper synchronization of its facilities with the TSP transmission system, in accordance with ERCOT guidelines;
- C) The Plant and the GIF shall be designed to isolate any fault, or to disconnect from or isolate any abnormality that would negatively affect the ERCOT system. The Generator shall be responsible for protection of its facilities. In particular, Generator shall provide relays, circuit breakers, and all other devices necessary to promptly remove and fault contribution of the generation equipment to any short circuit occurring on the TSP system. Such protective equipment shall include, without limitation, a disconnect device or switch with the appropriate interrupting capability to be located within the GIF. Generator shall be responsible for protection of such facilities from such conditions as negative sequence currents, over or under frequency, sudden load rejection, over or under voltage, generator loss of field, inadvertent energization (reverse power) and uncleared transmission system faults.
- D) The Plant and the GIF shall have protective relaying that is consistent with the protective relaying criteria described in the ERCOT Requirements and NERC standards. If requested by the TSP, Generator shall at Generator's expense, provide corrections or

additions to existing control and protective equipment required to protect the ERCOT system or to comply with government, industry regulations, or standard changes.

- E) The Generators' protective relay design shall incorporate the necessary test switches to enable complete functional testing. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and tripping generator units.
 - F) Generators shall install sufficient disturbance and fault monitoring equipment to thoroughly analyze all system disturbances of the generation system. This equipment shall monitor the voltages at major nodes of the system, current at major branches, breaker and switch positions, and enough of the dc logic in the relay control scheme to analyze a system disturbance. The TSP shall provide for disturbance and fault monitoring equipment in its TSP Substation. The disturbance and fault monitoring for Generators and TSP shall be consistent with the disturbance monitoring requirements described in the ERCOT Requirements and NERC standard.
 - G) Prior to modifying any relay protection system design or relay setting involving the connecting facilities between the Parties, Generators shall submit the proposed changes to the TSP for review and approval. TSP's review and approval shall be for the limited purpose of determining whether such proposed changes are compatible with the ERCOT transmission system.
 - H) In accordance with Good Utility Practice and ERCOT and NERC standards, the TSP shall determine requirements for protection of the Point of Interconnection and the zone of protection around the Point of Interconnection and shall specify and implement protection and control schemes as necessary to meet such requirements. The Generator shall have the right to review and comment on the necessary protection requirements, and such comments shall not be unreasonably refused by the TSP when determining such requirements. The TSP shall coordinate the relay system protection between the Generator and the ERCOT system.
 - I) The Generators shall provide in PSSE or Aspen One-Liner format the short circuit model for the GIFs, the generators and collector facilities prior to the protective relays settings being calculated and in no case later than 60 days prior to the actual In-Service Date. Generator data submitted in accordance with Section 7.3 of Exhibit "A" shall include, but not be limited to,
 - 1) a detailed one-line diagram of the proposed Plants and GIFs showing the collector buses and their voltages,
 - 2) conductor types and lengths of all lines connecting the collector buses to the TSP Substation,
 - 3) the total number of inverters,
 - 4) size, make and model of battery connected to each inverter,
 - 5) size locations (electrical) and control settings for each reactive device installed, and
 - 6) the voltage, impedance and rating data of the transformers, bus, and transmission line being installed to get power from the Plants to the POI.
- 11) Inputs to Telemetry Equipment:
- A) Generator to provide:
 - 1) status indicator, three phase megawatts, and three phase megavars for 138-kV breaker.

- 2) Voltage for A, B, and C phases for each bus.
- 3) Status indicator, three phase megawatts, and three phase megavars for each reactive device
- 4) Status indicator for each switch.

12) Supplemental Terms and Conditions, if any, attached:

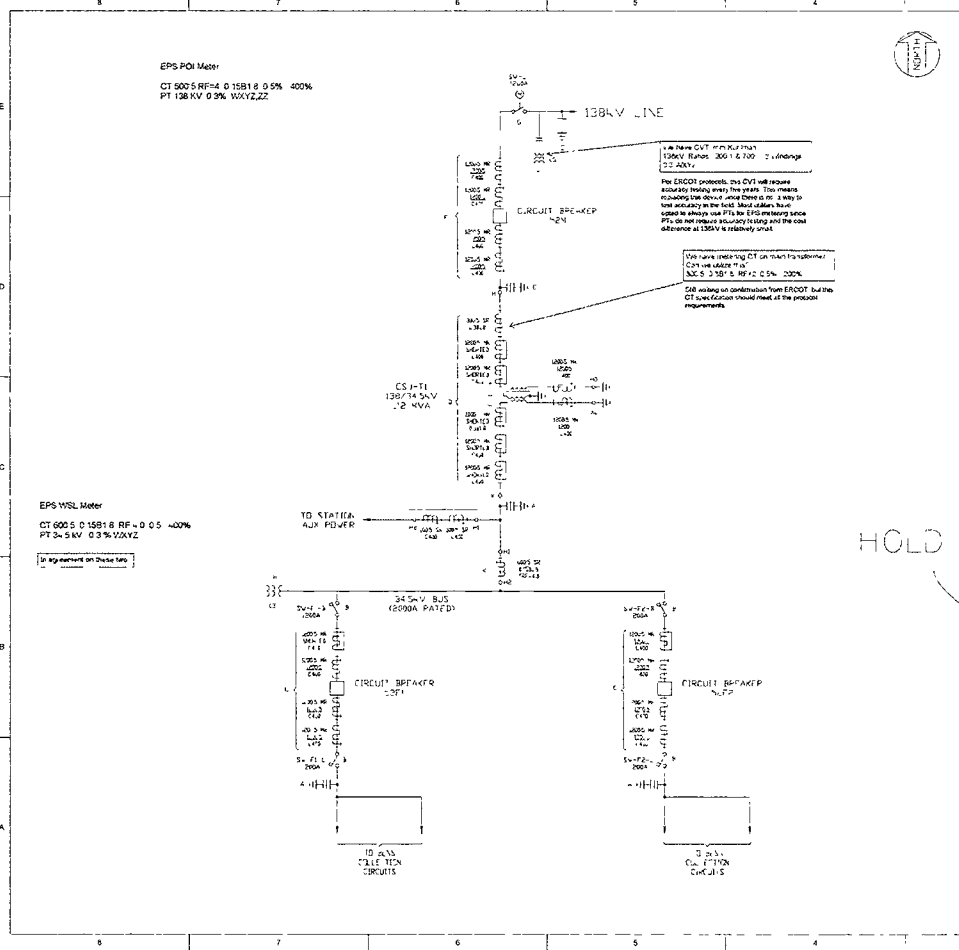
- A) Generator and TSP will cooperate to establish unique numbers for each device. Generator will register the name(s) of its facilities and associated device numbers in accordance with ERCOT requirements.
- B) Generator will install, maintain and operate reactive facilities in accordance with ERCOT Requirements as needed to operate the facility within the normal operating range of 138-kV plus and minus 5% at the POI.
- C) Generator will coordinate selection of no load tap settings on its power transformers prior to the in-service date.
- D) In the event that changes at Andice substation require the relocation of the POI, the Generator shall cooperate with TSP and make commercially reasonable efforts to relocate its facilities as required to maintain the POI.

13) Special Operating Conditions: The interconnection of the Generator Facilities shall not obligate the TSP to curtail transmission service to retail loads in order to facilitate Generator operations whether it be to charge or discharge or re-charge its facilities unless otherwise required by ERCOT Requirements or PUCT Rules.

14) Generator shall make application to become a PEC member. As needed in accordance with PEC member policies and ERCOT requirements for battery energy storage facilities, obtain retail electric service for auxiliary loads from PEC.

15) Real Property Rights and Access Road Provisions:

- A) Prior to installation of the metering facilities, Generator shall, at no cost to TSP, acquire from the underlying landowner and convey to TSP, a separate stand-alone transmission easement for the installation, operation and maintenance of TSP's metering facilities in a form approved by TSP including access rights to over and through the property on which the TSPs metering facilities are to be located.



LIST OF EQUIPMENT

ITEM	DESCRIPTION
1	34.5kV BUS (600A RATED)
2	CIRCUIT BREAKER
3	TRANSFORMER T1
4	TRANSFORMER T2
5	34.5kV BUS
6	TO STATIAUX AUX POWER
7	TO 5kV TABLE TEN CIRCUITS

PHASING INFORMATION

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

HOLD INFORMATION		
NO.	DESCRIPTION	
1	CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE INCLUDING CONTRACTORS/INSTALLER'S PERSONNEL OR THAT OF ITS SUB-CONTRACTORS/PERSONNEL PERFORMING THE WORK.	
RELEASE INFORMATION		
REV.	DATE	DESCRIPTION
0A	06/30/2020	ISSUED FOR COMMENTS 50%
0B	07/01/2020	ISSUED FOR COMMENTS 60%
ISSUE PURPOSE		
ISSUE PURPOSE	REVIEW	
DESCRIPTION	NO.	
PROJECT NO.	4029-002	
CAD FILE NAME: NFK-SE-001		
PREPARED BY: PKV		
REVIEWED BY: JCK		
APPROVED BY: MAB		
ANY MODIFICATION OR DEVIATION TO THIS DRAWING BY AN ORGANIZATION OTHER THAN SARGENT & LUNDY IS NOT THE RESPONSIBILITY OF SARGENT & LUNDY.		
PROJECT: NORTH FORK BATTERY ENERGY STORAGE SITE		
DRAWING TITLE: 138/34 5kV SUBSTATION MAIN ONE LINE DIAGRAM		
DRAWING NUMBER	REVISION	
NFK-SE-001	0	
SHEET	OF	

Site Map:

Exhibit "C2"

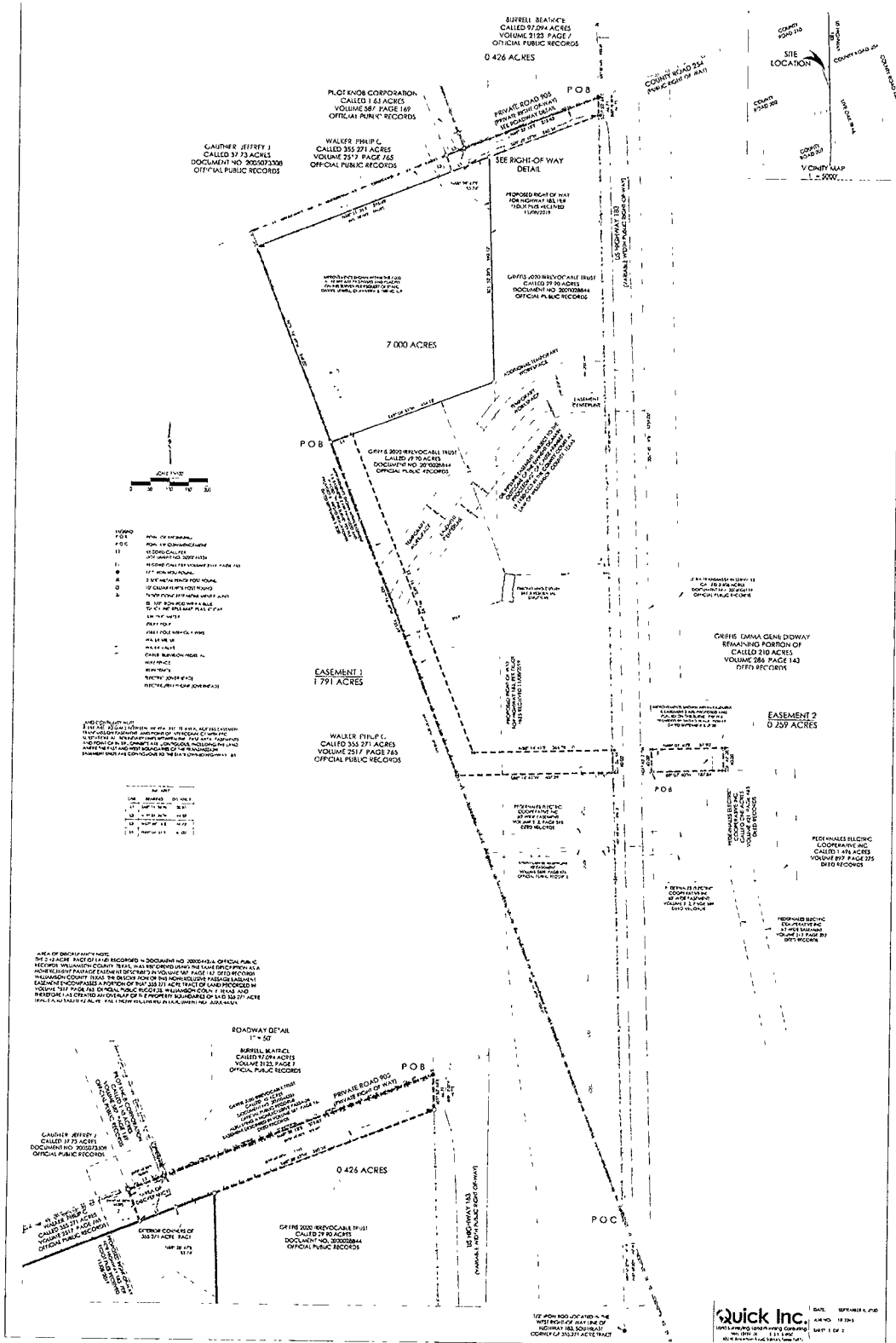
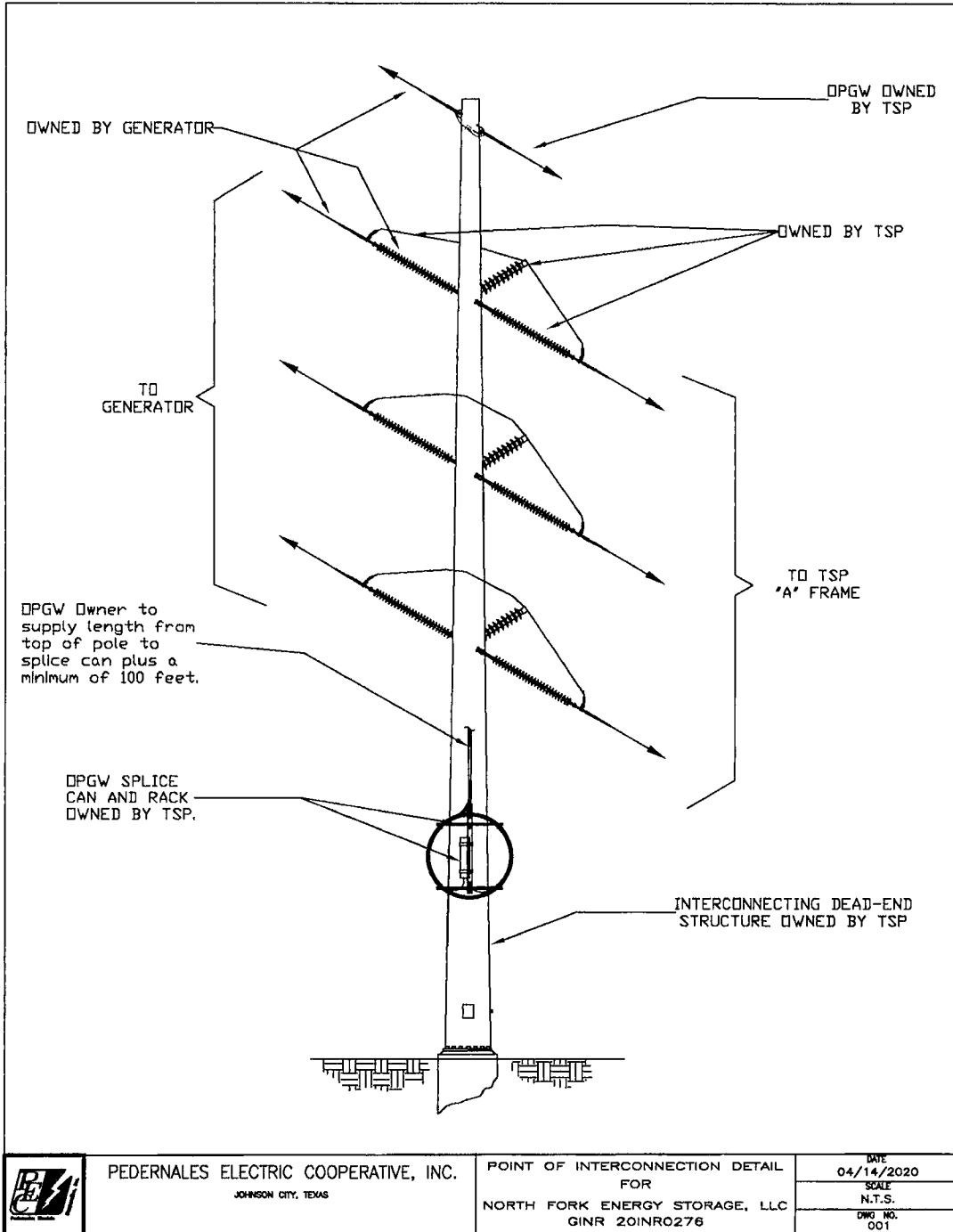


Exhibit "C3"
Interconnection Detail



**CORRECTION TO THE FIRST AMENDMENT
to the
Interconnection Agreement**

This Correction to the First Amendment to the ERCOT Standard Generation Interconnection Agreement (the "Correction Amendment") is dated as of November 5, 2020 by and between Pedernales Electric Cooperative, Inc. (hereinafter called "PEC") and North Fork Energy Storage, LLC (hereinafter called "Generator") is effective as of November 11, 2020.

RECITALS

WHEREAS, PEC and Generator entered into that ERCOT Standard Generation Interconnection Agreement dated as of April 28, 2020 and First Amendment to the Interconnection Agreement dated as of October 26, 2020 (collectively, the "Agreement"); and

WHEREAS, PEC and Generator wish to amend the Agreement to remove and replace Exhibit C, Interconnection Details, in its entirety due to an scrivener's error.

NOW, THEREFORE, and in consideration of the mutual covenants herein contained, the receipt and sufficiency of which are hereby acknowledged, PEC and Generator agree to amend the Agreement as follows:

1. Exhibit C, Interconnection Details, is removed and replaced in its entirety with the Exhibit C attached hereto and incorporated herein.
2. All other terms and conditions of the Agreement not hereby modified shall continue in full force and effect.

Pedernales Electric Cooperative, Inc.

North Fork Energy Storage, LLC

By: 

By: 

Name: Brian Gedrich

Name: Mark Klein

Title: Vice President, Engineering

Title: Chief Operating Officer

Date: 11/9/2020

Date: November 6th, 2020

**Exhibit “C”
Interconnection Details**

- 1) Name: North Fork Energy Storage, LLC (North Fork Energy Storage) Interconnection
- 2) Point of Interconnection Location: The Point of Interconnection will be at the first transmission pole located outside PEC’s Andice Substation (“TSP substation”) located in Williamson County, TX as shown in Exhibit C1, Exhibit C2, and Exhibit C3.
- 3) Delivery Voltage: 138-kV
- 4) Number and Size of Generating Units: The Plant is a Battery Energy Storage System (“BESS”) facility with one Point of Interconnection to the grid. The nominal Plant rating will be approximately 115.8-MVA of AC power with a maximum rating of 100 MW at the Point of Interconnection comprised of 33 inverter units.
- 5) Type of Generating Unit

Unit ID	IA (MW)	# Inverters	Inverter Rating (MW)	Inverter Manufacturer	Inverter Model #
1	100.49	33	3.045	Power Electronics	FP3510M

- 6) Metering and Telemetry Equipment:
 - A) Generator acknowledges that the Plant will engage in wholesale energy storage in accordance with the PUCT Rules and ERCOT Requirements for a Wholesale Storage Load (“WSL”) and that the installation will require two meter points at the North Fork Substation. One meter point will be on the 138-kV side of the Generator Step Up (GSU) transformer to meter power flow across the point of interconnection (POI). One meter point will be on the 34.5-kV side of the GSU in order to meter the power flow delivered to the storage device. Meter data from the two meters will be used to determine the auxiliary power load consumed by the facility.
 - B) The Transmission Service Provider shall, in accordance with ERCOT Requirements and Good Utility Practices, install, own, operate, inspect, test, calibrate, and maintain primary and back up ERCOT Polled Settlement (EPS) meters located at North Fork Substation. The location of the meters are denoted on the one-line attached as Exhibit C1.
 - C) Generator shall provide suitable space within the North Fork Substation for the TSP-specified enclosure for the EPS meters.
 - D) The Generator shall install, for TSP’s use, adequately rated instrument transformers to accurately meter the Generator’s facilities. The location of the instrument transformers is denoted on the one-line attached as Exhibit C1.
 - E) Generator shall, no fewer than one hundred twenty (120) days prior to the In-Service Date, provide, for TSP’s review and approval, the necessary equipment specifications,

- factory test reports, vendor cut-sheets and any other engineering drawings for the aforementioned instrument transformers to be installed by Generator and used by TSP.
- F) The Generator shall provide the cable and suitable conduit paths between the Generator's instrument transformers and the Generator's control building for TSP's use in metering the WSL.
 - G) Generator shall provide access to and maintenance of the TSP-specified enclosure for the EPS meters.
 - H) A Remote Terminal Unit (RTU) shall be provided by the Transmission Service Provider at Andice Substation and will have a dedicated communication port available to provide applicable breaker status and other telemetry data to ERCOT as required by the ERCOT Nodal Operating Guides.
 - I) An RTU shall be provided by the Generator at the Generator's interconnection substation as part of the GIF and will have dedicated communication port(s) available to provide breaker status and other telemetered data to ERCOT as required by the ERCOT Nodal Operating Guides.
- 7) Generator Interconnection Facilities (GIF): The GIF shall consist of the following major equipment, at a minimum:
- A) Generator's interconnection substation including control building, 138-kV step up transformer(s), transformer protection, and 138-kV circuit breaker(s).
 - B) RTU and communication to provide breaker/switch status, telemetry and energy data from the GIF to ERCOT as required by the ERCOT Nodal Operating Guides.
 - C) One 138-kV breaker with associated appurtenances needed to connect the Generator.
 - D) Three (3) 34.5-kV metering current transformers and three (3) 34.5-kV metering accuracy voltage transformers for TSP's WSL metering.
 - E) Three (3) 138-kV metering current transformers and three (3) 138-kV metering accuracy voltage transformers for TSP's EPS metering.
 - F) Suitable conduit paths from the Generator's control building to the Generator owned metering current transformers and metering accuracy voltage transformers with review and acceptance of design by TSP.
 - G) A 138-kV bus.
 - H) Control house for relay and communications panels with space for TSP's EPS and WSL metering and communications equipment.
 - I) OPGW from North Fork's substation to the POI. Generator shall dress out the OPGW in a manner acceptable to the TSP to facilitate one (1) splice with the TSP owned fiber at the POI and one (1) splice with the TSP owned WSL meter.
 - J) Fiber patch panel at the Generator's site, the Generator will install fiber jumpers from to the TSP EPS and WSL meters.

Transmission structures and right-of-way from the POI to the North Fork Substation.

- 8) Transmission Service Provider Interconnection Facilities: The Transmission Service Provider will provide the following major facilities for the TIF.
- A) At Andice:
 - 1) An A-frame structure.
 - 2) One (1) 138-kV breaker with associated appurtenances needed to connect the Generator into a ring bus configuration at Andice substation.

- 3) Bus extensions, as needed.
 - 4) 138-kV conductor from the Andice substation A-frame to the POI consisting of one 795 kcmil Drake ACSR conductor per phase, and
 - 5) OPGW (144 strands) from the POI to the TSP control house at Andice including an OPGW splice box and rack at the POI.
 - 6) One steel transmission pole at the POI.
- B) At North Fork:
- 1) Metering Facilities which will include the following:
 - (i) Two (2) metering panels;
 - (ii) Two (2) EPS meters (one primary meter and one backup meter);
 - (iii) Two (2) WSL meters (one primary meter and one backup meter);
- 9) Communications Facilities:
- A) The Generator shall, in accordance with ERCOT requirements and Good Utility Practice, provide communication facilities that are, or may in the future be, necessary for effective interconnected operation of the Plant and GIF with the transmission system, including but not limited to OPGW from PEC Control house at Andice to Generator Control house at North Fork.
 - B) The Generator shall provide the dedicated channels or fiber pairs for necessary items including Generator's 138-kV radial circuit protective relaying, TSP's EPS and WSL metering, and Remedial Action Scheme communications.
- 10) System Protection Equipment:
- A) Generators shall provide line protection panel(s) for Generator's equipment at North Fork, which will coordinate with the PEC line panel(s) at the Andice Substation;
 - B) Generator shall be responsible for the proper synchronization of its facilities with the TSP transmission system, in accordance with ERCOT guidelines;
 - C) The Plant and the GIF shall be designed to isolate any fault, or to disconnect from or isolate any abnormality that would negatively affect the ERCOT system. The Generator shall be responsible for protection of its facilities. In particular, Generator shall provide relays, circuit breakers, and all other devices necessary to promptly remove and fault contribution of the generation equipment to any short circuit occurring on the TSP system. Such protective equipment shall include, without limitation, a disconnect device or switch with the appropriate interrupting capability to be located within the GIF, Generator shall be responsible for protection of such facilities from such conditions as negative sequence currents, over or under frequency, sudden load rejection, over or under voltage, generator loss of field, inadvertent energization (reverse power) and uncleared transmission system faults.
 - D) The Plant and the GIF shall have protective relaying that is consistent with the protective relaying criteria described in the ERCOT Requirements and NERC standards. If requested by the TSP, Generator shall at Generator's expense, provide corrections or

additions to existing control and protective equipment required to protect the ERCOT system or to comply with government, industry regulations, or standard changes.

- E) The Generators' protective relay design shall incorporate the necessary test switches to enable complete functional testing. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and tripping generator units.
- F) Generators shall install sufficient disturbance and fault monitoring equipment to thoroughly analyze all system disturbances of the generation system. This equipment shall monitor the voltages at major nodes of the system, current at major branches, breaker and switch positions, and enough of the dc logic in the relay control scheme to analyze a system disturbance. The TSP shall provide for disturbance and fault monitoring equipment in its TSP Substation. The disturbance and fault monitoring for Generators and TSP shall be consistent with the disturbance monitoring requirements described in the ERCOT Requirements and NERC standard.
- G) Prior to modifying any relay protection system design or relay setting involving the connecting facilities between the Parties, Generators shall submit the proposed changes to the TSP for review and approval. TSP's review and approval shall be for the limited purpose of determining whether such proposed changes are compatible with the ERCOT transmission system.
- H) In accordance with Good Utility Practice and ERCOT and NERC standards, the TSP shall determine requirements for protection of the Point of Interconnection and the zone of protection around the Point of Interconnection and shall specify and implement protection and control schemes as necessary to meet such requirements. The Generator shall have the right to review and comment on the necessary protection requirements, and such comments shall not be unreasonably refused by the TSP when determining such requirements. The TSP shall coordinate the relay system protection between the Generator and the ERCOT system.
- I) The Generators shall provide in PSSE or Aspen One-Liner format the short circuit model for the GIFs, the generators and collector facilities prior to the protective relays settings being calculated and in no case later than 60 days prior to the actual In-Service Date. Generator data submitted in accordance with Section 7.3 of Exhibit "A" shall include, but not be limited to,
 - 1) a detailed one-line diagram of the proposed Plants and GIFs showing the collector buses and their voltages,
 - 2) conductor types and lengths of all lines connecting the collector buses to the TSP Substation,
 - 3) the total number of inverters,
 - 4) size, make and model of battery connected to each inverter,
 - 5) size locations (electrical) and control settings for each reactive device installed, and
 - 6) the voltage, impedance and rating data of the transformers, bus, and transmission line being installed to get power from the Plants to the POI.

11) Inputs to Telemetry Equipment:

A) Generator to provide:

- 1) status indicator, three phase megawatts, and three phase megavars for 138-kV breaker.

- 2) Voltage for A, B, and C phases for each bus.
- 3) Status indicator, three phase megawatts, and three phase megavars for each reactive device
- 4) Status indicator for each switch.

12) Supplemental Terms and Conditions, if any, attached:

- A) Generator and TSP will cooperate to establish unique numbers for each device. Generator will register the name(s) of its facilities and associated device numbers in accordance with ERCOT requirements.
- B) Generator will install, maintain and operate reactive facilities in accordance with ERCOT Requirements as needed to operate the facility within the normal operating range of 138-kV plus and minus 5% at the POI.
- C) Generator will coordinate selection of no load tap settings on its power transformers prior to the in-service date.
- D) In the event that changes at Andice substation require the relocation of the POI, the Generator shall cooperate with TSP and make commercially reasonable efforts to relocate its facilities as required to maintain the POI.

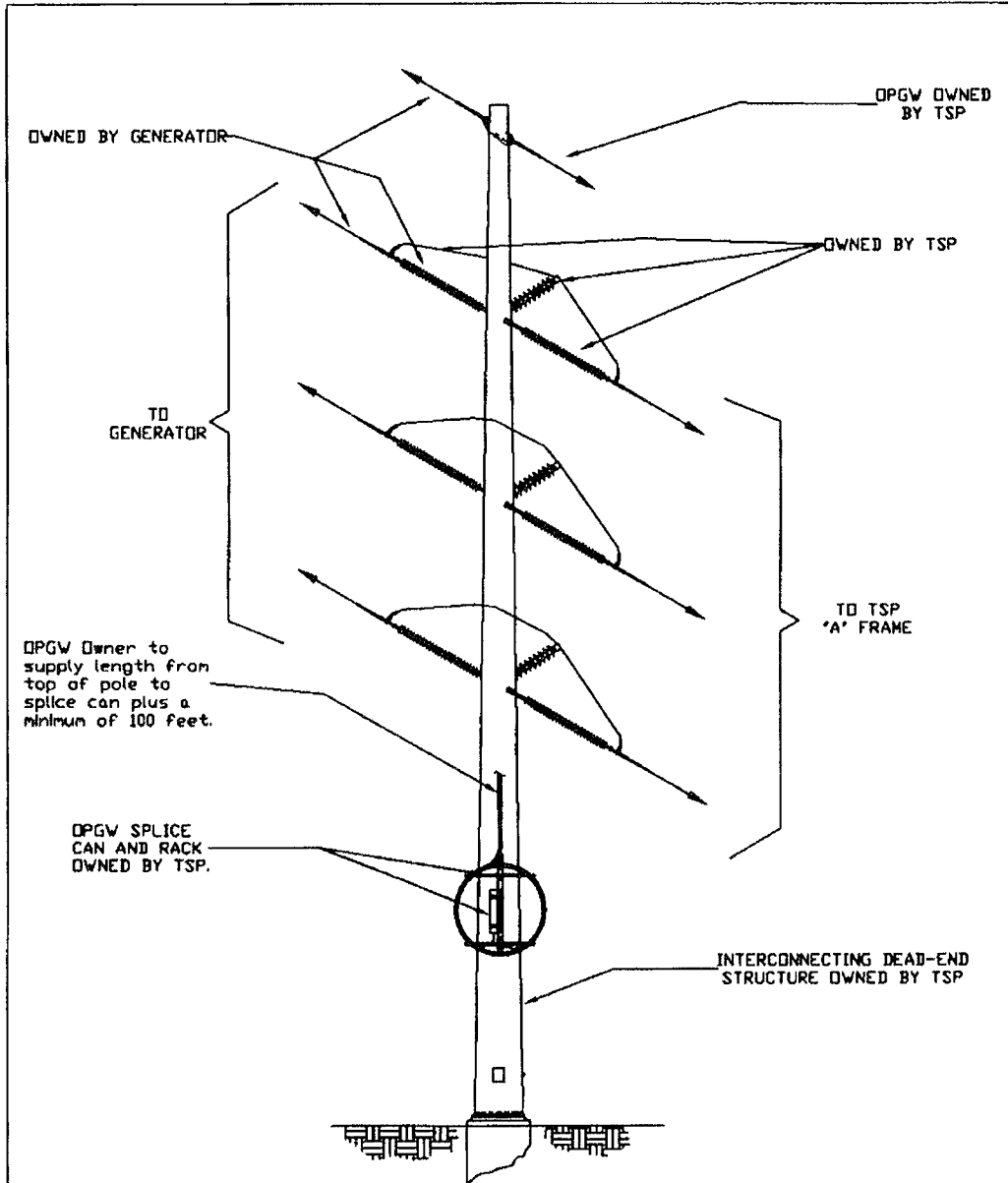
13) Special Operating Conditions: The interconnection of the Generator Facilities shall not obligate the TSP to curtail transmission service to retail loads in order to facilitate Generator operations whether it be to charge or discharge or re-charge its facilities unless otherwise required by ERCOT Requirements or PUCT Rules.

14) Generator shall make application to become a PEC member. As needed in accordance with PEC member policies and ERCOT requirements for battery energy storage facilities, obtain retail electric service for auxiliary loads from PEC.

15) Real Property Rights and Access Road Provisions:

- A) Prior to installation of the metering facilities, Generator shall, at no cost to TSP, acquire from the underlying landowner and convey to TSP, a separate stand-alone transmission easement for the installation, operation and maintenance of TSP's metering facilities in a form approved by TSP including access rights to over and through the property on which the TSPs metering facilities are to be located.

Exhibit "C3"
Interconnection Detail



PEDERNALES ELECTRIC COOPERATIVE, INC.
JACKSON CITY, TEXAS

POINT OF INTERCONNECTION DETAIL
FOR
NORTH FORK ENERGY STORAGE, LLC
GINR 201NR0276

DATE	04/14/2020
SCALE	N.T.S.
DWG. NO.	001