Control Number: 35077

Item Number: 217

Addendum StartPage: 0

Project No. 35077

First Amendment to

INTERCONNECTION AGREEMENT

Between

Lower Colorado River Authority (Wirtz Plant)

and

LCRA Transmission Services Company

July 22, 2009

217

FIRST AMENDMENT TO
GENERATION INTERCONNECTION AGREEMENT

This First Amendment ("First Amendment") to the Generation Interconnection Agreement, dated April 28, 2009 between the Lower Colorado River Authority and the LCRA Transmission Services Corporation ("Agreement") is made and entered into this 22nd day of July ~~August~~ 2009, between Lower Colorado River Authority ("Generator) and LCRA Transmission Services Corporation ("Transmission Service Provider" or "TSP"), collectively referred to hereinafter as the Parties. In consideration of the mutual promises and undertakings herein set forth, the Parties agree to amend the Agreement as follows:

1. Exhibit "B" Facility Schedule is deleted in its entirety and the Exhibit "B" Facility Schedule attached to this First Amendment is hereby added to the Agreement in lieu thereof.

2. Exhibit "B" Facility Schedule 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.

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.

Lower Colorado River Authority

By: _____

Name: Ryan Rowney
Title: Mgr. Dam & Hydro

Date: 7/21/2009

LCRA TRANSMISSION SERVICES CORPORATION

By: _____

Name: Ray Pfefferkorn, P.E.
Title: LCRA Transmission Engineering Manager

Date: 7/22/09

First Amendment

Exhibit "B"

Facility Schedule

1. Name: **Wirtz Plant** – Existing Generation facility.

2. Point of Interconnection: The points at which the GIF interface with the TIF at the ***Wirtz Plant*** are shown in the attached photographs and one-line diagram. There are two points of interconnection for this Plant.

   Point #1: (Unit #1)
   Is defined as where the jumpers from TSP's 138 kV Operating Bus #1 connect to Generator's Switch #4849.

   Point #2: (Unit #2)
   Is defined as where the jumpers from TSP's 138 kV Operating Bus #2 connect to Generator's Switch #21629

3. Delivery Voltage: Point #1 – 138 kV
   Point #2 – 138 kV

4. Number and size (nominal net rating) of Generating Unit: Unit #1: 30 MW Unit #2: 30 MW

5. Type of Generating Unit: Unit #1: Hydro Unit #2: Hydro

6. Metering and Telemetry Equipment:

   a. TSP shall design and install EPS Metering Equipment in accordance with TSP's EPS Metering Design Proposal submitted to and approved by ERCOT.

   b. TSP and Generator shall each install such metering and telemetry equipment as may be required to satisfy the operational requirements of the TSP TIF, Plant GIF, and ERCOT's real-time data requirements.

7. Generator Interconnection Facilities

   a. Generator-Owned facilities located in the Plant and/or Common Switchyard including, but not limited to the following facilities:

   Point #1: (Unit #1 Generator Interconnection Facilities)

One – 138 kV Breaker (4850)
Three – 138 kV Air break switches (4849, 4851, 4853)
One – Transformer (GSU-1, T-7)
One – 138 kV Surge Arrestor (SA-36)
Two – 13.8 kV Surge Arrestors (SA-37, SA-11)
One – 13.8 kV Switch (WZG-1)
One lot – Differential and Overcurrent Protection for Power Transformer (T-7), including control cable and conduit
One lot –Overcurrent and Breaker Failure Protection for 138 KV Breaker 4850, including control cable and conduit
One lot - Associated structures, buswork, conductors, connectors, conduit, control cable, and foundations (for 138/13.8 kV Equipment listed above)
One lot - All cable and connections to the Common Switchyard grounding grid from (i) all Generator-owned equipment located in the Common Switchyard and (ii) the Plant grounding grid.

Point #2: (Unit #2 Generator Interconnection Facilities)
One – 138 kV Breaker (21630)
Two – Air break switches (21629, 21631)
One – Autotransformer (T-2) 138/69/13.8 kV at 40 MVA
One – 138 kV Surge Arrestor (SA-2)
One- 69kV Surge Arrestor (SA-5)
Two – 13.8 kV Surge Arrestors (SA-8, SA-12)
One – 13.8 kV Switch (WZG-2)
One lot – Differential and Overcurrent Protection for Autotransformer (T-2), including control cable and conduit
One lot – Overcurrent and Breaker Failure Protection for 138 kV Breaker 21630 including control cable and conduit
One lot – Associated structures, buswork, conductors, connectors, conduit, control cable, and foundations (for 138/13.8 kV Equipment listed above)
One lot - All cable and connections to the Common Switchyard grounding grid from (i) all Generator-owned equipment located in the Common Switchyard and (ii) the Plant grounding grid.

b. Generator-Owned Support Facilities located in the Plant, including the following facilities:

One lot - The physical building that houses Generator-Owned Support Facilities. This includes, but is not limited to the building structures, lighting, HVAC, fire detection, fire suppression, and fire extinguishing equipment.

8. Transmission Service Provider Interconnection Facilities

a. TSP-owned facilities located in the Common Switchyard, including the following facilities:

Point #1:
One lot – Jumpers from TSP's 138 kV Operating Bus #1 to Generators switch (4849)
One – Metering Current Transformer (CT-9)
One lot – Fuse (F-1), Station service transformer (SS-1)
One lot - Galvanized steel structures, including transmission line structures, deadends, switch stands, metering structures, surge supports, potential transformer supports, current transformer supports, line trap supports, and bus supports, bus work, connectors, conduit, control cable, and foundations

Point #2:
One lot – Jumpers from TSP's 138 kV Operating Bus #2 to Generators switch (21629)
One – Metering Current Transformer (CT-10)
One lot - Galvanized steel structures, including transmission line structures, deadends, switch stands, metering structures, surge supports, potential transformer supports, current transformer supports, line trap supports, and bus supports, bus work, connectors, conduit, control cable, and foundations

b. TSP-Owned Support Facilities located in the Common Switchyard, including the following facilities:

One lot- Control house with battery bank, battery charger and other appurtances.
One lot - EPS Metering Equipment
One lot - Perimeter fencing and yard lighting
One lot - Common Switchyard grounding grid
One lot – Multi-ported RTU and panels to provide breaker status of CB 4850, CB21630, AT2 alarms, GSU-1 alarms, and other telemetry data from the TSP's transmission substation to the Generator using a fiber connection from the RTU to the generators SCADA system
One lot – Control Panels
One lot – For 2-138 kV buses -Bus Differential and Breaker failure scheme Protection for the 138 KV buswork including control cable and conduit.

9. Communications Facilities: Generator shall, in accordance with ERCOT Requirements and Good Utility Practice, provide communications facilities that are, or may in the future be, necessary for effective interconnected operation of the Generator's Plant with the transmission system. Generator will directly make arrangements to procure and will bear the procurement, installation, and ongoing operations and maintenance costs of such facilities. The communications facilities will include, but not be limited to:

a. One private line voice circuit in the Hydro Operations Control Center (an off-premise extension for TSP's PBX)

b. One ICCP communications circuit to SOCC providing Generator breaker status and Generator megawatts and megavars. Duplicate generation data is transmitted to the TSP control center via EPS metering to the TSP's RTU.

c. Fiber Optic communications circuit between TSP's multi-ported RTU and the Hydro Operations Control Center.

10. System Protection Equipment:

a. Generator shall own, operate, and maintain its protective relay and control equipment. This equipment includes the current transformers (other than EPS meter CT's), potential transformers, control wiring, and protective relays associated with the leads from the generator breakers to power transformer GSU-1, T-7; main auto transformer AUT-2, T-2; station service transformers, generator protection relays; generator synchronization; Plant auxiliary systems; and diesel generators associated with the Plant.

b. TSP shall own, operate, and maintain its protective relay and control equipment. This equipment includes the current transformers, potential transformers, control wiring, protective relays, and all the equipment associated with the transmission line terminal.

11. Inputs to Telemetry Equipment: Generator shall supply the following data to TSP's RTU.

a. Generating Unit Net Output - three phase megawatts and three phase megavars.

b. Generator breaker status – indication of breaker status (open or closed).

c. Circuit breaker 4850 status and pressure.

d. Circuit breaker 21630 status and pressure

e. AT-2 Differential status (trip or closed)

f. AT-2 Alarm status (alarm or normal)

g. GSU-1, T-7 Differential status (trip or closed)

h. GSU-1, T-7 Alarm status (alarm or normal)

12. Supplemental Terms and Conditions:

a. Switching and Clearance:

a) Generator shall obtain prior approval from TSP before operating any circuit switching apparatus (e.g. switches, circuit breakers, etc.) at the GIF, whether for testing or for operations of the of the Plant, which approval shall not be unreasonably withheld.

b) The TSP shall direct all switching at the Point of Interconnection and coordinate all switching of the GIF. The operators of the GIF or their designated agents shall comply with requirements of the TSP's switching and clearance procedures for

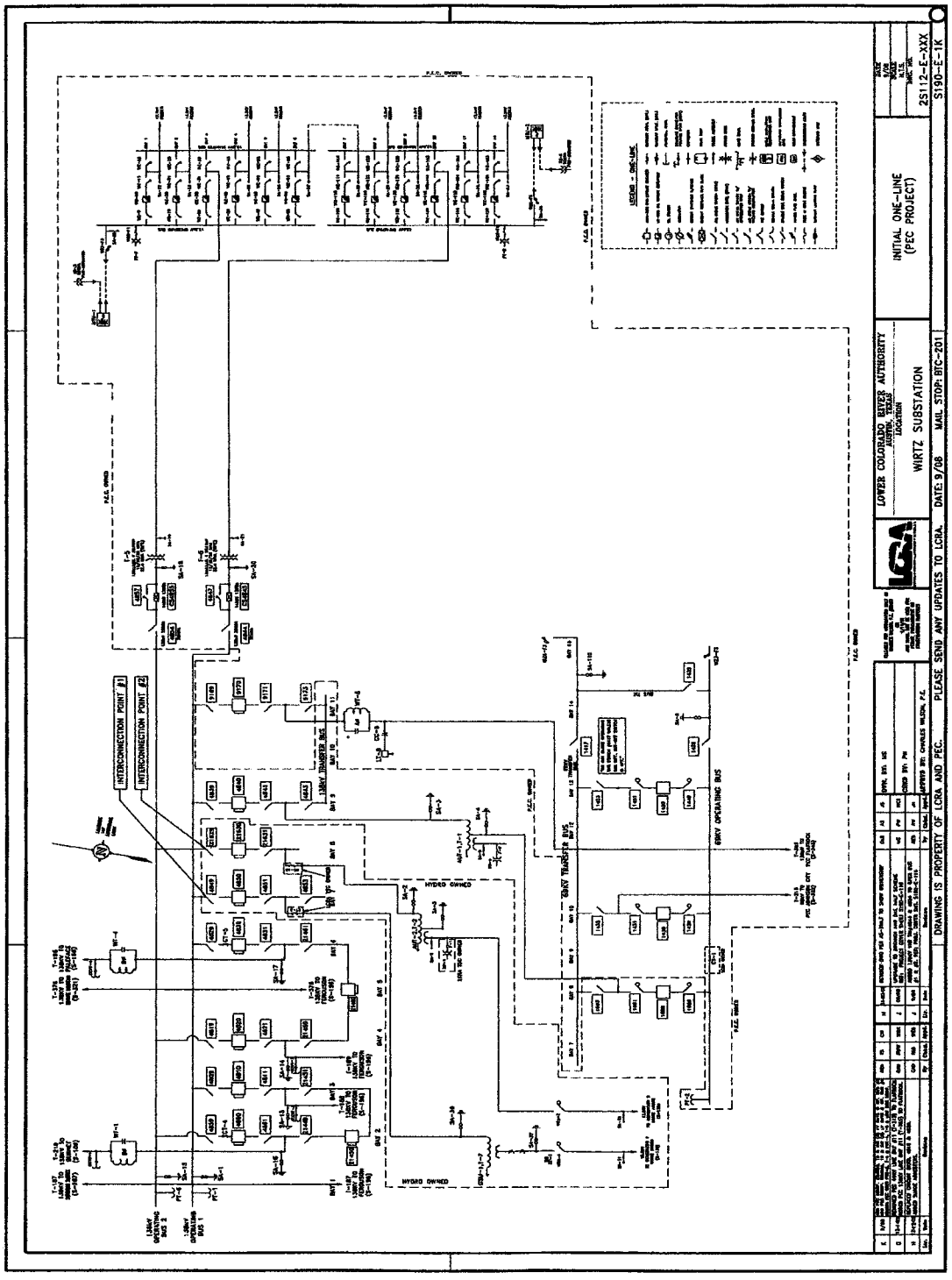
actions directly involving the Interconnection Point. Direction and/or coordination of the switching will be conducted by the TSP.

c) The TSP will provide Generator with a copy of the TSP's transmission operations procedure manual ("Red Book") and any subsequent amendments thereto. The TSP will provide transmission switching training to Generator prior to energizing the Point of Interconnection. Generator personnel or their designated agents that are to perform switching of the GIF must be on the TSP's authorized switching list. Generator and TSP agree to conduct all switching operations in accordance with the Red Book, as it may be changed by the TSP from time to time.

d) Generator will keep records of maintenance and switching operations of control and protective equipment and will allow TSP reasonable access to inspect such records.

b. No Retail Sale of Electricity to Plant by TSP: The TSP considers the energy and power that the Plant and GIF may from time to time consume from the system through the Point of Interconnection to be a retail transaction and as such, TSP does not intend to be the provider of this retail service. Generator shall make necessary arrangements with the appropriate retail supplier for the energy and power that the Plant and GIF may consume from the system through the Point of Interconnection.

c. The Generator is responsible for providing any back-up power sources that it may require due to the unavailability of this Point of Interconnection for any period of time.


INITIAL ONE-LINE
(PEC PROJECT)
2S112-E-XXX
S190-E-1K
LOWER COLORADO RIVER AUTHORITY
WIRTZ SUBSTATION
DATE: 9/08
MAIL STOP: BTC-201
DRAWING IS PROPERTY OF LCRA AND PEC. PLEASE SEND ANY UPDATES TO LCRA.
INTERCONNECTION POINT #1
INTERCONNECTION POINT #2
HYDRO OWNED
P.E.C. OWNED