Date:	June 2, 2015
To:	ERCOT Board of Directors
From:	Randa Stephenson, Technical Advisory Committee (TAC) Chair
Subject:	Application for Permanent Site-Specific Exemption from Compliance
-	with Paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3, Generation
	Netting for ERCOT-Polled Settlement Meters

### **Issue for the ERCOT Board of Directors**

### **ERCOT Board of Directors Meeting Date:** June 9, 2015 **Item No.:** 2.2

### Issue:

Whether the ERCOT Board of Directors (ERCOT Board) should approve Lower Colorado River Authority (LCRA) and Austin Energy's application for permanent site-specific exemption from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3, Generation Netting for ERCOT-Polled Settlement Meters.

### **Background/History:**

Paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3 provide:

- (2) For Settlement purposes, generation netting is not allowed except under one of the following conditions:
  - (b) Multiple POIs where the Loads and generator output are electrically connected to a common switchyard, as defined in paragraph (6) below. In addition, there must be sufficient generator capacity to serve all plant Loads for netting to occur; ...
- (5) All Load(s) included in the netting arrangement for an EPS Metering Facility shall only be electrically connected to the ERCOT Transmission Grid through the EPS metering point(s) for such Facility. Such Loads shall not be electrically connected to the ERCOT Transmission Grid through electrical connections that are not metered by the EPS metering point(s) for the Facility.

On 5/28/15, TAC unanimously approved LCRA and Austin Energy's application for a permanent exemption under the provisions of and in accordance with the information and data requirements found in Protocol Section 10.14.3.1, Information to be Included in the Application. Each of the requirements and a summary of the associated portions of the application are as follows:

*The application for exemption to ERCOT shall include:* 

(a) A detailed description of the exemption sought. including specific reference to the relevant Section(s) of these Protocols or the SMOG authorizing ERCOT to grant the exemption, and the Metering Facilities to which the exemption will apply;

The Metering Facilities to which the exemption will apply are located at the Fayette Power Project (FPP). The Fayette Power Project consists of three units: FPP Unit 1 is jointly owned by Austin Energy and LCRA and was built in 1979, FPP Unit 2 is jointly owned by Austin Energy and LCRA and was built in 1980 and FPP Unit 3 is wholly owned by LCRA and was built in 1988. Since the units were built at different times, but at a single site, FPP Units 1 and 2 have a separate interconnection request, Resource Asset Registration Forms (RARFs) and ERCOT-Polled Settlement (EPS) Metering plan from FPP Unit 3. (See Arial View of the Fayette Power Project below).

In March 2012, LCRA completed a scrubber project by adding flue gas desulfurization technology to make environmental upgrades that remove about 90% of SO2 emissions plant wide. During this time, new switchgear and feeders were installed that facilitated backfeed options to increase plant reliability among the units (described more fully in the section below). The implementation of modifications for the backfeed options in 2013 and 2014 requires a permanent exemption to Protocol Section 10.3.2.3.

During backfeed configurations, power for FPP Unit 3 would be obtained from FPP Unit 1 or 2, or FPP Unit 1 or 2 power would be obtained from FPP Unit 3. This would only occur during plant shutdowns or startup conditions. The internal interconnecting equipment is not sized for plant operating loads and would not be used to power an operating plant.

Power is transferred between FPP Units through the FPP infrastructure without further recourse to transmission lines. None of the power is diverted around or bypasses any EPS meter. Therefore, the netting of the backfeed load and generation occurs strictly as a function of the internal management between LCRA and Austin Energy.

The Metering Facilities are included in the design proposals FPP Yard Design 1 for FPP Unit 1 and 2 and FPP Yard Design 2 for FPP Unit 3. No changes to these design proposals are required.

# (b) A detailed statement of the reason for seeking the exemption, including any supporting documentation;

For FPP Unit 3, station service can only be derived from the unit auxiliary transformer or standby auxiliary transformer. The unit auxiliary transformer is powered by the generator and therefore only available when the plant is operational. During shutdown or startup conditions, FPP Unit 3 plant loads can only be powered from the standby auxiliary transformer. If the standby auxiliary system fails while the plant is in shutdown or startup, there would be no power to FPP Unit 3's plant loads other than batteries and emergency generators. In these conditions, the plant could not be started. The backfeed project makes it possible to provide

power from FPP Unit 1 or 2 to power FPP Unit 3 plant loads during shutdown or startup conditions.

FPP Units 1 and 2 are similar except that the standby auxiliary transformer is shared between facilities and either FPP Unit 1's or Unit 2's unit auxiliary transformer can feed either plant load. Therefore, if both FPP Unit 1 and 2 are shut down and the standby auxiliary source failed, neither FPP Unit 1 nor 2 could be restarted. With the backfeed project, power could be provided from FPP Unit 3 to power or startup either FPP Unit 1 or 2.

During maintenance outages, it is desirable to go on to backfeed to allow maintenance of the standby auxiliary equipment. At the present time, this maintenance is performed while the plants are operational. Clearly, this is a reliability concern and introduces a level of risk which can be mitigated by the backfeed project. Therefore in this condition, if the plant trips, there will not be a source for the plant loads other than batteries and emergency generator.

As can be seen below in an aerial view of the Fayette Power Project, all three plants are located adjacent to each other at the same site. This facilitated internal transfer of power since electrical equipment is in close proximity within the plants for all facilities.



Arial View of the Fayette Power Project

(c) Details of the Entity(s) to which the exemption will apply;

The Entity to which the exemption will apply is the Fayette Power Project located in Fayette County and additional information is available in the RARF. FPP is owned by LCRA and Austin Energy as described above.

(*d*) Details of the location to which the exemption will apply;

The Facility to which the exemption will apply is the Fayette Power Project located in Fayette County and additional information is available in the RARF. Since this is an internal metering issue and does not affect the Point of Interconnection (POI), we do not have any further information for this section.

(e) Details of the period of time for which the exemption will apply, including the proposed start and finish dates of that period; and

The clarification from the requirement is regarding paragraph (5) of Protocol Section 10.3.2.3 concerning the term "Facility." It is not a defined term in the ERCOT Protocols. LCRA requests that all units of FPP are considered the "Facility" and can be used in the internal netting arrangement. The start date will be coordinated with Resource Owners and ERCOT's Operations and Metering Departments to be implemented as soon as possible to remove the temporary exemption that ERCOT granted.

(f) Any other information requested by ERCOT.

None requested as of this date.

# Key Factors Influencing Issue:

On May 7, 2015, ROS unanimously voted to endorse LCRA and Austin Energy's application for permanent site-specific exemption from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3.

On May 28, 2015, TAC unanimously voted to approve LCRA and Austin Energy's application for permanent site-specific exemption from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3.

### **Conclusion/Recommendation:**

As more specifically described above, TAC recommends that the ERCOT Board approve LCRA and Austin Energy's application for permanent site-specific exemption from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3.

## ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC. BOARD OF DIRECTORS RESOLUTION

WHEREAS, paragraphs (2)(b) and (5) of Section 10.3.2.3 of the Electric Reliability Council of Texas, Inc. (ERCOT) Protocols impose requirements related to generation netting for Generation Resource Facilities;

WHEREAS, Lower Colorado River Authority (LCRA) and Austin Energy have submitted a permanent site-specific exemption application from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3 for the Metering Facilities at Fayette Power Project (FPP);

WHEREAS, the ERCOT Board of Directors (Board) concurs with the May 28, 2015 Technical Advisory Committee (TAC) recommendation to approve LCRA and Austin Energy's permanent site-specific exemption application; and

WHEREAS, the ERCOT Board deems it desirable and in ERCOT's best interest to approve LCRA and Austin Energy's permanent site-specific exemption application.

THEREFORE be it RESOLVED, that the ERCOT Board hereby approves LCRA and Austin Energy's application for permanent site-specific exemption from compliance with paragraphs (2)(b) and (5) of Protocol Section 10.3.2.3.

# **CORPORATE SECRETARY'S CERTIFICATE**

I, Vickie G. Leady, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its June 9, 2015 meeting, the ERCOT Board passed a motion approving the above Resolution by \_\_\_\_\_.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of June 2015.

Vickie G. Leady Assistant Corporate Secretary