



Modification Request Impact Study for Generator Interconnection Requests

GEN-2011-045

GEN 2011-046

June, 2014
Generator Interconnection



Executive Summary

<OMITTED TEXT> (Customers) have requested a modification to Generation Interconnection Requests GEN 2011-045 and GEN 2011-046 in accordance with Section 4.4 of the Generator Interconnection Procedures (GIP) of the Southwest Power Pool Open Access Transmission Tariff (OATT). Customers have requested to drop their requests for Network Resource Interconnection Service (NRIS) and to be designated as Energy Resource Interconnection Service (ERIS) only. SPP has undertaken this Modification Request Impact Study (MRIS) to determine the impacts on other interconnection customers for accommodating the modification request.

A power flow analysis shows that with ERIS Network Upgrades identified in DISIS-2011-002, the Customer's request to drop its request for NRIS will not affect the scope or cost of NRIS Network Upgrades for other Interconnection Customers sharing or depending on the NRIS Network Upgrades currently assigned to the Interconnection Customers. Power flow analysis was based on both summer and winter peak conditions and light loading cases. Therefore, the previously identified NRIS Network Upgrades listed in Table 3 are no longer required for Interconnection Service.

Stability Analysis was not performed for this study.

The request of these Customers to be designated as Energy Resource Interconnection Service only is NOT considered a Material Modification under GIP 4.4.

Nothing in this study should be construed as a guarantee of transmission service. If the customer wishes to sell power from the facility, a separate request for transmission service shall be requested on Southwest Power Pool's OASIS by the Customer.

This study fulfills SPP's requirements in accordance with GIP 4.4.3 to evaluate the Customer's modification. In accordance, with GIP 4.4.2, the Customer may choose to withdraw its request for modification.

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Introduction

<OMITTED TEXT> (Customers) have requested a modification to Generation Interconnection Requests GEN 2011-045 and GEN 2011-046 in accordance with Section 4.4 of the Generator Interconnection Procedures (GIP) of the Southwest Power Pool Open Access Transmission Tariff (OATT Customer has requested to drop its request for Network Resource Interconnection Service (NRIS) and to be designated as Energy Resource Interconnection Service (ERIS) only. SPP has undertaken this Modification Request Impact Study (MRIS) to determine the impacts to the transmission system of accommodating the modification request.

Purpose

The purpose of this Modification Request Impact Study (MRIS) is to evaluate the impact of the proposed modification to other interconnection customers. The MRIS considers the Base Case as well as all Generating Facilities (and with respect to (b) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the MRIS is commenced:

- a) are directly interconnected to the Transmission System;
- b) are interconnected to Affected Systems and may have an impact on the Interconnection Request;
- c) have a pending higher queued Interconnection Request to interconnect to the Transmission System; or
- d) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC.
- e) Lower queued interconnection customers that may be impacted.

Nothing in this System Impact Study constitutes a request for transmission service or confers upon the Interconnection Customer any right to receive transmission service

Power Flow Analysis

A power flow analysis was conducted for the Interconnection Customer’s facility using a modified version of the 2014 spring, 2014 summer, 2014 winter, 2019 summer, 2019 winter, and 2024 summer seasonal models. The output of the Interconnection Customer’s facility was offset in the model by a reduction in output of existing online SPP generation. This method allows the request to be studied as an Energy Resource (ERIS) Interconnection Request.

The ACCC function of PSS/E was used to simulate single contingencies in portions of or all of the control area of SPS and other control areas within SPP and the resulting data analyzed. This satisfies the “more probable” contingency testing criteria mandated by NERC and the SPP criteria.

The analysis consisted of performing the power flow analysis for all remaining NRIS interconnection requests in the South Texas Panhandle/New Mexico area for DISIS-2011-002, DISIS-2012-001, and DISIS-2012-002, DISIS-2013-001, and DISIS-2013-002. These NRIS requests included in the analysis are listed in Table 1 below.

Table 1: NRIS Request included in the Analysis

Request	MW	Point of Interconnection
GEN-2011-048	175	Mustang 230kV
GEN-2013-013	248	Tap Eddy County – Tolk 345kV
GEN-2013-022	25	Norton 115kV

ACCC analysis indicates that with the ERIS Network Upgrades identified in DISIS-2011-002, no additional Network Upgrades are required for other Interconnection Customers if the customer withdraws its request for NRIS. See Table 2 below.

Table 2: Additional Constraints on assigned NRIS upgrades for other NRIS requests

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-048			None		
GEN-2013-013			None		
GEN-2013-022			None		

Therefore, the following NRIS upgrades listed in Table 3 that were assigned to GEN-2011-045 in DISIS-2011-002-4 are no longer required for Interconnection Service.

Table 3: NRIS Upgrades no longer required

NRIS Upgrades no longer required
Rebuild Allen – Lubbock South 115kV ckt. 1

Stability Analysis

Stability Analysis was not performed for this study.

Conclusion

<OMITTED TEXT> (Customers) have requested a modification to Generation Interconnection Requests GEN-2011-045 and GEN-2011-046, in accordance with Section 4.4 of the Generator Interconnection Procedures (GIP) of the Southwest Power Pool Open Access Transmission Tariff (OATT). Customer has requested to withdraw its request to be studied for NRIS and to only be studied for ERIS.

Power flow analysis showed that with the ERIS Network Upgrades identified in DISIS-2011-002 and DISIS-2013-002, the Customer's request for modification will not cause additional costs to lower and equally queued interconnection customers. Therefore, the previously identified NRIS Upgrades listed in Table 3 are no longer required for Interconnection Service.

The request of these Customers to be designated as Energy Resource Interconnection Service only is NOT considered a Material Modification under GIP 4.4.

Stability Analysis was not performed for this study.

This study does not include any constraints associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer requests transmission service through Southwest Power Pool's OASIS. It should be noted that the models used for simulation do not contain all SPP transmission service.

This study fulfills SPP's requirements in accordance with GIP 4.4.3 to evaluate the Customer's modification. In accordance, with GIP 4.4.2, the Customer may choose to withdraw its request for modification