



Modification Request Impact Study for Generation Interconnection Requests

GEN-2011-019

GEN-2011-020

GEN 2011-021

GEN 2011-024

GEN 2011-049

February, 2013
Generator Interconnection



Executive Summary

<OMITTED TEXT> (Customers) have requested a modification to Generation Interconnection Requests, , GEN 2011-019, GEN 2011-020, GEN 2011-021, , GEN 2011-024, and GEN 2011-049 in accordance with Section 4.4 of the Generation 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 of other interconnection customers for accommodating the modification request.

A power flow analysis shows that with ERIS Network Upgrades identified in DISIS-2011-001 and DISIS 2011-002, the Customer's request to drop its request for NRIS will affect the cost of NRIS Network upgrades for other Interconnection Customers sharing or depending on the NRIS upgrades currently assigned to the Interconnection Customers. Power flow analysis was based on both summer and winter peak conditions and light loading cases.

Stability Analysis was not performed for this study.

The request of these Customers to be designated as Energy Resource Interconnection Service only is 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 2011-019, Gen 2011-020 ,Gen 2011-021 , Gen 2011-024, and Gen 2011-049 in accordance with Section 4.4 of the Generation 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 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 2013 spring, 2013 summer, 2013 winter, 2018 summer, 2018 winter, and 2023 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. This analysis was conducted assuming that previous queued requests listed in DISIS 2011-001 and DISIS-2011-002 were in-service.

The ACCC function of PSS/E was used to simulate single contingencies in portions of or all of the control area of OKGE 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 northern Oklahoma area for DISIS-2011-001, DISIS-2011-002, DISIS-2012-001, and DISIS-2012-002. These NRIS requests included in the analysis are listed below.

Table 1. NRIS Request included in the Analysis

Request	MW	Point of Interconnection
GEN-2011-051	104.4	Tap Woodward - Tatonga 345kV
GEN-2011-014	201	Beaver County 345kV

ACCC analysis indicates that with the ER Network Upgrades identified in DISIS-2011-0021, the costs of other Interconnection Customer’s NRIS upgrades will be affected if the customer withdraws its request for NIRS.

Table 2. Constraints on assigned NRIS upgrades for other NRIS requests

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-051	13G	01NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.05592	'WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05215	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.11433	'DBL-TGA-MATT'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.06396	'DBL-WWRD-G12'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.06396	'DBL-G1216-TH'
GEN-2011-051	13G	01NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.11433	'DBL-TGA-MATT'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05592	'WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05736	'DBL-WICH-THI'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515787 1-OKLA WIND ENERGY CENTER'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.11433	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0591	'IODINE - WOODWARD EHV 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0591	'DEWEY - IODINE 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN520922 1-SLEEPING BEAR'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.06069	'MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.06069	'MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'BASE CASE'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05046	'DEWEY - TALOGA 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05592	'WOODWARD - WOODWARD 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04985	'FT SUPPLY - IODINE 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05355	'THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05355	'G12-016 TAP 345.00 - THISTLE7 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04985	'IODINE - MOORELAND 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05355	'G12-016 TAP 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05181	'BORDER 7345.00 - G12-038 TAP 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05181	'G12-038 TAP 345.00 - TUCO INTERCHANGE 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515389 1-TLGAWND1 34.500'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05204	'ELK CITY 230KV - SWEETWATER 230KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05204	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05771	'DBL-BVR-WWRD'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05181	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04987	'WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05208	'SPP-SWPS-03'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05145	'THISTLE7 345.00 - WICHITA 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05145	'THISTLE7 345.00 - WICHITA 345KV CKT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05081	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04528	'WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04527	'WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05204	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05204	'SPP-SWPS-02A'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN514805 1-SOONER UNIT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05244	'DBL-HTCH-BVR'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05019	'DBL-SPRVL-MU'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05019	'DBL-MUL-RENO'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05065	'BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04993	'POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05215	'SPP-AEPW-32'

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05107	'BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05091	'BENTON - WICHITA 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN514806 1-SOONER UNIT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN521120 1-BUFBEAR2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05124	'CARTER JCT - WOODWARD 69KV CKT 1'
GEN-2011-051	13G	01NR	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	0.04135	'DBL-TGA-MATT'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05095	'MATTHEWSON 345.00 - NORTHWEST 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04993	'SPP-SWPS-04'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04987	'MINGO - SETAB 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN520947 1-HUGO1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05051	'MATTHEWSON 345.00 - WOODRING 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04993	'Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04969	'G11-17T 345.00 - G12-11T 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04969	'G12-11T 345.00 - POST ROCK 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04994	'MINGO - RED WILLOW 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515226 1-MUSKOGEE 6G'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN336821 1-GRAND GULF UNIT'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05124	'CARTER JCT - MOORELAND 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05124	'MOORELAND (MOORELND) 138/69/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04945	'WRTOD400'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN336153 1-WATERFORD UNIT#3'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'NC1_GEN-NEBRASKA CITY 1'
GEN-2011-051	13G	01NR	'ROMAN NOSE - SOUTHARD 138KV CKT 1'	0.05101	'DBL-TGA-MATT'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN659103 1-ANTELOPE VALLEY UNIT1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN659107 2-ANTELOPE VALLEY UNIT2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04635	'WAUKOMIS - WAUKOMIS TAP 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN527903 1-HOBBS PLANT #3 (ST)'

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04912	'ALVA - CHEROKEE SW 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0479	'GOLTYTP2 69.000 - IMO 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04857	'OKEENE - WATONGA SW 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN645011 1-NEBRASKA CITY 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0479	'GOLTYTP2 69.000 - HELENA TAP 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04608	'OGE3TERM1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05104	'G12-032 TAP 345.00 - ROSE HILL 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN562078 1-G11_051_3 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN526331 1-JONES GEN #1 22 KV'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN526332 1-JONES GEN #2 21 KV'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05104	'G12-032 TAP 345.00 - G12-041 TAP 345.00 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05104	'G12-041 TAP 345.00 - SOONER 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN640011 2-GERALD GENTLEMAN STATION UNIT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0491	'ALVA - KNOBHILL 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN542962 2-IATAN UNIT #2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0499	'DELAWARE - NORTHEAST STATION 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN645012 2-NEBRASKA CITY 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN525561 1-TOLK GEN #1 24 KV'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04635	'HENESSEY - WAUKOMIS 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560175 1-G07-44 0.5750'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN562010 1-G11_024_3 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN640010 1-GERALD GENTLEMAN STATION UNIT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560282 1-G08-19 0.6000'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0479	'HELENA TAP - SALINE 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04791	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'
GEN-2011-051	13SP	00NR	'NORTHWEST (NORTWST2) 345/138/13.8KV	0.04917	'NORTHWEST (NORTWST3) 345/138/13.8KV

Source	Season	Group	Constraint	TDF	Contingency
			TRANSFORMER CKT 1'		TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04635	'DOVER SW - HENESSEY 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04935	'LYDIA - VALLIANT 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04935	'SPP-AEPW-01'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04814	'CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0479	'KNOBHILL - SALINE 69KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.05127	'VIOLA 7 345.00 - WICHITA 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04814	'CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN525562 1-TOLK GEN #2 24 KV'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN640009 1-COOPER NUCLEAR STATION'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN659118 1-LARAMIE RIVER UNIT1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN531447 1-HOLCOMB GENERATOR'
GEN-2011-051	13SP	00NR	'NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1'	0.04917	'NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560223 1-G07-62-3 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560224 1-G07-62-4 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560221 1-G07-62-1 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN560222 1-G07-62-2 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515397 1-OUSPRT 1 34.500'
GEN-2011-051	13G	01NR	'EL RENO - ROMAN NOSE 138KV CKT 1'	0.05101	'DBL-TGA-MATT'
GEN-2011-051	13G	01NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.06396	'DBL-G1216-TH'
GEN-2011-051	13G	01NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.06396	'DBL-WWRD-G12'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04425	'WOODWARD - WOODWARD EHV 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515393 1-OGEWND2G'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN562023 1-G11_020_3 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN562026 1-G11_019_3 0.6900'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04934	'GEN515365 1-CENT 21 34.500'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0464	'EL RENO - ROMAN NOSE 138KV CKT 1'

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-051	23SP	00NR	'EVANS ENERGY CENTER NORTH - MAIZEW 4 138.00 138KV CKT 1'	0.03395	'BENTON - WICHITA 345KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04742	'KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04652	'MOREWOOD SW - RED HILLS WIND 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0464	'ROMAN NOSE - SOUTHARD 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04742	'KNOBHILL - MOORELAND 138KV CKT 1'
GEN-2011-051	13G	01NR	'NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1'	0.03571	'NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04512	'DOVER SW - OKEENE 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0464	'DEWEY - SOUTHARD 138KV CKT 1'
GEN-2011-051	13G	01NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.05736	'DBL-WICH-THI'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03937	'DBL-TGA-MATT'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03937	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03937	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03207	'WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03308	'IODINE - WOODWARD EHV 138KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03308	'DEWEY - IODINE 138KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03085	'DBL-WWRD-G12'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03085	'DBL-G1216-TH'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03081	'DBL-WICH-THI'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03207	'WOODWARD - WOODWARD 69KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0304	'MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0304	'MATTHEWSON 345.00 - TATONGA7 345.00 345KV CKT 2'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.02979	'BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0304	'DEWEY - TALOGA 138KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03134	'BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1'

Source	Season	Group	Constraint	TDF	Contingency
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04203	'BORDER 7345.00 - G12-038 TAP 345.00 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03847	'POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1'
GEN-2011-014	23SP	00NR	'INDIANA SUB - STANTON SUB 115KV CKT 1'	0.04102	'CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03225	'BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03225	'BEAVER CO 345.00 - Hitchland Interchange 345KV CKT 2'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03067	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.03937	'DBL-TGA-MATT'
GEN-2011-014	13G	02NR	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0525	'DBL-HTCH-BVR'
GEN-2011-014	13G	02NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.03937	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
GEN-2011-014	13G	02NR	'FPL SWITCH - MOORELAND 138KV CKT 1'	0.03937	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
GEN-2011-014	18SP	00NR	'INDIANA SUB - STANTON SUB 115KV CKT 1'	0.06347	'CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV 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 2011-019, Gen 2011-020 ,Gen 2011-021 , Gen 2011-024, and Gen 2011-049, in accordance with Section 4.4 of the Generation 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 Network Upgrades identified in DISIS-2011-001 and DISIS-2011-002, the Customer's request for modification will cause additional costs to lower and equally queued interconnection customers.

The request of these Customers to be designated as Energy Resource Interconnection Service only is 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