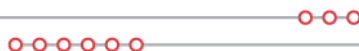


Feasibility Cluster Study for Generator Interconnection Requests (FCS-2014-002)

June 2014

Generator Interconnection Studies



Revision History

Date or Version Number	Author	Change Description	Comments
6/27/2014	Southwest Power Pool	N/A	Report Issued

Executive Summary

Generator Interconnection customers have requested a Feasibility Study under the Generation Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study (FCS) window which closed March 31st, 2014. This Feasibility Cluster Study analyzes generation interconnection requests totaling approximately 472 MW which would be located within the transmission systems of Westar Energy (WERE) and Southwestern Public Service (SPS). The generation interconnection requests have various proposed in-service dates. The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

Power flow analysis has indicated that for the power flow cases studied, 472 MW of nameplate generation may be interconnected with transmission system reinforcements within the SPP transmission system. The need for reactive compensation in accordance with Order No. 661-A for wind farm interconnection requests will be evaluated in the Preliminary Interconnection System Impact Study (PISIS) and Definitive Interconnection System Impact Study (DISIS) based on the wind turbine manufacturer and type requested by the Customer. Dynamic stability studies performed as part of the PISIS and DISIS Cluster Studies will provide additional guidance as to whether required reactive compensation can be static or a portion must be dynamic (such as a SVC).

In no way does this study guarantee operation for all periods of time. This interconnection study identifies and assigns transmission reinforcements for Energy Resource (ER) interconnection injection constraints (defined as a 20% distribution factor impact) and Network Resource (NR) constraints if requested by the Customer. This interconnection study does not assign transmission reinforcements for all potential transmission constraints. It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list and cannot account for every operational situation. Because of this, it is likely that the Customer(s) may be required to reduce their generation output to 0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

The total estimated minimum cost for interconnecting the studied generation interconnection request is \$122,000,000. These costs are shown in Appendices E and F. These costs do not include the Interconnection Customer Interconnection Facilities as defined by the SPP Open Access Transmission Tariff (OATT). This cost does not include the possible need for reactive compensation or additional interconnection facilities or network upgrades that may be identified through additional analyses performed in the PISIS and DISIS.

Network Constraints listed in Appendix I are located in the local area of the new generation when this generation is injected throughout the SPP footprint for the Energy Resource (ER) Interconnection Request. Certain interconnection requests have been studied for Network Resource (NR) Interconnection Service. Those constraints are also listed in Appendix I. Additional Network constraints will have to be verified with a Transmission Service Request (TSR) and associated studies. With a defined source and sink in a TSR, this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements.

The required interconnection costs listed in Appendix E and F do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT.

Table of Contents

Revision History	2
Executive Summary	3
Table of Contents	5
Introduction.....	6
Model Development	6
Interconnection Requests Included in the Cluster.....	6
Previously Queued Interconnection Requests.....	6
Development of Base Cases.....	7
Base Case Upgrades.....	7
Contingent Upgrades.....	8
Potential Upgrades Not in the Base Case.....	9
Regional Groupings	9
Identification of Network Constraints	10
Identification of Electrically Isolated Groups and Requests.....	10
Determination of Cost Allocated Network Upgrades	10
Credits for Amounts Advanced for Network Upgrades.....	11
Interconnection and Network Upgrade Facilities	11
Power Flow Analysis.....	12
Power Flow Analysis Methodology.....	12
Power Flow Analysis	12
Cluster Group 8 (South Central Kansas/North Oklahoma)	13
Curtailment and System Reliability	13
Conclusion	14
Appendix	15
A: Generation Interconnection Requests Considered for Feasibility Study	16
B: Prior Queued Interconnection Requests	17
C: Study Groupings.....	18
D: Proposed Point of Interconnection One line Diagrams.....	19
E: Cost Allocation per Interconnection Request (Including Prior Queued Upgrades)	20
F: Cost Allocation per Proposed Study Network Upgrade	21
G: FCITC Analysis Constraints Requiring Reinforcement (ERIS)	22
H: FCITC Analysis Constraints Requiring Reinforcement (NRIS).....	23
I: FCITC Analysis Constraints Not Requiring Reinforcement.....	24

Introduction

Generator Interconnection customers have requested a Feasibility Study under the Generation Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study (FCS) window which closed March 31st, 2014. This Feasibility Cluster Study analyzes two generation interconnection requests totaling approximately 472 MW which would be located within the transmission systems of Westar Energy (WERE) and Southwestern Public Service (SPS). The generation interconnection requests have various proposed in-service dates¹. The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by queue number, amount, area, requested interconnection service, requested interconnection point, proposed interconnection point, and the requested in-service date.

The primary objective of this Feasibility Cluster Study is to identify the system constraints associated with connecting the generation to the area transmission system. The Feasibility and other subsequent Interconnection Studies are designed to identify attachment facilities, Network Upgrades and other Direct Assignment Facilities needed to accept power into the grid at each specific interconnection receipt point.

Model Development

Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Feasibility Study Agreement no later than March 31st, 2014 and were subsequently accepted by Southwest Power Pool under the terms of the Generator Interconnection Procedures (GIP) effective at the time of this study. The interconnection requests that are included in this study are listed in Appendix A.

Previously Queued Interconnection Requests

The previously queued requests included in this study are listed in Appendix B. In addition to the Base Case Upgrades, the previously queued requests and associated upgrades were assumed to be in-service and added to the Base Case models. These projects were dispatched as Energy Resources and or Network Resources (in accordance with the individual Generation Interconnection Requests) with equal distribution across the SPP footprint.

¹ The generation interconnection requests in-service dates will need to be deferred based on the required lead time for the Network Upgrades necessary. The Interconnection Customer's that proceed to the Facility Study will be provided a new in-service date based on the competition of the Facility Study.

Development of Base Cases

The 2013 series Transmission Service Request (TSR) Models 2014 spring, 2014 summer and winter peak, 2019 summer and winter peak, and 2024 summer peak scenario 0 cases were used for this study. After the cases were developed, each of the control areas' resources were then re-dispatched to account for the new generation requests using current dispatch orders.

Base Case Upgrades

The following facilities are part of the SPP Transmission Expansion Plan or the Balanced Portfolio or recently approved Priority Projects. These facilities, have an approved Notice to Construct (NTC), or are in construction stages and were assumed to be in-service at the time of dispatch and added to the base case models. The FCS-2014-002 Customers have not been assigned cost for the below listed projects. The FCS-2014-002 Customers Generation Facilities in service dates may need to be delayed until the completion of the following upgrades. If for some reason, construction on these projects is discontinued, additional restudies will be needed to determine the interconnection needs of the Feasibility Study customers.

- Balanced Portfolio Projects²:
 - Iatan – Nashua 345kV, scheduled for 6/1/2015 in-service
 - Nashua 345/161kV autotransformer
- Priority Projects³:
 - Woodward – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
 - Spearville – Clark County double circuit 345kV, scheduled for 12/31/2014 in-service
 - Clark County – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
 - Thistle – Wichita double circuit 345kV, scheduled for 12/31/2014 in-service
 - Thistle 345/138kV autotransformer, scheduled for 12/31/2014 in-service
 - Thistle – Flat Ridge 138kV, scheduled for 12/31/2014 in-service
- St. John – Barber 115kV rebuild, scheduled for 6/20/2014 in service
- Hays – South Hays 115kV line rebuild, scheduled for 6/1/2015 in-service⁴
- Northwest 345/138/13.8kV circuit #3 autotransformer, scheduled for 6/1/2017 in-service⁵
- Ogallala 230/115/13kV Transformer circuit #1 replacement⁶
- Hoskins – Neligh East Projects⁷
 - Neligh East 345/115kV substation and transformer
 - Neligh East Area 115kV upgrades to support new station
 - Hoskins – Neligh East 345kV circuit #1
- Maxwell – North Platte 115kV terminal equipment upgrade⁸
- Chisholm – Gracemont 345kV circuit #1 scheduled for 3/1/2018⁹

² Notification to Construct (NTC) issued June 2009

³ Notification to Construct (NTC) issued June 2010

⁴ SPP Regional Reliability 2013 ITPNT Project Per SPP-NTC-200210

⁵ SPP Transmission Service Project identified in SPP 2009-AG2-AFS6. Per SPP-NTC-20137

⁶ Notification to Construct (NTC) SPP-2009-AGP1-AFS-5, Per SPP-NTC-20117

⁷ SPP Regional Reliability 2012 ITP 10 Project Per SPP-NTC-200220

⁸ SPP Regional Reliability 2014 ITPNT Per SPP-NTC-200253

⁹ Notification to Construct issued February 2014

The following projects are considered in-service in the 19SP, 19WP, and 24SP cases only:

- HPILS projects¹⁰
 - Hobbs – Yoakum 345kV circuit #1 scheduled for 6/1/2020
 - Yoakum – TUCO 345kV circuit #1 scheduled for 6/1/2020
 - China Draw – North Loving 345kV circuit #1 scheduled for 6/1/2018
 - North Loving – Kiowa 345kV circuit #1 scheduled for 6/1/2018
 - Hobbs - Kiowa 345kV circuit #1 scheduled for 6/1/2018
 - Kiowa – Road Runner 345kV circuit #1 scheduled for 6/1/2018

Contingent Upgrades

The following facilities do not yet have approval. These facilities have been assigned to higher queued interconnection customers. These facilities have been included in the models for the FCS-2014-002 study and are assumed to be in service. This list may not be all inclusive. The FCS-2014-002 Customers at this time do not have responsibility for these facilities but may later be assigned the cost of these facilities if higher queued customers terminate their GIA or withdraw from the interconnection queue. The FCS-2014-002 Customer Generation Facilities in service dates may need to be delayed until the completion of the following upgrades.

- Upgrades assigned to 1st Cluster (ICS-2008-001) Interconnection Customers:
 - Clinton Jct - GEN-2007-032 Tap - Clinton 138kV Rerate
- Upgrades assigned to DISIS-2009-001 Interconnection Customers:
 - Fort Dodge – North Fort Dodge – Spearville 115kV circuit #2 build
 - Fort Randall – Madison County – Kelly 230kV circuit #1 rerate (320MVA)
 - Spearville 345/115kV autotransformer circuit #1 build
- Upgrades assigned to DISIS-2010-001 Interconnection Customers:
 - Switch 2749 – Wildorado 69kV circuit #1 rebuild
- Upgrades assigned to DISIS-2010-002 Interconnection Customers:
 - Dixon County – Twin Church circuit #1 rerate (320 MVA)
- Upgrades assigned to DISIS-2011-001 Interconnection Customers:
 - Beaver County – Buckner 345kV circuit #1 build
 - Hoskins – Dixon County – Twin Church 230kV circuit #1 conductor clearance increase
 - (NRIS only) FPL Switch – Woodward – Mooreland – Glass Mountain 138kV circuit #1 rebuild
 - (NRIS only) Woodward – Woodward EHV 138kV rebuild
 - (NRIS only) Woodward 138/69kV auto replacement
 - (NRIS only) Woodward (OKGE) – Woodward (WFEC) 69kV rebuild
 - (NRIS only) TUCO – New Deal 345kV
 - (NRIS only) New Deal 345/115kV transformer
 - (NRIS only) New Deal – Stanton 115kV
 - (NRIS only) Wolfforth Interchange 230/115/13.2kV transformer

¹⁰ Notification to construct issued May 2014

- Upgrades assigned to DISIS-2011-002 Interconnection Customers:
 - Jones – Lubbock South 230kV circuit #2 replace line traps
 - Power System Stabilizers – Install Power System Stabilizers at Jones (Units: 1,2,3,4) and Tolk (Units: 1,2)
 - West Brock – Sub 967 – Sub 968 – Sub 969 – Sub 974 69kV circuit #1 replace terminal equipment
 - (NRIS only) Allen – Lubbock South 115kV circuit #1 rebuild
 - (NRIS only) Hydro Carbon Tap – Sub974 69kV circuit #1 rewire CT (63MVA)
 - (NRIS only) Nebraska City U Syracuse – Sub 970 circuit #1 replace terminal equipment
- Upgrades assigned to DISIS-2012-001 Interconnection Customers:
- Upgrades assigned to DISIS-2012-002 Interconnection Customers:
 - Thistle SVC and Cap Bank
- Upgrades assigned to DISIS 2013-001 Interconnection customers
 - Deaf Smith – Plant X 230kV circuit #1 line trap replacements
 - 60 Mvar Capacitor Bank(s) at Oklaunion
 - Meadow Grove & S Norfolk Projects
 - Meadow Grove 115kV substation bay and transformer
 - Meadow Grove – N Petersburg 115kV
 - Meadow Grove – S Norfolk 230kV
 - S Norfolk 345/230kV substation and transformer
 - Tolk – Plant X 230kV circuit #3 addition
 - Vinita – Vinita Junction 69kV rebuild
 - Vinita Junction 138/69/13.2kV transformer circuit #1 replacement
 - (NRIS only) Catoosa – Terra Nitrogen Tap – Verdigras 138kV rebuild
 - (NRIS only) Knoll – N Hays – Vine – Hays Plant 115kV rebuild
 - (NRIS only) Plant X 230/115/13kV transformer circuit #2 addition
 - (NRIS only) Vinita – Eastern State Hospital Tap – Vinita Neo Tap – J6 – Explorer Tap – Afton 69kV rebuild
- Upgrades assigned to DISIS 2013-002 Interconnection customers
 - Bushland – Tumbleweed 230kV circuit #1
 - Gerald Gentleman Station Flowgate Stability Limit Mitigation
 - Viola – Wichita 345kV circuit #1 terminal equipment replacement
- Upgrades assigned to DISIS 2014-001 Interconnection customers
 - Upgrades to be determined in DISIS 2014-001

Potential Upgrades Not in the Base Case

Any potential upgrades that do not have a Notification to Construct (NTC) have not been included in the base case. These upgrades include any identified in the SPP Extra-High Voltage (EHV) overlay plan, or any other SPP planning study other than the upgrades listed above in the previous section.

Regional Groupings

The interconnection requests listed in Appendix A were grouped together in two regional groups based on geographical and electrical impacts. These groupings are shown in Appendix C.

For each group, the various wind generating plants were modeled at 100% nameplate of maximum generation. The other wind generating plants in each area were modeled at 80% nameplate while the wind generating plants in the other areas were modeled at 20% nameplate of maximum generation. These projects were dispatched as Energy Resources with a load factor by area distribution across the SPP footprint. Certain projects that requested Network Resource Interconnection Service were dispatched as an additional analysis into the balancing authority of the interconnecting transmission owner. This method allowed for the identification of network constraints that were common to the regional groupings that could then in turn have the mitigating upgrade cost allocated throughout the entire cluster. Other sensitivity analyses are also performed with all interconnection requests in each group being dispatched at 100% nameplate.

Peaking units were not dispatched in the 2014 spring model. To study peaking units' impacts, the 2014 summer and winter and 2019 summer and winter, and 2024 summer seasonal models were chosen and peaking units were modeled at 100% of the nameplate rating and wind generating facilities were modeled at 10% of the nameplate rating. Each interconnection request was also modeled separately at 100% nameplate for certain analyses.

Identification of Network Constraints

The initial set of network constraints were found by using PSS® MUST First Contingency Incremental Transfer Capability (FCITC) analysis on the entire cluster grouping dispatched at the various levels mentioned above. These constraints were then screened to determine if any of the generation interconnection requests had at least a 20% Distribution Factor (DF) upon the constraint. Constraints that measured at least a 20% DF from at least one interconnection request were considered for mitigation. Interconnection Requests that were being studied for Network Resource Interconnection Service (NRIS) were studied in the additional NRIS analysis to determine if any constraint had at least a 3% DF. If so, these constraints were considered for mitigation.

Identification of Electrically Isolated Groups and Requests

From the FCITC analysis, it may be determined that some of the regional groups had no common impacts with the other groups. However, this determination may change as the Interconnection Customers depending upon the time at which the interconnection customers enter either the Preliminary Interconnection System Impact Study (PISIS) or the Definitive Interconnection System Impact Study (DISIS).

Determination of Cost Allocated Network Upgrades

Cost Allocated Network Upgrades of wind generation interconnection requests were determined using the 2014 spring model. Cost Allocated Network Upgrades of peaking units was determined using the 2019 summer peak model. A PSSE® MUST sensitivity analysis was performed to

determine the Distribution Factors (DF), a distribution factor with no contingency that each generation interconnection request had on each new upgrade. The impact each generation interconnection request had on each upgrade project was weighted by the size of each request. Finally the costs due by each request for a particular project were then determined by allocating the portion of each request's impact over the impact of all affecting requests.

For example, assume that there are three Generation Interconnection requests, X, Y, and Z that are responsible for the costs of Upgrade Project '1'. Given that their respective DF for the project have been determined, the cost allocation for Generation Interconnection request 'X' for Upgrade Project 1 is found by the following set of steps and formulas:

- Determine an Impact Factor on a given project for all responsible GI requests:

$$\text{Request X Impact Factor on Upgrade Project 1} = \text{DF}(\%)(X) * \text{MW}(X) = X1$$

$$\text{Request Y Impact Factor on Upgrade Project 1} = \text{DF}(\%)(Y) * \text{MW}(Y) = Y1$$

$$\text{Request Z Impact Factor on Upgrade Project 1} = \text{DF}(\%)(Z) * \text{MW}(Z) = Z1$$

- Determine each request's Allocation of Cost for that particular project:

$$\text{Request X's Project 1 Cost Allocation (\$)} = \frac{\text{Network Upgrade Project 1 Cost(\$)} * X1}{X1 + Y1 + Z1}$$

- Repeat previous for each responsible GI request for each Project

The cost allocation of each needed Network Upgrade is determined by the size of each request and its impact on the given project. This allows for the most efficient and reasonable mechanism for sharing the costs of upgrades.

Credits for Amounts Advanced for Network Upgrades

Interconnection Customer shall be entitled to credits in accordance with Attachment Z2 of the SPP Tariff for any Network Upgrades including any tax gross-up or any other tax-related payments associated with the Network Upgrades, and not refunded to the Interconnection Customer.

Interconnection and Network Upgrade Facilities

The generator interconnection customers requested interconnection within the transmission systems of Westar Energy (WERE) and Southwestern Public Service (SPS). The requirement to interconnect the 472 MW of generation into the existing and proposed transmission systems in the affected areas of the SPP transmission footprint consist of the necessary cost allocated shared facilities listed in Appendices E and F with an approximate cost of \$116,000,000. Appendices E and F also include Interconnection Facilities specific to each generation interconnection request.

A list of constraints with greater than or equal to a 20% DF that were identified as requiring proposed transmission reinforcements for mitigation are listed in Appendix G and H. Other Network Constraints, those between 3% and 20% DF, not requiring proposed transmission reinforcements for mitigation, are shown in Appendix I. With a defined source and sink in a TSR, this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements.

A preliminary one-line drawing for each generation interconnection request are listed in Appendix D.

Power Flow Analysis

Power Flow Analysis Methodology

The FCITC function of PSS® MUST was used to simulate single element and special (i.e., breaker-to-breaker, multi-element, etc) contingencies in portions or all of the modeled control areas of SPP, as well as, other control areas external to SPP and the resulting scenarios analyzed. This satisfies the “more probable” contingency testing criteria mandated by NERC and the SPP criteria.

Power Flow Analysis

A power flow analysis was conducted for each Interconnection Customer’s facility using modified versions of the 2014 (spring, summer, and winter) peak, the 2019 (summer and winter) peak and 2024 summer peak models. The output of the Interconnection Customer’s facility was offset in each model by a reduction in output of existing online SPP generation. This method allows the request to be studied as an Energy Resource (ER) Interconnection Request. Certain requests that requested Network Resource Interconnection Service (NRIS) had an additional analysis conducted for displacing resources in the interconnecting Transmission Owner’s balancing authority.

This analysis was conducted assuming that previous queued requests in the immediate area of these interconnect requests were in-service. The analysis of the each Customer’s project indicates that criteria violations will occur on the WERE transmission systems under steady state and contingency conditions in the peak seasons.

The need for reactive compensation will be determined during the Interconnection System Impact Study. The need for reactive compensation will be based on the Interconnection Customer’s choice of wind turbine make and manufacturer. Dynamic Stability studies performed as part of the System Impact Cluster Study will provide additional guidance as to whether the reactive compensation can be static or a portion must be dynamic (such as a SVC or STATCOM). It is possible that an SVC or STATCOM device will be required at the Customer facility because of FERC Order 661A Low Voltage Ride-Through Provisions (LVRT) which went into effect January 1, 2006. FERC Order 661A orders that wind farms stay on-line for 3-phase faults at the point of interconnection even if that requires the installation of a SVC or STATCOM device.

Cluster Group 06 (South Texas Panhandle/New Mexico)

In addition to the 5187.55MW of previously queued generation in the area, 300 MW of new interconnection service was studied. Constraints were observed primarily on the Eddy – Tolk 345kV line. These constraints require constructing a new 345kV line from Gen 2014-008 tap to Hobbs.

Table 1 – Group 6 ERIS overloads

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00KV CKT 1	557	120.9135	CROSSROADS 345.00 - TOLK STATION 345KV CKT 1
EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	560	119.8285	CROSSROADS 345.00 - TOLK STATION 345KV CKT 1
EDDY_NORTH 6230.00 (WAIK WT01134) 230/115/13.2KV TRANSFORMER CKT 2	250	136.4916	'EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1'
TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	557	120.8775	EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
CROSSROADS 345.00 - TOLK STATION 345KV CKT 1	557	120.7615	EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1'

Table 2- Group 6 NRIS overloads

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
None			

Cluster Group 8 (South Central Kansas/North Oklahoma)

In addition to the 4064.7 MW of previously queued generation in the area, 172 MW of new interconnection service was studied. No new constraints were found in this area.

Curtailement and System Reliability

In no way does this study guarantee operation for all periods of time. It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list and cannot account for every operational situation. Because of this, it is likely that the Customer(s) may be required to reduce their generation output to 0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

Conclusion

The minimum cost of interconnecting 472 MW of new interconnection requests included in this Feasibility Cluster Study is estimated at \$122,000,000 including the Allocated Network Upgrades and Transmission Owner Interconnection Facilities, which are listed in Appendices E and F. These costs do not include the cost of upgrades of other transmission facilities listed in Appendix H which are Network Constraints.

These interconnection costs do not include any cost of Network Upgrades determined to be required by AC power flow, short circuit or transient stability analysis. These studies will be performed if the Interconnection Customer executes the appropriate Interconnection System Impact Study Agreement and provides the required data along with demonstration of Site Control and the appropriate deposit. At the time of the System Impact Cluster Study, a better determination of the interconnection facilities may be available.

The required interconnection costs listed in Appendices E and F, and other upgrades associated with Network Constraints do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request (TSR) through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP Open Access Transmission Tariff (OATT).

Appendix

A: Generation Interconnection Requests Considered for Feasibility Study

A: Generation Interconnection Requests Considered for Impact Study

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date
GEN-2014-008	300.0	ER/NR	SPS	Tap Eddy - Tolk 345 kV	Tap Eddy - Tolk 345kV	11/15/2018
GEN-2014-011	172.0	ER/NR	WERE	Tap Reno - Summit 345 kV	Tap Reno - Summit 345kV	12/31/2016
TOTAL		472.0				

*request dependent upon Priority Projects or Balanced Portfolio may be delayed until 12/31/2014.
Other projects in service date to be determined after Facility Study.

B: Prior Queued Interconnection Requests

B: Prior Queued Interconnection Requests

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Shilder (AEPW) 138kV	AECI queue Affected Study
ASGI-2010-010	42.20	SPS	Lovington 115kV	Lea County Affected Study
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV	Lea County Affected Study
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV	Lea County Affected Study
ASGI-2011-001	28.80	SPS	Lovington 115kV	On-Line
ASGI-2011-002	20.00	SPS	Herring 115kV	On-Line
ASGI-2011-003	10.00	SPS	Hendricks 115kV	On-Line
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV	Under Study (DISIS-2011-002)
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV	Under Study (DISIS-2012-002)
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV	Under Study (DISIS-2012-001)
ASGI-2013-001	11.50	SPS	PanTex South 115kV	Under Study (DISIS-2013-001)
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV	Under Study (DISIS-2013-001)
ASGI-2013-003	18.40	SPS	FE Clovis 115kV	Under Study (DISIS-2013-001)
ASGI-2013-004	29.60	SUNCMKEC	Morris 115kV	Under Study (DISIS-2013-002)
ASGI-2013-005	1.80	SPS	FE Clovis 115kV	Under Study (DISIS-2013-002)
ASGI-2013-006	2.00	SPS	SP-Erskine 115kV	Under Study (DISIS-2013-002)
ASGI-2013-007	90.00	AECI	Tap Hickory Creek - Locust Creek 161kV	AECI System Impact Study
ASGI-2014-001	2.50	SPS	SP-Erskine 115kV	DISIS-2014-001
GEN-2001-014	96.00	WFEC	Ft Supply 138kV	On-Line
GEN-2001-026	74.00	WFEC	Washita 138kV	On-Line
GEN-2001-033	180.00	SPS	San Juan Tap 230kV	On-Line at 120MW
GEN-2001-036	80.00	SPS	Norton 115kV	On-Line
GEN-2001-037	100.00	OKGE	FPL Moreland Tap 138kV	On-Line
GEN-2001-039A	105.00	SUNCMKEC	Tap Greensburg - Ft Dodge (Shooting Star Tap) 115kV	On-Line
GEN-2001-039M	100.00	SUNCMKEC	Central Plains Tap 115kV	On-Line
GEN-2002-004	200.00	WERE	Latham 345kV	On-Line at 150MW
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV	On-Line
GEN-2002-008	240.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2002-009	80.00	SPS	Hansford 115kV	On-Line
GEN-2002-022	240.00	SPS	Bushland 230kV	On-Line
GEN-2002-023N	0.80	NPPD	Harmony 115kV	On-Line
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV	On-Line
GEN-2003-004	100.00	WFEC	Washita 138kV	On-Line
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV	On-Line
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV	On-Line
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV	On-Line
GEN-2003-020	160.00	SPS	Martin 115kV	On-Line
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV	On-Line
GEN-2003-022	120.00	AEPW	Washita 138kV	On-Line
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV	On-Line at 100MW
GEN-2004-020	27.00	AEPW	Washita 34.5kV	On-Line
GEN-2004-023	20.60	WFEC	Washita 138kV	On-Line
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV	On-Line
GEN-2005-003	30.60	WFEC	Washita 138kV	On-Line
GEN-2005-008	120.00	OKGE	Woodward 138kV	On-Line
GEN-2005-012	250.00	SUNCMKEC	Ironwood 345kV	On-Line at 160MW
GEN-2005-013	201.00	WERE	Tap Latham - Neosho (Caney River) 345kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2006-002	101.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-006	205.50	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV	On-Line
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV	On-Line
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV	On-Line
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV	On-Line
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV	On-Line
GEN-2006-026	604.00	SPS	Hobbs 230kV & Hobbs 115kV	On-Line
GEN-2006-031	75.00	MIDW	Knoll 115kV	On-Line
GEN-2006-035	225.00	AEPW	Sweetwater 230kV	On-Line at 132MW
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV	On Schedule for 2014
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV	On-Line
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV	On-Line
GEN-2006-040	108.00	SUNCMKEC	Mingo 115kV	On Suspension
GEN-2006-043	99.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-044	370.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2006-044N	40.50	NPPD	North Petersburg 115kV	On-Line
GEN-2006-046	131.00	OKGE	Dewey 138kV	On-Line
GEN-2007-011	135.00	SUNCMKEC	Syracuse 115kV	On Suspension
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV	On-Line
GEN-2007-021	201.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-025	300.00	WERE	Viola 345kV	On-Line
GEN-2007-032	150.00	WFEC	Tap Clinton Junction - Clinton 138kV	On Suspension
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV	On-Line at 132MW
GEN-2007-043	200.00	OKGE	Minco 345kV	On-Line
GEN-2007-044	300.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-046	199.50	SPS	Hitchland 115kV	On Schedule for 2015
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV	On-Line at 150MW
GEN-2007-052	150.00	WFEC	Anadarko 138kV	On-Line
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV	On Schedule for 2014
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV	On-Line
GEN-2008-013	300.00	OKGE	Tap Wichita - Woodring (Hunter) 345kV	On-Line at 235MW
GEN-2008-017	300.00	SUNCMKEC	Setab 345kV	On Schedule for 2015
GEN-2008-018	250.00	SPS	Finney 345kV	On-Line
GEN-2008-021	42.00	WERE	Wolf Creek 345kV	On-Line
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Crossroads) 345kV	On Schedule for 2015
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV	On-Line
GEN-2008-037	101.00	WFEC	Tap Washita - Blue Canyon Wind 138kV	On-Line
GEN-2008-044	197.80	OKGE	Tatonga 345kV	On-Line
GEN-2008-047	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	On Schedule for 2014
GEN-2008-051	322.00	SPS	Potter County 345kV	On-Line at 161MW
GEN-2008-079	99.20	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV	On-Line
GEN-2008-086N02	200.00	NPPD	Tap Ft Randle - Columbus (Meadow Grove) 230kV	On Schedule for 2014
GEN-2008-088	50.60	SPS	Vega 69kV	On Suspension
GEN-2008-092	201.00	MIDW	Post Rock 230kV	On Schedule for 2014
GEN-2008-098	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2008-1190	60.00	OPPD	S1399 161kV	On-Line
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline (Rosemont) 115kV	On Schedule for 2014

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV	On Schedule for 2016
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV	On-Line
GEN-2009-008	199.50	MIDW	South Hays 230kV	On Suspension
GEN-2009-020	48.60	MIDW	Tap Nekoma - Bazine (Walnut Creek) 69kV	On Schedule for 2015
GEN-2009-025	60.00	OKGE	Nardins 69kV	On-Line
GEN-2009-040	73.80	WERE	Marshall 115kV	On Schedule for 2015
GEN-2010-001	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	On Schedule for 2014 (204 MW) and 2015 (96 MW)
GEN-2010-003	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2010-005	300.00	WERE	Viola 345kV	On-Line at 170MW
GEN-2010-006	205.00	SPS	Jones 230kV	On-Line
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV	On-Line
GEN-2010-011	29.70	OKGE	Tatonga 345kV	On Line
GEN-2010-014	358.80	SPS	Hitchland 345kV	On Schedule for 2016
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2010-036	4.60	WERE	6th Street 115kV	On-Line
GEN-2010-040	300.00	OKGE	Cimarron 345kV	On-Line
GEN-2010-041	10.50	OPPD	S 1399 161kV	IA Pending
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV	IA Pending
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV	On Schedule for 2016
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV	IA Pending
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV	On Schedule for 2014
GEN-2010-055	4.50	AEPW	Wekiwa 138kV	On-Line
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV	On Schedule for 2015
GEN-2010-057	201.00	MIDW	Rice County 230kV	On-Line
GEN-2011-007	250.10	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV	On Schedule for 2015
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV	IA Pending
GEN-2011-010	100.80	OKGE	Minco 345kV	On-Line
GEN-2011-011	50.00	KACP	Iatan 345kV	On-Line
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	IA Pending
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV	IA Pending
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV	On Schedule 2018
GEN-2011-018	73.60	NPPD	Steele City 115kV	On-Line
GEN-2011-019	299.00	OKGE	Woodward 345kV	On Schedule for 2017
GEN-2011-020	299.00	OKGE	Woodward 345kV	On Schedule for 2017
GEN-2011-022	299.00	SPS	Hitchland 345kV	On Schedule for 2017
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV	On Suspension
GEN-2011-027	120.00	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)	On Schedule for 2015
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV	On-Line
GEN-2011-040	111.00	OKGE	Tap Ratliff - Pooleville 138kV	On Schedule for 2014
GEN-2011-045	205.00	SPS	Jones 230kV	On-Line
GEN-2011-046	27.00	SPS	Lopez 115kV	On-Line
GEN-2011-048	175.00	SPS	Mustang 230kV	On-Line
GEN-2011-049	250.00	OKGE	Border 345kV	On Suspension
GEN-2011-050	109.80	AEPW	Rush Springs Natural Gas Tap 138kV	On Suspension
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV	IA Pending
GEN-2011-054	300.00	OKGE	Cimarron 345kV	On Schedule for 2013 (200 MW) and 2014 (99 MW)
GEN-2011-055	52.80	OPPD	South Sterling 69kV	IA Pending
GEN-2011-056	3.60	NPPD	Jeffrey 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2011-056A	3.60	NPPD	John 1 115kV	On-Line
GEN-2011-056B	4.50	NPPD	John 2 115kV	On-Line
GEN-2011-057	150.40	WERE	Creswell 138kV	On Schedule for 2014
GEN-2012-001	61.20	SPS	Tap Grassland - Borden County 230kV	On-Line
GEN-2012-004	41.40	OKGE	Tap Ratliff - Pooleville (Carter County) 138kV	On Schedule for 2014
GEN-2012-005	81.00	NPPD	Tap Fort Randall - Columbus (North of Meadow Grove) 230kV	Facility Study
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV	On Schedule for 2014
GEN-2012-009	15.00	SPS	Mustang 230kV	IA Pending
GEN-2012-010	15.00	SPS	Mustang 230kV	IA Pending
GEN-2012-011	200.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (North of GEN-2011-017 Tap)	Facility Study
GEN-2012-020	478.00	SPS	TUCO 230kV	IA Pending
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV	On-Line
GEN-2012-023	115.00	WERE	Viola 345kV	IA Pending
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV	Facility Study
GEN-2012-026	100.00	MIDW	Colby 115kV	IA Pending
GEN-2012-027	136.00	AEPW	Shidler 138kV	On Schedule for 2015
GEN-2012-028	74.80	WFEC	Gotebo 69kV	On Schedule for 2015
GEN-2012-031	200.00	OKGE	Cimarron 345kV (GEN-2010-040 Sub)	IA Pending
GEN-2012-032	300.00	OKGE	Tap Rose Hill - Sooner (Ranch) 345kV	IA Pending
GEN-2012-033	98.80	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV	On Schedule for 2015
GEN-2012-034	7.00	SPS	Mustang 230kV	IA Pending
GEN-2012-035	7.00	SPS	Mustang 230kV	IA Pending
GEN-2012-036	7.00	SPS	Mustang 230kV	IA Pending
GEN-2012-037	203.00	SPS	TUCO 345kV	Facility Study
GEN-2012-040	76.50	WFEC	Chilocco 138kV	On Schedule for 2015
GEN-2012-041	121.50	OKGE	Tap Rose Hill - Sooner 345kV	On Schedule for 2015
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom & Pleasant Hill 115kV CKT 2	Facility Study
GEN-2013-004	6.00	NPPD	Tap Fort Randall - Columbus (Meadow Grove) 230kV	Facility Study
GEN-2013-005	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV	Facility Study
GEN-2013-006	50.60	NPPD	Tap Fort Randall - Columbus (Meadow Grove) 230kV	Facility Study
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV	Facility Study
GEN-2013-008	1.20	NPPD	Steele City 115kV	On-Line
GEN-2013-009	100.30	AEPW	Tap Alluwe Tap - Vinita Junction 138kV	Facility Study
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (GEN-2012-011 Tap)	Facility Study
GEN-2013-011	30.00	AEPW	Turk 138kV	Facility Study
GEN-2013-012	147.00	OKGE	Redbud 345kV	Facility Study
GEN-2013-013	248.40	SPS	Tap Eddy County - Tolk 345kV	Facility Study
GEN-2013-014	25.50	NPPD	Tap Guide Rock - Pauline (GEN-2008-123N Tap) 115kV	IA Pending
GEN-2013-015	125.80	NPPD	Tap Pauline - Hildreth 115kV	IA Pending
GEN-2013-016	203.00	SPS	TUCO 345kV	Facility Study
GEN-2013-019	73.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2	Facility Study
GEN-2013-021	229.50	NPPD	Ogallala 230kV	Facility Study
GEN-2013-022	25.00	SPS	Norton 115kV	Facility Study
GEN-2013-025	50.00	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV	Facility Study
GEN-2013-026	150.00	GMO	Tap Saint Joseph - Cooper 345kV (GEN-2010-056 Tap)	DISIS-2014-001
GEN-2013-027	326.40	SPS	Tap Tolk - Yoakum 230kV	DISIS-2014-001
GEN-2013-028	559.50	GRDA	Tap N Tulsa - GRDA 1 345kV	Facility Study

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2013-029	300.00	OKGE	Renfrow 345kV	Facility Study
GEN-2013-030	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	Facility Study
GEN-2013-031	370.00	SPS	Bushland 230kV	Facility Study
GEN-2013-032	204.00	NPPD	Neligh 115kV	Facility Study
GEN-2013-033	28.00	MIDW	Goodman Energy Center 115kV	Facility Study
GEN-2013-034	73.60	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2013-034 Tap) 345kV	Facility Study
GEN-2013-035	100.00	OKGE	Tap Woodward - Tatonga 345kV (GEN-2011-051 Tap)	DISIS-2014-001
GEN-2014-001	200.60	WERE	Tap Wichita - Emporia Energy Center 345kV	DISIS-2014-001
GEN-2014-002	10.53	OKGE	Tatonga 345kV (GEN-2007-021 POI)	DISIS-2014-001
GEN-2014-003	15.84	OKGE	Tatonga 345kV (GEN-2007-044 POI)	DISIS-2014-001
GEN-2014-004	3.96	NPPD	Steele City 115kV (GEN-2011-018 POI)	DISIS-2014-001
GEN-2014-005	5.67	OKGE	Minco 345kV (GEN-2011-010 POI)	DISIS-2014-001
GEN-2014-006	74.90	NPPD	Harbine 115kV	DISIS-2014-001
GEN-2014-007	400.00	SPS	Tap TUCO Interchange - Border 345kV	DISIS-2014-001
GEN-2014-012	850.00	SPS	Tap Hobbs Interchange - Andrews 230kV	DISIS-2014-001
GEN-2014-013	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV	DISIS-2014-001
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV	On-Line
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV	On-Line
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV	On-Line
NPPD Distributed (Burt County Wind)	12.00	NPPD	Tekamah & Oakland 115kV	On-Line
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV	On-Line
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV	On-Line
NPPD Distributed (Ord)	11.90	NPPD	Ord 115kV	On-Line
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV	On-Line
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV	On-Line
SPS Distributed (Etter)	20.00	SPS	Etter 115kV	On-Line
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV	On-Line
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV	On-Line
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV	On-Line
SPS Distributed (Monument)	10.00	SPS	Monument 115kV	On-Line
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV	On-Line
SPS Distributed (Ocotillo)	10.00	SPS	S_Jal 115kV	On-Line
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV	On-Line
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV	On-Line
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV	On-Line
Total: 29,604.4				

C: Study Groupings

C. Study Groups

GROUP 1: WOODWARD AREA			
Request	Capacity	Area	Proposed Point of Interconnection
GEN-2001-014	96.00	WFEC	Ft Supply 138kV
GEN-2001-037	100.00	OKGE	FPL Moreland Tap 138kV
GEN-2005-008	120.00	OKGE	Woodward 138kV
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV
GEN-2006-046	131.00	OKGE	Dewey 138kV
GEN-2007-021	201.00	OKGE	Tatonga 345kV
GEN-2007-043	200.00	OKGE	Minco 345kV
GEN-2007-044	300.00	OKGE	Tatonga 345kV
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV
GEN-2008-044	197.80	OKGE	Tatonga 345kV
GEN-2010-011	29.70	OKGE	Tatonga 345kV
GEN-2010-040	300.00	OKGE	Cimarron 345kV
GEN-2011-007	250.10	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV
GEN-2011-010	100.80	OKGE	Minco 345kV
GEN-2011-019	299.00	OKGE	Woodward 345kV
GEN-2011-020	299.00	OKGE	Woodward 345kV
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV
GEN-2011-054	300.00	OKGE	Cimarron 345kV
GEN-2012-031	200.00	OKGE	Cimarron 345kV (GEN-2010-040 Sub)
GEN-2013-025	50.00	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV
GEN-2013-034	73.60	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2013-034 Tap) 345kV
GEN-2013-035	100.00	OKGE	Tap Woodward - Tatonga 345kV (GEN-2011-051 Tap)
GEN-2014-002	10.53	OKGE	Tatonga 345kV (GEN-2007-021 POI)
GEN-2014-003	15.84	OKGE	Tatonga 345kV (GEN-2007-044 POI)
GEN-2014-005	5.67	OKGE	Minco 345kV (GEN-2011-010 POI)
PRIOR QUEUED SUBTOTAL	4,540.24		
AREA TOTAL	4,540.24		

GROUP 2: HITCHLAND AREA			
Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2011-002	20.00	SPS	Herring 115kV
GEN-2002-008	240.00	SPS	Hitchland 345kV
GEN-2002-009	80.00	SPS	Hansford 115kV
GEN-2003-020	160.00	SPS	Martin 115kV
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV
GEN-2006-044	370.00	SPS	Hitchland 345kV
GEN-2007-046	199.50	SPS	Hitchland 115kV
GEN-2008-047	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2010-001	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2010-014	358.80	SPS	Hitchland 345kV
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2011-022	299.00	SPS	Hitchland 345kV
GEN-2013-030	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV
SPS Distributed (Etter)	20.00	SPS	Etter 115kV
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV
PRIOR QUEUED SUBTOTAL	2,962.20		
AREA TOTAL	2,962.20		

GROUP 3: SPEARVILLE AREA			
Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV
GEN-2001-039A	105.00	SUNCMKEC	Tap Greensburg - Ft Dodge (Shooting Star Tap) 115kV
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV
GEN-2005-012	250.00	SUNCMKEC	Ironwood 345kV
GEN-2006-006	205.50	SUNCMKEC	Spearville 345kV
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV
GEN-2008-018	250.00	SPS	Finney 345kV
GEN-2008-079	99.20	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV
GEN-2012-011	200.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (North of GEN-2011-017 Tap)
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock 345kV (GEN-2012-011 Tap)
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV
PRIOR QUEUED SUBTOTAL	4,309.40		
AREA TOTAL	4,309.40		

GROUP 4/11: NW KANSAS AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2013-004	29.60	SUNCMKEC	Morris 115kV
GEN-2001-039M	100.00	SUNCMKEC	Central Plains Tap 115kV
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV
GEN-2006-031	75.00	MIDW	Knoll 115kV
GEN-2006-040	108.00	SUNCMKEC	Mingo 115kV
GEN-2007-011	135.00	SUNCMKEC	Syracuse 115kV
GEN-2008-017	300.00	SUNCMKEC	Setab 345kV
GEN-2008-092	201.00	MIDW	Post Rock 230kV
GEN-2009-008	199.50	MIDW	South Hays 230kV
GEN-2009-020	48.60	MIDW	Tap Nekoma - Bazine (Walnut Creek) 69kV
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV
GEN-2010-057	201.00	MIDW	Rice County 230kV
GEN-2012-026	100.00	MIDW	Colby 115kV
GEN-2013-033	28.00	MIDW	Goodman Energy Center 115kV
PRIOR QUEUED SUBTOTAL	2,045.70		
AREA TOTAL	2,045.70		

GROUP 5: AMARILLO AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2013-001	11.50	SPS	PanTex South 115kV
GEN-2002-022	240.00	SPS	Bushland 230kV
GEN-2008-051	322.00	SPS	Potter County 345kV
GEN-2008-088	50.60	SPS	Vega 69kV
GEN-2013-031	370.00	SPS	Bushland 230kV
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV
PRIOR QUEUED SUBTOTAL	1,074.10		
AREA TOTAL	1,074.10		

GROUP 6: S-TX PANHANDLE/W-TX AREA			
Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2010-010	42.20	SPS	Lovington 115kV
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV
ASGI-2011-001	28.80	SPS	Lovington 115kV
ASGI-2011-003	10.00	SPS	Hendricks 115kV
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV
ASGI-2013-003	18.40	SPS	FE Clovis 115kV
ASGI-2013-005	1.80	SPS	FE Clovis 115kV
ASGI-2013-006	2.00	SPS	SP-Erskine 115kV
ASGI-2014-001	2.50	SPS	SP-Erskine 115kV
GEN-2001-033	180.00	SPS	San Juan Tap 230kV
GEN-2001-036	80.00	SPS	Norton 115kV
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV
GEN-2006-026	604.00	SPS	Hobbs 230kV & Hobbs 115kV
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Crossroads) 345kV
GEN-2010-006	205.00	SPS	Jones 230kV
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV
GEN-2011-045	205.00	SPS	Jones 230kV
GEN-2011-046	27.00	SPS	Lopez 115kV
GEN-2011-048	175.00	SPS	Mustang 230kV
GEN-2012-001	61.20	SPS	Tap Grassland - Borden County 230kV
GEN-2012-009	15.00	SPS	Mustang 230kV
GEN-2012-010	15.00	SPS	Mustang 230kV
GEN-2012-020	478.00	SPS	TUCO 230kV
GEN-2012-034	7.00	SPS	Mustang 230kV
GEN-2012-035	7.00	SPS	Mustang 230kV
GEN-2012-036	7.00	SPS	Mustang 230kV
GEN-2012-037	203.00	SPS	TUCO 345kV
GEN-2013-013	248.40	SPS	Tap Eddy County - Tolk 345kV
GEN-2013-016	203.00	SPS	TUCO 345kV
GEN-2013-022	25.00	SPS	Norton 115kV
GEN-2013-027	326.40	SPS	Tap Tolk - Yoakum 230kV
GEN-2014-007	400.00	SPS	Tap TUCO Interchange - Border 345kV
GEN-2014-012	850.00	SPS	Tap Hobbs Interchange - Andrews 230kV
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV
SPS Distributed (Monument)	10.00	SPS	Monument 115kV
SPS Distributed (Ocotillo)	10.00	SPS	S_Jal 115kV
PRIOR QUEUED SUBTOTAL	5,187.55		
GEN-2014-008	300.00	SPS	Tap Eddy - Tolk 345kV
CURRENT CLUSTER SUBTOTAL	300.00		
AREA TOTAL	5,487.55		

GROUP 7: SW-OKLAHOMA AREA			
Request	Capacity	Area	Proposed Point of Interconnection
GEN-2001-026	74.00	WFEC	Washita 138kV
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV
GEN-2003-004	100.00	WFEC	Washita 138kV
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV
GEN-2003-022	120.00	AEPW	Washita 138kV
GEN-2004-020	27.00	AEPW	Washita 34.5kV
GEN-2004-023	20.60	WFEC	Washita 138kV
GEN-2005-003	30.60	WFEC	Washita 138kV
GEN-2006-002	101.00	AEPW	Sweetwater 230kV
GEN-2006-035	225.00	AEPW	Sweetwater 230kV
GEN-2006-043	99.00	AEPW	Sweetwater 230kV
GEN-2007-032	150.00	WFEC	Tap Clinton Junction - Clinton 138kV
GEN-2007-052	150.00	WFEC	Anadarko 138kV
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV
GEN-2008-037	101.00	WFEC	Tap Washita - Blue Canyon Wind 138kV
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV
GEN-2011-049	250.00	OKGE	Border 345kV
GEN-2012-028	74.80	WFEC	Gotebo 69kV
PRIOR QUEUED SUBTOTAL	1,900.00		
AREA TOTAL	1,900.00		

GROUP 8: N-OK/S-KS AREA			
Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Schilder (AEPW) 138kV
GEN-2002-004	200.00	WERE	Latham 345kV
GEN-2005-013	201.00	WERE	Tap Latham - Neosho (Caney River) 345kV
GEN-2007-025	300.00	WERE	Viola 345kV
GEN-2008-013	300.00	OKGE	Tap Wichita - Woodring (Hunter) 345kV
GEN-2008-021	42.00	WERE	Wolf Creek 345kV
GEN-2008-098	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV
GEN-2009-025	60.00	OKGE	Nardins 69kV
GEN-2010-003	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV
GEN-2010-005	300.00	WERE	Viola 345kV
GEN-2010-055	4.50	AEPW	Wekiwa 138kV
GEN-2011-057	150.40	WERE	Creswell 138kV
GEN-2012-023	115.00	WERE	Viola 345kV
GEN-2012-027	136.00	AEPW	Shidler 138kV
GEN-2012-032	300.00	OKGE	Tap Rose Hill - Sooner (Ranch) 345kV
GEN-2012-033	98.80	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV
GEN-2012-040	76.50	WFEC	Chilocco 138kV
GEN-2012-041	121.50	OKGE	Tap Rose Hill - Sooner 345kV
GEN-2013-009	100.30	AEPW	Tap Alluwe Tap - Vinita Junction 138kV
GEN-2013-012	147.00	OKGE	Redbud 345kV
GEN-2013-028	559.50	GRDA	Tap N Tulsa - GRDA 1 345kV
GEN-2013-029	300.00	OKGE	Renfrow 345kV
GEN-2014-001	200.60	WERE	Tap Wichita - Emporia Energy Center 345kV
PRIOR QUEUED SUBTOTAL	4,064.70		
GEN-2014-011	172.00	WERE	Tap Reno - Summit 345kV
CURRENT CLUSTER SUBTOTAL	172.00		
AREA TOTAL	4,236.70		

GROUP 9/10: NEBRASKA AREA			
Request	Capacity	Area	Proposed Point of Interconnection
GEN-2002-023N	0.80	NPPD	Harmony 115kV
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV
GEN-2006-044N	40.50	NPPD	North Petersburg 115kV
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV
GEN-2008-086N02	200.00	NPPD	Tap Ft Randle - Columbus (Meadow Grove) 230kV
GEN-2008-1190	60.00	OPPD	S1399 161kV
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline (Rosemont) 115kV
GEN-2009-040	73.80	WERE	Marshall 115kV
GEN-2010-041	10.50	OPPD	S 1399 161kV
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV
GEN-2011-018	73.60	NPPD	Steele City 115kV
GEN-2011-027	120.00	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)
GEN-2011-055	52.80	OPPD	South Sterling 69kV
GEN-2011-056	3.60	NPPD	Jeffrey 115kV
GEN-2011-056A	3.60	NPPD	John 1 115kV
GEN-2011-056B	4.50	NPPD	John 2 115kV
GEN-2012-005	81.00	NPPD	Tap Fort Randall - Columbus (North of Meadow Grove) 230kV
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom & Pleasant Hill 115kV CKT 2
GEN-2013-004	6.00	NPPD	Tap Fort Randall - Columbus (Meadow Grove) 230kV
GEN-2013-005	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV
GEN-2013-006	50.60	NPPD	Tap Fort Randall - Columbus (Meadow Grove) 230kV
GEN-2013-008	1.20	NPPD	Steele City 115kV
GEN-2013-014	25.50	NPPD	Tap Guide Rock - Pauline (GEN-2008-123N Tap) 115kV
GEN-2013-015	125.80	NPPD	Tap Pauline - Hildreth 115kV
GEN-2013-019	73.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2
GEN-2013-021	229.50	NPPD	Ogallala 230kV
GEN-2013-032	204.00	NPPD	Neligh 115kV
GEN-2014-004	3.96	NPPD	Steele City 115kV (GEN-2011-018 POI)
GEN-2014-006	74.90	NPPD	Harbine 115kV
GEN-2014-013	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV
NPPD Distributed (Burt County Wind)	12.00	NPPD	Tekamah & Oakland 115kV
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV
NPPD Distributed (Ord)	11.90	NPPD	Ord 115kV
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV
PRIOR QUEUED SUBTOTAL	2,602.16		
AREA TOTAL	2,602.16		

GROUP 12: NW-AR AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2013-011	30.00	AEPW	Turk 138kV
PRIOR QUEUED SUBTOTAL	30.00		
AREA TOTAL	30.00		

GROUP 13: NW MISSOURI AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2013-007	90.00	AECI	Tap Hickory Creek - Locust Creek 161kV
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV
GEN-2010-036	4.60	WERE	6th Street 115kV
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV
GEN-2011-011	50.00	KACP	Iatan 345kV
GEN-2013-026	150.00	GMO	Tap Saint Joseph - Cooper 345kV (GEN-2010-056 Tap)
PRIOR QUEUED SUBTOTAL	525.80		
AREA TOTAL	525.80		

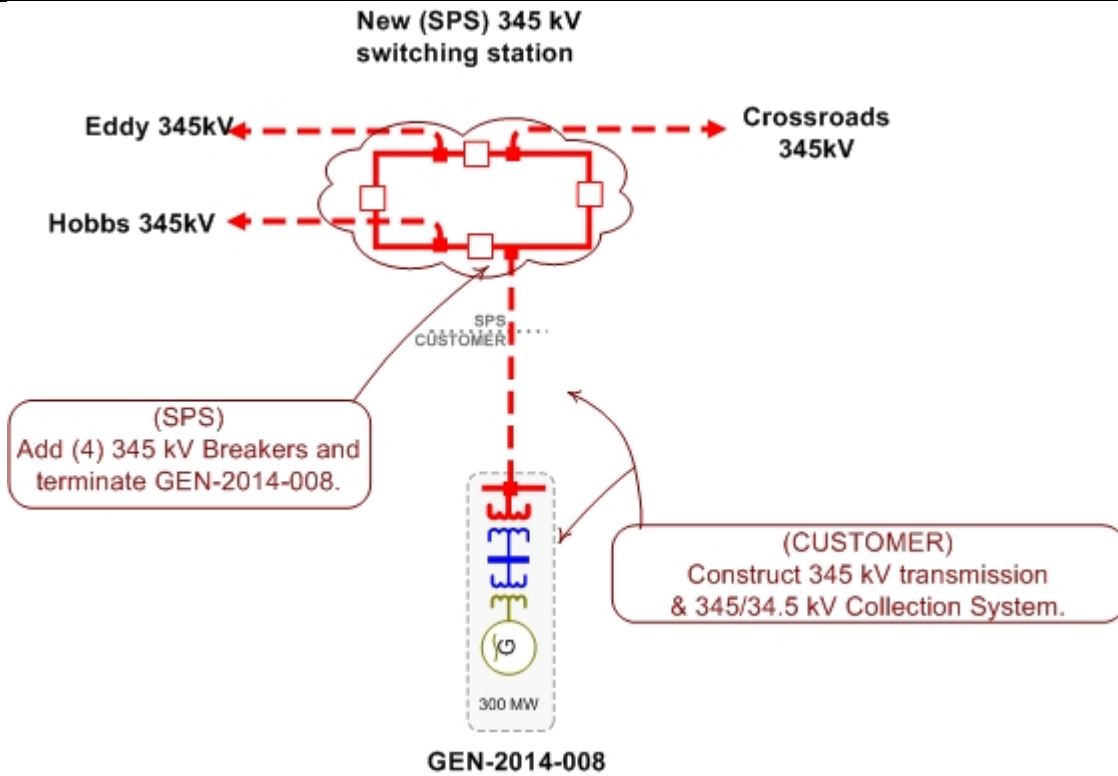
GROUP 14: S-OKLAHOMA AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2011-040	111.00	OKGE	Tap Ratliff - Pooleville 138kV
GEN-2011-050	109.80	AEPW	Rush Springs Natural Gas Tap 138kV
GEN-2012-004	41.40	OKGE	Tap Ratliff - Pooleville (Carter County) 138kV
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV
PRIOR QUEUED SUBTOTAL	362.50		
AREA TOTAL	362.50		

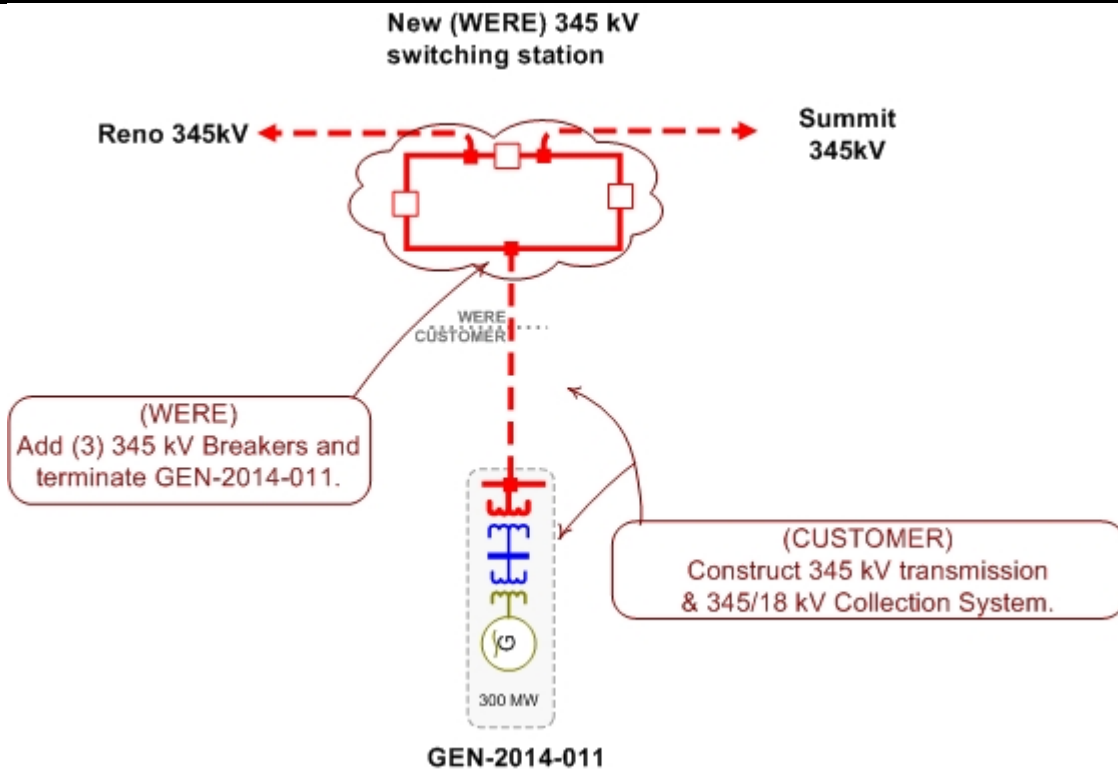
CLUSTER TOTAL (CURRENT STUDY)	472.0	MW
PQ TOTAL (PRIOR QUEUED)	29,604.4	MW
CLUSTER TOTAL (INCLUDING PRIOR QUEUED)	30,076.4	MW

D: Proposed Point of Interconnection One line Diagrams

GEN-2014-008



GEN-2014-011



E: Cost Allocation per Interconnection Request (Including Prior Queued Upgrades)

Important Note:

****WITHDRAWAL OF HIGHER QUEUED PROJECTS WILL CAUSE A RESTUDY AND MAY RESULT IN HIGHER INTERCONNECTION COSTS****

This section shows each Generation Interconnection Request Customer, their current study impacted Network Upgrades, and the previously allocated upgrades upon which they rely to accommodate their interconnection to the transmission system.

The costs associated with the current study Network Upgrades are allocated to the Customers shown in this report.

In addition should a higher queued request, defined as one this study includes as a prior queued request, withdraw, the Network Upgrades assigned to the withdrawn request may be reallocated to the remaining requests that have an impact on the Network Upgrade under a restudy. Also, should an Interconnection Request choose to go into service prior to the operation date of any necessary Network Upgrades, the costs associated with those upgrades may be reallocated to the impacted Interconnection Request. The actual costs allocated to each Generation Interconnection Request Customer will be determined at the time of a restudy.

The required interconnection costs listed do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT. In addition, costs associated with a short circuit analysis will be allocated should the Interconnection Request Customer choose to execute a Facility Study Agreement.

Appendix E. Cost Allocation Per Request

(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Gen 2014-008			
GEN 2014-008 Interconnection Costs See one line diagram	Current Study	\$13,000,000.00	\$13,000,000.00
GEN 2014-008 Tap - Hobbs 345kV Build approximately 80 miles of 345kV line from Gen 2014-008 tap - Hobbs	Current Study	\$100,000,000.00	\$100,000,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Clark - Thistle 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Deaf Smith - Plant X 230kV CKT 1 Replace line traps at both ends	Previously Allocated		\$1,000,000.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Hobbs 345/230kV transformer HPILS: Install 345/230kV transformer	Previously Allocated		\$10,262,813.00
Lubbock South 230/115kV Autotransformer CKT 2 NRIS only required upgrade: Install 2nd 230/115/13.2kV Autotransformer	Previously Allocated		\$4,000,000.00
Mustang - Yoakum 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		\$200,000.00
Spearville - Clark 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00

* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Tolk - Plant X 230kV CKT 3 Build a 3rd circuit between Tolk - Plant X 230kV	Previously Allocated		\$20,000,000.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
Yoakum 230/115/13kV Transformer CKT 1&2 NRIS only required upgrade: Replace existing two Yoakum 230/115/13kV transformers.	Previously Allocated		\$7,514,514.00
	Current Study Total	\$113,000,000.00	

Gen 2014-011

GEN 2014-011 Interconnection Costs See one line diagram	Current Study	\$9,000,000.00	\$9,000,000.00
Arcadia - Kamo Memorial 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 7 miles of 138kV	Previously Allocated		\$7,000,000.00
Arcadia - Redbud 345kV Dbl CKT 1 Per 2014 ITP NT: Upgrade terminal equipment for both circuits	Previously Allocated		\$1,010,523.00
Beaver County - Buckner 345kV Build approximately 90 miles of 345kV from Beaver County - Buckner @ 3000 amps	Previously Allocated		\$170,209,050.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345V CKT 1 Replace Terminal equipment	Previously Allocated		\$771,000.00
Clark - Thistle 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Nashua 345/161/13.8KV Autotransformer CKT 1 Balanced Portfolio: Nashua/161/13.8 Autotransformer 345kV CKT 1 (Total Project E&C Cost Shown).	Previously Allocated		\$4,230,000.00
Spearville - Clark 345KV Dbl CKT Priority Project: Spearville - Clark - Thistle Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00

* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
	Current Study Total	\$9,000,000.00	
TOTAL CURRENT STUDY COSTS:		\$122,000,000.00	

* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

F: Cost Allocation per Proposed Study Network Upgrade

Important Note:

****WITHDRAWAL OF HIGHER QUEUED PROJECTS WILL CAUSE A RESTUDY
AND MAY RESULT IN HIGHER INTERCONNECTION COSTS****

This section shows each Direct Assigned Facility and Network Upgrade and the Generation Interconnection Request Customer(s) which have an impact in this study assuming all higher queued projects remain in the queue and achieve commercial operation.

The required interconnection costs listed do not include all costs associated with the deliverability of the energy to final customers. These costs are determined by separate studies if the Customer submits a Transmission Service Request through SPP's Open Access Same Time Information System (OASIS) as required by Attachment Z1 of the SPP OATT. In addition, costs associated with a short circuit analysis will be allocated should the Interconnection Request Customer choose to execute a Facility Study Agreement.

There may be additional costs allocated to each Customer. See Appendix E for more details.

Appendix F. Cost Allocation by Upgrade

GEN 2014-008 Interconnection Costs **\$13,000,000.00**

See one line diagram

Gen 2014-008 \$13,000,000.00

Total Allocated Costs **\$13,000,000.00**

GEN 2014-008 Tap - Hobbs 345kV **\$100,000,000.00**

Build approximately 80 miles of 345kV line from Gen 2014-008 tap - Hobbs

Gen 2014-008 \$100,000,000.00

Total Allocated Costs **\$100,000,000.00**

GEN 2014-011 Interconnection Costs **\$9,000,000.00**

See one line diagram

Gen 2014-011 \$9,000,000.00

Total Allocated Costs **\$9,000,000.00**

* Withdrawal of higher queued projects will cause a restudy and may result in higher costs

G: FCITC Analysis Constraints Requiring Reinforcement (ERIS)

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		
							Rating (MVA)	Loading (%)	Contname
00G14_008	14WP	0	G14_008	FROM->TO	'EDDY_NORTH 6230.00 (WAUK WTO1134) 230/115/13.2KV TRANSFORMER CKT 2	0.19929	249.7	103.3588	'EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1
00G14_008	14WP	0	G14_008	FROM->TO	'EDDY_NORTH 6230.00 (WAUK WTO1134) 230/115/13.2KV TRANSFORMER CKT 2	0.19929	250	103.1548	'EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1
00G14_008	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.29691	671.6	113.9477	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
00G14_008	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.29691	671.6	112.6523	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1
00G14_008	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.29691	671.6	110.7464	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1
00G14_008	19WP	0	G14_008	FROM->TO	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	0.38187	553.9	100.6248	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
00G14_008	19WP	0	G14_008	FROM->TO	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	0.38187	555.5	100.299	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
	6 14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	556.1	120.9135	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
	6 14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	556.1	120.9135	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	556.1	120.8775	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
	6 14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556.8	120.7615	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
	6 14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	556.1	120.6258	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556.8	120.5101	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	120.1143	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
	6 14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	119.8642	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	119.8285	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
	6 14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	119.8285	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	560	119.8214	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
	6 14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	560	119.8214	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
	6 14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.30067	674	100.2167	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
06G14_008	14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	556.1	110.1241	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06G14_008	14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	556.1	110.1241	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	556.1	110.0881	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556.8	109.9856	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	556.1	109.8364	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556.8	109.7342	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	109.3962	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	109.1461	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	109.1104	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06G14_008	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.8	109.1104	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06G14_008	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	560	109.1071	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06G14_008	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	560	109.1071	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.29722	664.5	121.713	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.29722	664.5	118.8688	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	0.37872	546.9	119.2189	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
06ALL	14G	0	G14_008	FROM->TO	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	0.37872	551.4	118.1734	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
06ALL	14G	0	G14_008	FROM->TO	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	0.3739	549.9	117.0367	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	0.3739	553.2	116.3024	'TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23664	664.5	105.4471	'NORTHWEST - TATONGA7 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	551.9	124.6059	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	551.9	124.3116	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	555.6	123.8481	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1	1	555.6	123.8481	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556	123.759	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556	123.4712	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559	123.0948	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559	122.8086	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.4	122.685	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.4	122.685	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.9	122.6112	'TOLK STATION (ABBXLN844501) 345/230/13.2KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1	1	559.9	122.6112	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23664	664.5	101.5795	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	0.24538	337.6	103.1715	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23808	664.5	101.1907	'SPP-SWPS-03'
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23664	664.5	100.782	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23759	664.5	100.5626	'ELK CITY 230KV - SWEETWATER 230KV CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23759	664.5	100.5626	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.23759	664.5	100.5325	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
06ALL	14G	0	G14_008	FROM->TO	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1	0.21745	337.6	100.9234	'SPP-SWPS-01'
06ALL	14G	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.22283	664.5	100.395	'OKLAUN - OKLAUNION 345KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'EDDY_NORTH 6230.00 (WAUK WTO1134) 230/115/13.2KV TRANSFORMER CKT 2	0.24224	249.7	103.9535	'EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		Contname
							Rating (MVA)	Loading (%)	
00G14_008NR	24SP	0	G14_008	FROM->TO	TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559	102.415	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.1	101.9138	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559	101.9141	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	559.5	101.7694	'TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	559.5	101.7694	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	560	101.75	'TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	560	101.75	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'

H: FCITC Analysis Constraints Requiring Reinforcement (NRIS)

Group	Season	Scenario	Source	Direction	Monitored Element	Contingency			
						TDF	Rating	Loading %	Contingency
00G14_008NR	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	156.2	156.4763	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	156.2	156.4763	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.06008	175.6	138.2825	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04174	154.9	159.5365	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04846	176.5	176.7354	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0387	153.9	129.6361	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08334	350.8	101.3689	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08334	350.8	101.3689	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	104.6848	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	104.6017	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	101.0283	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07557	351	102.8407	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07557	351	102.7553	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	144.1813	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	144.0975	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08086	358	139.3458	'SPP-SWPS-01'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08045	358	139.0042	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08045	358	138.9763	'SPP-AEPW-32'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	139.9634	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	135.4947	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	125.8857	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	325.8	126.8947	'BASE CASE'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.09391	358	128.8752	'NEWHART 230 - PLANT X STATION 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	124.4891	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.09255	358	128.0377	'NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.7634	'SPP-SWPS-W40'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.7075	'DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	120.3975	'Central Valley REC-12 Mile Hill - EDDY COUNTY INTERCHANGE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.0651	'DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9827	'Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9573	'HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9573	'Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	121.4785	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	160.9	152.1541	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	164.4	148.6715	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	160.9	152.1541	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	164.4	148.6715	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.06008	164.9	147.4373	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.06008	165.5	145.8402	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04174	158.5	156.2284	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04174	163.2	151.4228	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04846	166	188.1554	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04846	167.5	186.2316	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0387	156.9	127.4761	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0387	162.2	123.0025	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.05258	152.4	114.6155	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.05732	138.4	112.0636	'HOBBS - KIOWA 7345.00 345KV CKT 1'
06G14_008NR	14G	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	174.5	127.6883	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	174.5	127.6883	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.06008	190.5	118.8053	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04174	173.9	127.9022	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04846	191	153.3183	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'	1	556.4	103.0554	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1'
06G14_008NR	14G	0	G14_008	TO->FROM	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1'	1	556.2	103.0924	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	559.3	102.0919	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (ABB AEM30711) 345/230/13.2KV TRANSFORMER CKT 1'	1	559.9	102.0361	'CROSSROADS 345.00 - TOLK STATION 345KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07326	245.9	107.5551	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	24SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07326	248.2	106.4376	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
06G14_008NR	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (WH XH570551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	167.8	110.2211	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
06G14_008NR	14G	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (WH XH570551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	168	109.9113	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (WH XH570551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	167.8	110.2211	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14SP	0	G14_008	FROM->TO	'EDDY COUNTY INTERCHANGE (WH XH570551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	168	109.9113	'EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'

Group	Season	Scenario	Source	Direction	Monitored Element	Contingency			
						TDF	Rating	Loading %	Contingency
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04584	249.3	121.842	'SPP-SWPS-K37'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04584	249.3	121.7617	'LAMB COUNTY INTERCHANGE (WH_ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04584	251.9	120.6241	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04584	251.9	120.3462	'SPP-SWPS-K37'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04584	251.9	120.2668	'LAMB COUNTY INTERCHANGE (WH_ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04012	249.3	112.5592	'PLANT X STATION 115/13.8KV TRANSFORMER CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04012	251.9	111.9899	'PLANT X STATION 115/13.8KV TRANSFORMER CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05582	249.3	113.3759	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05582	251.9	111.9674	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05304	249.3	108.4685	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05304	251.9	107.1107	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04983	249.3	103.6298	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04079	249.3	102.8227	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.03444	249.3	102.3795	'SPP-SWPS-T04'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.03913	249.3	102.2619	'KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04983	251.9	102.322	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04079	251.9	101.5629	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.03444	251.9	101.0846	'SPP-SWPS-T04'
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.03913	251.9	100.9682	'KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1
06G14_008NR	14G	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.03935	249.3	100.8845	'HALE CO INTERCHANGE - TUCO INTERCHANGE 115KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	249.3	123.732	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	249.3	123.4513	'SPP-SWPS-K37'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	249.3	123.371	'LAMB COUNTY INTERCHANGE (WH_ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	251.9	122.2168	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	251.9	121.9389	'SPP-SWPS-K37'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05488	251.9	121.8595	'LAMB COUNTY INTERCHANGE (WH_ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04571	249.3	113.5126	'PLANT X STATION 115/13.8KV TRANSFORMER CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04571	251.9	112.1028	'PLANT X STATION 115/13.8KV TRANSFORMER CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.0622	249.3	114.4645	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.0622	251.9	113.0449	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.06112	249.3	109.9222	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.06112	251.9	108.5494	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05052	249.3	104.7156	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04017	249.3	103.3498	'SPP-SWPS-T04'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05588	249.3	104.6787	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04463	249.3	103.1645	'KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05052	251.9	103.3966	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05588	251.9	103.3601	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04017	251.9	102.0449	'SPP-SWPS-T04'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.06117	249.3	103.0289	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04463	251.9	101.8615	'KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04422	249.3	101.7112	'HALE CO INTERCHANGE - TUCO INTERCHANGE 115KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.06117	251.9	101.7273	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04422	251.9	100.4232	'HALE CO INTERCHANGE - TUCO INTERCHANGE 115KV CKT 1'
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.04775	249.3	100.371	'SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1
00G14_008NR	14SP	2	G14_008	FROM->TO	'PLANT X STATION (WH_ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	0.05478	249.3	100.3345	'LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.04034	128	121.8766	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.04034	136.2	114.2452	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.04034	128	121.8766	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.04034	136.2	114.2452	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.03797	123.6	151.0445	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE_M100747) 230/115/13.2KV TRANSFORMER CKT 1	0.03797	134.3	138.6381	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
06G14_008NR	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.4	102.5027	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1
06G14_008NR	14G	0	G14_008	FROM->TO	'TOLK STATION (ABBXNL844501) 345/230/13.2KV TRANSFORMER CKT 1	1	559.4	102.5027	'EDDY COUNTY INTERCHANGE - G14-008 TAP 345.00 345KV CKT 1

I: FCITC Analysis Constraints Not Requiring Reinforcement

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		
							Rating	Loading %	Contingency
00G14_008	14SP	0	G14_008	TO->FROM	'BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1'	0.05665	159.4	103.6355	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
00G14_008	14SP	2	G14_008	TO->FROM	'BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1'	0.05622	159.4	103.6173	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
	0	14WP	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09661	175.5	118.3625	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0	19SP	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0877	154.4	132.0765	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0	24SP	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.07889	153.3	100.2325	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09577	155.9	157.5568	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09661	175.5	134.1783	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0877	154.4	148.4521	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.086	176.5	181.4731	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.07889	153.3	114.9818	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09515	159.4	118.9288	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	156.2	156.4763	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.06008	175.6	138.2825	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04174	154.9	159.5365	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04846	176.5	176.7354	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0387	153.9	129.6361	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.17831	350.9	104.0732	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.17831	350.9	103.9878	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18012	360.9	102.8363	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18012	360.9	102.7808	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16662	358.1	150.2335	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16662	358.1	150.1497	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16662	358.1	146.0168	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18407	358.1	145.105	'SPP-SWPS-01'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18143	358.1	144.437	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18143	358.1	144.4091	'SPP-AEPW-32'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.17605	358.1	138.9598	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.17605	358.1	138.122	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.17605	358.1	136.8933	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.15076	325.9	133.9454	'BASE CASE'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18392	358.1	135.905	'NEWHART 230 - PLANT X STATION 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.18623	358.1	135.931	'NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16402	358.1	129.5186	'SPP-SWPS-W40'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16402	358.1	129.4627	'DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.15076	358.1	126.816	'Central Valley REC-12 Mile Hill - EDDY COUNTY INTERCHANGE 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16402	358.1	128.8204	'DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16402	358.1	128.234	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.16472	358.1	128.2089	'AMARILLO SOUTH INTERCHANGE - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.15078	358.1	125.7844	'SPP-SWPS-T14'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.15076	358.1	125.6504	'Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08334	350.8	101.3689	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	104.6848	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	104.6017	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.10604	361	101.0283	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07557	351	102.8407	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07557	351	102.7553	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	144.1813	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	144.0975	'BUSHLAND INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08086	358	139.3458	'SPP-SWPS-01'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08045	358	139.0042	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08045	358	138.9763	'SPP-AEPW-32'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08823	358	139.9634	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	135.4947	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	125.8857	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	325.8	126.8947	'BASE CASE'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.09391	358	128.8752	'NEWHART 230 - PLANT X STATION 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08057	358	124.4891	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.09525	358	128.0377	'NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.7634	'SPP-SWPS-W40'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.7075	'DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	120.3975	'Central Valley REC-12 Mile Hill - EDDY COUNTY INTERCHANGE 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	358	122.0651	'DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9827	'Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9573	'HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.07641	358	118.9573	'Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1'

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		
							Rating	Loading %	Contingency
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'	0.08431	158	121.4785	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'
	0 14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09661	365	126.0764	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0 14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09661	166.4	124.8354	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0 19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0877	158.7	128.7499	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0 19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0877	162.6	125.4158	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09577	160.8	153.0043	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09577	164.1	149.6837	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09661	165	142.8988	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09661	166.4	141.5162	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0877	158.7	144.6818	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0877	162.6	140.9655	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.086	166.1	193.0764	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.086	167.5	191.2239	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.07889	157.1	112.4551	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.07889	161.6	109.0761	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09515	166.8	113.8324	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.09515	167.4	113.2452	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	160.9	152.1541	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04772	164.4	148.6715	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.06008	164.9	147.4373	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.06008	166.5	145.8402	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04174	158.5	156.2284	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04174	163.2	151.4228	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04846	166	188.1554	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.04846	167.5	186.2316	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0387	156.9	127.4761	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	'BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1'	0.0387	162.2	123.0025	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1'	0.08468	94.3	108.3796	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1'	0.08322	94.3	107.7232	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.05163	104.7	101.5177	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.08468	94.7	122.3886	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.08468	94.7	111.6177	'BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.05008	104.7	101.2799	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.08322	94.7	121.8406	'BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'CANYON WEST SUB - DAWN SUB 115KV CKT 1'	0.08322	94.7	111.0697	'BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'CARGILL SUB - DEAF SMITH REC-#24 115KV CKT 1'	0.06124	93.7	112.2583	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'CARGILL SUB - DEAF SMITH REC-#24 115KV CKT 1'	0.05998	93.7	111.6297	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'CARGILL SUB - FRIONA SUB 115KV CKT 1'	0.06124	91.6	104.5699	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	'CARGILL SUB - FRIONA SUB 115KV CKT 1'	0.05998	91.6	104.036	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
00G14_008	14WP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.04409	153.8	104.764	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008	24SP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.05209	136	100.461	'HOBBS - KIOWA 7345.00 345KV CKT 1'
00G14_008NR	14WP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.05258	152.4	114.6155	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	TO->FROM	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	0.05732	138.4	112.0636	'HOBBS - KIOWA 7345.00 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	'CONWAY SUB - KIRBY SWITCHING STATION 115KV CKT 1'	0.03265	159.2	101.7572	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	'CONWAY SUB - KIRBY SWITCHING STATION 115KV CKT 1'	0.03238	159.2	101.669	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'	0.03889	180	103.2594	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'	0.03265	174.9	100.5703	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'	0.03859	180	103.2094	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'	0.03238	174.9	100.49	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
	0 14WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09661	190.3	100.5392	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	0 19SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0877	173.3	103.4773	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09577	174.2	128.663	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.09661	190.3	115.1251	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.0877	173.3	118.0669	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.086	191	157.7487	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04772	174.5	127.6883	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	14WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.06008	190.5	118.8053	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19SP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04174	173.9	127.9022	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008NR	19WP	0	G14_008	TO->FROM	'COULTER INTERCHANGE - HILLSIDE 115KV CKT 1'	0.04846	191	153.3183	'BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	14WP	2	G14_008	FROM->TO	'CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1'	0.03159	176.9	113.7801	'HOBBS INTERCHANGE - MADDOX STATION 115KV CKT 1'
	6 14G	2	G14_008	FROM->TO	'CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1'	0.03167	159.4	104.9566	'HOBBS INTERCHANGE - MADDOX STATION 115KV CKT 1'
06G14_008	14G	2	G14_008	FROM->TO	'CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1'	0.03167	159.4	103.7645	'HOBBS INTERCHANGE - MADDOX STATION 115KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	'CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1'	0.03166	159.4	103.9831	'HOBBS INTERCHANGE - MADDOX STATION 115KV CKT 1'
	6 14G	0	G14_008	FROM->TO	'CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.06153	94	108.4757	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06G14_008	14G	0	G14_008	FROM->TO	'CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.06153	94	104.5483	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		
							Rating	Loading %	Contingency
06ALL	14G	0	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.06124	91.8	137.0218	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.04202	91.8	100.439	SPP-SWPS-01'
06ALL	14G	0	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.04502	91.8	100.0577	PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'
6	14G	2	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.06028	94	107.7311	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06G14_008	14G	2	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.06028	94	103.8834	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.05998	91.8	136.3802	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1'	0.04129	91.8	100.2108	SPP-SWPS-01'
00G14_008	19WP	0	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.05163	105.1	106.5547	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.08468	95.1	126.7108	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.08468	95.1	115.9853	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.0508	105.1	106.3178	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.08322	95.1	126.0599	BUFFALO 230.00 - BUSHLAND INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1'	0.08322	95.1	115.3344	BUFFALO 230.00 - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	DEAF SMITH REC-#20 - PARMER COUNTY SUB 115KV CKT 1'	0.06124	91	127.7868	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	DEAF SMITH REC-#20 - PARMER COUNTY SUB 115KV CKT 1'	0.05998	91	127.2495	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1'	0.06124	94	119.2404	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	DEAF SMITH REC-#24 - PARMER COUNTY SUB 115KV CKT 1'	0.05998	94	118.6138	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
00G14_008	24SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07121	245.1	101.2089	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008	24SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07121	247.4	100.1467	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	24SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07326	245.9	107.5551	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	24SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'	0.07326	248.2	106.4376	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008	14SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.0446	167.7	101.2999	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008	14SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.0446	168	101	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	167.8	110.2211	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14SP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.05017	168	109.9113	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14WP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.04834	167.9	106.5527	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008NR	14WP	0	G14_008	FROM->TO	EDDY COUNTY INTERCHANGE (WH XHS70551) 230/115/13.2KV TRANSFORMER CKT 1'	0.04834	168	106.3107	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'
00G14_008	14WP	0	G14_008	FROM->TO	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'	0.19929	249.7	103.3588	EDDY COUNTY INTERCHANGE - EDDY NORTH 6230.00 230KV CKT @1'
00G14_008	14WP	0	G14_008	FROM->TO	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'	0.19929	250	103.1548	EDDY COUNTY INTERCHANGE - EDDY NORTH 6230.00 230KV CKT @1'
00G14_008NR	24SP	0	G14_008	FROM->TO	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'	0.07154	246.5	104.4471	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'
00G14_008NR	24SP	0	G14_008	FROM->TO	EDDY NORTH 6230.00 (WAUK WT01134) 230/115/13.2KV TRANSFORMER CKT 2'	0.07154	248.5	103.4857	EDDY COUNTY INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 1'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09863	314.3	114.5067	SPP-AEPW-32'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09863	315.6	114.1301	SPP-AEPW-32'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.10023	314.3	113.374	SPP-SWPS-01'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.10023	315.6	113.0021	SPP-SWPS-01'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09863	314.3	112.7249	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09863	315.6	112.3557	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.08968	314.3	101.1938	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
06ALL	14G	0	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.08968	315.6	100.8403	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09831	314.3	114.4596	SPP-AEPW-32'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09831	315.6	114.0832	SPP-AEPW-32'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09992	314.3	113.3274	SPP-SWPS-01'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09992	315.6	112.9556	SPP-SWPS-01'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09831	314.3	112.6779	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.09831	315.6	112.3088	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.08894	314.3	101.0948	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
06ALL	14G	2	G14_008	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	0.08894	315.6	100.7418	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	146.2849	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	126.7165	G11 051T 345.00 - TATONGA7 345.00 345KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	122.6878	G11 051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03164	139	114.0961	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04024	139	113.135	SPP-SWPS-03'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	112.7442	ELK CITY 230KV - SWEETWATER 230KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	112.7442	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	112.0967	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04419	139	112.8817	SPP-AEPW-32'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03323	139	108.4714	IODINE - WOODWARD EHV 138KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	110.0823	SPP-SWPS-02a'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04419	139	110.004	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04361	139	109.6881	SPP-SWPS-01'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03323	139	105.8814	DEWEY - IODINE 138KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03443	139	102.3476	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	102.4564	STLN-DEMARC6 - SWEETWATER 230KV CKT 1'
6	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	102.4564	SPP-SWPS-02'
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	144.4439	NORTHWEST - TATONGA7 345.00 345KV CKT 1'

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency			
							Rating	Loading %	Contingency	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	124.8755	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04265	139	120.8468	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03164	139	112.7304	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04024	139	111.398	SPP-SWPS-03'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	111.015	ELK CITY 230KV - SWEETWATER 230KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	111.015	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	110.3675	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04419	139	110.9742	SPP-AEPW-32'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03323	139	107.037	IODINE - WOODWARD EHV 138KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	108.3531	SPP-SWPS-02a'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04419	139	108.0965	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04361	139	107.8056	SPP-SWPS-01'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03323	139	104.447	DEWEY - IODINE 138KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03443	139	100.8614	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	100.7272	SPP-SWPS-02'	
06G14_008	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04006	139	100.7272	STLN-DEMARC6 - SWEETWATER 230KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04229	133.1	168.7029	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04229	133.1	148.5676	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04229	133.1	144.3603	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03138	133.1	131.2599	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03988	133.1	133.6454	SPP-SWPS-03'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	132.6495	ELK CITY 230KV - SWEETWATER 230KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	132.5744	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	132.4992	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03295	133.1	125.9523	IODINE - WOODWARD EHV 138KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04378	133.1	133.0331	SPP-AEPW-32'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	129.9448	SPP-SWPS-02a'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03295	133.1	123.0973	DEWEY - IODINE 138KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04378	133.1	130.0278	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04321	133.1	129.5128	SPP-SWPS-01'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03413	133.1	119.9996	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	122.1311	STLN-DEMARC6 - SWEETWATER 230KV CKT 1'	
06ALL	14G	0	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03971	133.1	122.1311	SPP-SWPS-02'	
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	146.2797	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	126.7114	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	122.6826	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03164	139	114.0961	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04015	139	113.1194	SPP-SWPS-03'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	112.7286	ELK CITY 230KV - SWEETWATER 230KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	112.7286	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	112.0811	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04432	139	112.9042	SPP-AEPW-32'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03322	139	108.4696	IODINE - WOODWARD EHV 138KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	110.0668	SPP-SWPS-02a'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04432	139	110.0984	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04373	139	109.7088	SPP-SWPS-01'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03322	139	105.8797	DEWEY - IODINE 138KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03438	139	102.339	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	102.4409	STLN-DEMARC6 - SWEETWATER 230KV CKT 1'
	6	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	102.4409	SPP-SWPS-02'
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	144.44	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	124.8717	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04262	139	120.8429	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03164	139	112.7304	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04015	139	111.3863	SPP-SWPS-03'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	111.0033	ELK CITY 230KV - SWEETWATER 230KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	111.0033	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	110.3558	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04432	139	110.9911	SPP-AEPW-32'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03322	139	107.0357	IODINE - WOODWARD EHV 138KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	108.3414	SPP-SWPS-02a'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04432	139	108.1853	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.04373	139	107.8212	SPP-SWPS-01'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03322	139	104.4458	DEWEY - IODINE 138KV CKT 1'	
06G14_008	14G	2	G14_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	0.03438	139	100.855	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency		
							Rating	Loading %	Contingency
06G14_008	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	100.7155	'STLN-DEMARC6 - SWEETWATER 230KV CKT 1'
06G14_008	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03997	139	100.7155	'SPP-SWPS-02'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04226	133.1	168.6995	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04226	133.1	148.4891	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04226	133.1	144.3569	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03138	133.1	131.1848	'WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03979	133.1	133.6352	'SPP-SWPS-03'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	132.5642	'ELK CITY 230KV - SWEETWATER 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	132.5642	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	132.4891	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03295	133.1	125.9523	'IODINE - WOODWARD EHV 138KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	129.8595	'SPP-SWPS-02a'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0439	133.1	133.0466	'SPP-AEPW-32'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03295	133.1	123.0973	'DEWEY - IODINE 138KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.0439	133.1	130.0413	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.04332	133.1	129.5252	'SPP-SWPS-01'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03408	133.1	119.994	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	122.121	'STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1'
06ALL	14G	2	G14_008	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	0.03962	133.1	122.121	'SPP-SWPS-02'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.11203	355.9	124.1947	'SPP-AEPW-32'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.11375	355.9	122.3729	'SPP-SWPS-01'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.11203	355.9	121.9469	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08711	355.9	110.7145	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.0985	355.9	110.1854	'Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08711	355.9	108.9444	'SPP-SWPS-T53'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08711	355.9	108.2138	'CONWAY SUB - KIRBY SWITCHING STATION 115KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.0985	355.9	108.7525	'POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.0985	355.9	108.1905	'SPP-SWPS-04'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07669	323.4	105.4443	'BASE CASE'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08264	355.9	104.0719	'KINGSMILL INTERCHANGE - MCCULLOUGH SUB 69KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08225	355.9	103.5614	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08797	355.9	103.4535	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08797	355.9	103.0882	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08797	355.9	102.5263	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08264	355.9	102.0208	'BOWERS INTERCHANGE - MCCULLOUGH SUB 69KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08225	355.9	101.9879	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08225	355.9	101.6788	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07905	355.9	101.0438	'KINGSMILL INTERCHANGE - LLANO ESTACADO WIND GEN 115KV CKT 1'
00G14_008	19WP	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07905	355.9	100.3414	'SPP-SWPS-V29'
06ALL	14G	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09105	350.2	110.1535	'SPP-AEPW-32'
06ALL	14G	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09252	350.2	109.1028	'SPP-SWPS-01'
06ALL	14G	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09105	350.2	108.5544	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
06ALL	14G	0	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07126	350.2	100.7393	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.1117	355.9	124.1669	'SPP-AEPW-32'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.11343	355.9	122.374	'SPP-SWPS-01'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.1117	355.9	121.9191	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08645	355.9	110.687	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09775	355.9	110.1222	'Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08645	355.9	108.9168	'SPP-SWPS-T53'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08645	355.9	108.1863	'CONWAY SUB - KIRBY SWITCHING STATION 115KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09775	355.9	108.6892	'POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09775	355.9	108.1554	'SPP-SWPS-04'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07611	323.4	105.3905	'BASE CASE'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08201	355.9	104.0188	'KINGSMILL INTERCHANGE - MCCULLOUGH SUB 69KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08166	355.9	103.5117	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08749	355.9	103.4411	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08749	355.9	103.0478	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08749	355.9	102.5139	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08201	355.9	101.9958	'BOWERS INTERCHANGE - MCCULLOUGH SUB 69KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08166	355.9	101.9663	'G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.08166	355.9	101.6291	'G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07844	355.9	100.9924	'KINGSMILL INTERCHANGE - LLANO ESTACADO WIND GEN 115KV CKT 1'
00G14_008	19WP	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07844	355.9	100.29	'SPP-SWPS-V29'
06ALL	14G	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09076	350.2	110.1125	'SPP-AEPW-32'
06ALL	14G	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09224	350.2	109.0622	'SPP-SWPS-01'

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency			
							Rating	Loading %	Contingency	
06ALL	14G	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.09076	350.2	108.5134	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06ALL	14G	2	G14_008	TO->FROM	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	0.07068	350.2	100.6573	'CONWAY SUB - NICHOLS STATION 115KV CKT 1'	
00G14_008	19WP	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11364	356.8	103.8935	'SPP-AEPW-32'	
00G14_008	19WP	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11538	356.8	102.1059	'SPP-SWPS-01'	
00G14_008	19WP	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11364	356.8	101.6514	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.09863	345	104.1143	'SPP-AEPW-32'	
06ALL	14G	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.10023	345	103.0825	'SPP-SWPS-01'	
06ALL	14G	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.09863	345	102.4911	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
00G14_008	19WP	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11331	356.8	103.8938	'SPP-AEPW-32'	
00G14_008	19WP	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11506	356.8	102.079	'SPP-SWPS-01'	
00G14_008	19WP	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.11331	356.8	101.6516	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06ALL	14G	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.09831	345	104.0714	'SPP-AEPW-32'	
06ALL	14G	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.09992	345	103.04	'SPP-SWPS-01'	
06ALL	14G	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	0.09831	345	102.4483	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE (PENN 0257751) 230/115/13.2KV TRANSFORMER CKT 1'	0.03582	104.5	108.3952	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE (PENN 0257751) 230/115/13.2KV TRANSFORMER CKT 1'	0.03582	105.7	107.2592	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
06ALL	14G	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE (PENN 0257751) 230/115/13.2KV TRANSFORMER CKT 1'	0.03554	104.5	108.2593	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
06ALL	14G	2	G14_008	FROM->TO	'GRAPEVINE INTERCHANGE (PENN 0257751) 230/115/13.2KV TRANSFORMER CKT 1'	0.03554	105.7	107.2195	'GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	
00G14_008NR	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.04152	665.8	123.4839	'BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1'	
00G14_008NR	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.04152	665.8	108.3443	'BORDER 7345.00 - G14_007T 345.00 345KV CKT 1'	
00G14_008NR	19WP	0	G14_008	TO->FROM	'OKLAUNION - TUCO INTERCHANGE 345KV CKT 1'	0.04152	665.8	106.1364	'G14_007T 345.00 - TUCO INTERCHANGE 345KV CKT 1'	
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	118.3705	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	118.1698	'SPP-SWPS-K37'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	118.0896	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	116.9032	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	116.665	'SPP-SWPS-K37'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	116.6253	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.09967	249.2	115.2571	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10049	249.2	115.3361	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.09967	251.9	113.8233	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10049	251.9	113.8617	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08764	249.2	104.5881	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0686	249.2	103.3965	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08764	251.9	103.2289	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0686	251.9	102.0897	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08267	249.2	102.3037	'LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1'
	6	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08267	251.9	100.969	'LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1'
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	116.5266	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	116.326	'SPP-SWPS-K37'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	249.2	116.2457	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	115.0792	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	114.841	'SPP-SWPS-K37'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07658	251.9	114.8013	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.09967	249.2	112.8574	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10049	249.2	112.9166	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.09967	251.9	111.4492	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10049	251.9	111.4681	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08764	249.2	102.478	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0686	249.2	101.7448	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08764	251.9	101.1414	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0686	251.9	100.4557	'PLANT X STATION - SUNDOWN INTERCHANGE 230KV CKT 1'	
06G14_008	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08267	249.2	100.3132	'LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	249.4	122.4481	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	249.4	122.2075	'SPP-SWPS-K37'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	249.4	122.1674	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	252	120.907	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	252	120.7085	'SPP-SWPS-K37'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.07657	252	120.6292	'LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10025	249.4	124.3936	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.10025	252	122.872	'DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0996	249.4	119.3023	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.0996	252	117.7936	'TOLK STATION EAST - TUCO INTERCHANGE 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08746	249.4	111.5954	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08746	252	110.2059	'PLANT X STATION - POTTER COUNTY INTERCHANGE 230KV CKT 1'	
06ALL	14G	0	G14_008	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	0.08252	249.4	108.0505	'LAMB COUNTY INTERCHANGE - PLANT X STATION 115KV CKT 1'	

Group	Season	Scenario	Source	Direction	Monitored Element	TDF	Contingency			
							Rating	Loading %	Contingency	
	0	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03225	128.8	101.1574	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
	0	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03166	124.5	136.9298	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
	0	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03166	135.1	125.8162	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'
00G14_008	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03225	128.8	107.6669	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03225	136.6	101.2262	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03166	124.5	143.6129	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03166	135.1	131.9748	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008NR	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.04034	128	121.8766	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008NR	14SP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.04034	136.2	114.2452	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008NR	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03797	123.6	151.0445	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008NR	14WP	0	G14_008	FROM->TO	'POTASH JUNCTION INTERCHANGE (GE M100747) 230/115/13.2KV TRANSFORMER CKT 1'	0.03797	134.3	138.6381	'CARLSBAD INTERCHANGE - PECOS INTERCHANGE 115KV CKT 1'	
00G14_008	14SP	0	G14_008	FROM->TO	'ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1'	0.03444	251.1	100.9287	'OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1'	
00G14_008	14SP	0	G14_008	FROM->TO	'ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1'	0.03444	251.7	100.5689	'OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1'	
00G14_008	14SP	2	G14_008	FROM->TO	'ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1'	0.03368	251.1	100.9176	'OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1'	
00G14_008	14SP	2	G14_008	FROM->TO	'ROOSEVELT COUNTY INTERCHANGE (ABB LMM60042) 230/115/13.2KV TRANSFORMER CKT 1'	0.03368	251.7	100.5578	'OASIS INTERCHANGE (ABB LLM60041) 230/115/13.2KV TRANSFORMER CKT 1'	