



Definitive Interconnection System Impact Study for Generation Interconnection Requests

Groups 1, 2, and 3 Restudy

July 2014

Generation Interconnection



Revision History

Date	Author	Change Description
07/29/2011	SPP	Report Issued (DISIS-2011-001)
12/16/2011	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-1)
05/04/2012	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-2)
02/05/2013	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-3)
12/19/2013	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-4)
05/19/2014	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-5)
07/25/2014	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-001-6)

Executive Summary

Generation Interconnection customers have requested a Definitive Interconnection System Impact Study (DISIS) 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 System Impact Cluster Study window which closed March 31, 2011. The customers will be referred to in this study as the DISIS-2011-001 Interconnection Customers. Only those requests within DISIS groups 1, 2 and 3 are included within this restudy. The results for the previous restudy are still valid for the remaining groups included within this DISIS-2011-001 study. This System Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling approximately 2,568MW of new generation which would be located within the transmission systems of Oklahoma Gas and Electric (OKGE), Sunflower Electric Power Corporation/Mid-Kansas Electric Power LLC (SUNC)/(MKEC), Southwestern Public Service (SPS). The various generation interconnection requests have differing proposed in-service dates¹. The generation interconnection requests included in this System Impact Cluster Study are listed in Appendix A by their queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date. This restudy was performed to account for withdrawals within the DISIS-2011-001 study and/or higher queued projects withdrawing.

Power flow analysis has indicated that for the power flow cases studied, 2,568MW of nameplate generation may be interconnected with transmission system reinforcements within the SPP transmission system. Dynamic stability and power factor analysis has determined the need for reactive compensation in accordance with Order No. 661-A for wind farm interconnection requests and those requirements are listed for each interconnection request within the contents of this report. Dynamic stability analysis has determined that the transmission system will remain stable with the assigned Network Upgrades and necessary reactive compensation requirements.

It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list that can account for every operational situation. Additionally, the generator[s] may not be able to inject any power onto the Transmission System due to constraints that fall below the threshold of mitigation for a Generator Interconnection request. Because of this, it is likely that the Customer[s] may be required to reduce their generation output to 0 MW under certain system conditions to allow system operators to maintain the reliability of the transmission network.

The total estimated minimum cost for interconnecting the DISIS-2011-001 interconnection customers is \$119,851,105. These costs are shown in Appendix E and F. Interconnection Service to

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 Facility Study's time for completion of the Network Upgrades necessary.

DISIS-2011-001 interconnection customers is also contingent upon higher queued customers paying for certain required network upgrades. **The in service date for the DISIS customers will be deferred until the construction of these network upgrades can be completed.**

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 additional network constraints in the SPP transmission system identified and shown in Appendix H.

Network Constraints listed in Appendix H are in the local area of the new generation when this generation is injected throughout the SPP footprint for the Energy Resource (ERIS) Interconnection Request. Certain Interconnection Requests were also studied for Network Resource Interconnection Service (NRIS). Those constraints are also listed in Appendix H. 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.

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Introduction

Pursuant to the Southwest Power Pool (SPP) Open Access Transmission Tariff (OATT), SPP has conducted this Definitive Interconnection System Impact Study (DISIS) for certain generation interconnection requests in the SPP Generation Interconnection Queue. These interconnection requests have been clustered together for the following System Impact Study window which closed March 31, 2011. The customers will be referred to in this study as the DISIS-2011-001 Interconnection Customers. Only those requests within DISIS groups 1, 2 and 3 are included within this restudy. The results for the previous restudy are still valid for the remaining groups included within this DISIS-2011-001 restudy. This System Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 2,568MW of new generation which would be located within the transmission systems of Oklahoma Gas and Electric (OKGE), Sunflower Electric Power Corporation/Mid-Kansas Electric Power LLC (SUNC)/(MKEC), Southwestern Public Service (SPS). The various generation interconnection requests have differing proposed in-service dates². The generation interconnection requests included in this System Impact Study are listed in Appendix A by their queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date. This restudy was performed to account for withdrawals within the DISIS-2011-001 study and/or higher queued projects withdrawing.

The primary objective of this Definitive Interconnection System Impact Study is to identify the system constraints associated with connecting the generation to the area transmission system. The Impact 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.

² 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 completion of the Facility Study.

Model Development

Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Definitive Interconnection System Impact Study Agreement no later than March 31, 2011 and were subsequently accepted by Southwest Power Pool under the terms of the Generator Interconnection Procedures (GIP) that became effective March 30, 2010. The interconnection requests that are included in this study are listed in Appendix A.

Affected System Interconnection Requests

Also included in this Definitive Impact Re-Study is one Affected System Study, located on the Southwestern Public Service Company distribution system and share a connection to the SPS transmission system. The Affected System Study Request has been given the designation: ASGI-2011-002 (20 MW, POI is Herring 115kV).

Previously Queued Interconnection Requests

The previous queued requests included in this study are listed in Appendix B. In addition to the Base Case Upgrades, the previous 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 with equal distribution across the SPP footprint. Prior queued projects that requested Network Resource Interconnection Service (NRIS) were dispatched in an additional analysis into the balancing authority of the interconnecting transmission owner.

Development of Base Cases

Power Flow

The 2013 series Transmission Service Request (TSR) Models 2014 spring, 2014 summer and winter peak, 2019 summer and winter peak, and the 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.

Dynamic Stability

The 2013 series SPP Model Development Working Group (MDWG) Models 2014 winter, 2015 summer, and 2024 summer were used as starting points for this study.

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 DISIS-2011-001 Customers have not been assigned acceleration costs for the below listed projects. The DISIS-2011-001 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 DISIS Interconnection Customers.

- Hitchland 230/115kV area projects³:
 - Hitchland – Ochiltree 230kV Project, (placed in-service 2013)
- Balanced Portfolio Projects⁴:
 - Woodward – Border – TUCO 345kV project, scheduled for 9/30/2014 in-service
 - Woodward 345/138kV circuit #2 autotransformer, (placed in-service 2014)
 - TUCO 345/230kV circuit #2 autotransformer, (placed in-service 2014)
 - Reactors at Woodward and Border, (placed in-service 2014)
 - Iatan– Nashua 345kV, scheduled for 6/1/2015 in-service
 - Nashua 345/161kV autotransformer
 - Muskogee– Seminole 345kV, scheduled for 12/31/2013 in-service
 - Cleveland – Sooner 345kV, (placed in-service 2012)
 - Tap Stillwell – Swissvale 345kV line at West Gardner, (placed in-service 2013)
- Priority Projects⁵:
 - Hitchland – Woodward double circuit 345kV, scheduled for 6/30/2014 in-service
 - Hitchland 345/230kV circuit #2 autotransformer, (placed in-service 2014)
 - Woodward – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
 - Spearville – Clark – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
 - Thistle – Wichita double circuit 345kV, (placed in-service 2014)
 - Thistle 345/138kV autotransformer, (placed in-service 2014)
 - Thistle – Flat Ridge 138kV, (placed in-service 2014)
- Various MKEC Transmission System Upgrades⁶
 - Harper – Flat Ridge 138kV rebuild (placed in-service in 2013)
 - Flat Ridge – Medicine Lodge 138kV rebuild, (placed in-service 2013)
 - Pratt – Medicine Lodge 115kV rebuild, (placed in-service 2014)
 - Medicine Lodge 138/115kV autotransformer replacement (placed in-service in 2013)
- Northwest 345/138/13.8kV circuit #3 autotransformer, scheduled for 6/1/2017 in-service⁷
- Sheldon – SW7th and Pleasant Hill 115kV circuit #2 rebuild (placed in-service in 2013)⁸

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 DISIS-2011-001 study and are assumed to be in service. This list may not be all inclusive. The DISIS-2011-001 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

³ SPP Regional Reliability Projects identified in 2007 STEP. As of the writing of this report, SPP Project Tracking TAGIT shows some of these project's in-service dates have been delayed from the original 2010/2011 in-service dates.

⁴ Notice to Construct (NTC) issued June 2009.

⁵ Notice to Construct (NTC) issued June 2010.

⁶ SPP Transmission Service Projects identified in SPP-2007-AG3-AFS-9.

⁷ SPP Transmission Service Project identified in SPP-2009-AG2-AFS6. Per SPP-NTC-20137.

⁸ SPP Regional Reliability 2012 ITPNT Project. Per SPP-NTC-200171.

interconnection queue. The DISIS-2011-001 Customer Generation Facilities in service dates may need to be delayed until the completion of the following upgrades.

- Upgrades assigned to DISIS-2009-001 Interconnection Customers:
 - Lancer Project
 - Spearville – Lancer 345kV, addition
 - Lancer 345/115kV transformer circuit #1, addition
 - Lancer – North Ft. Dodge 115kV, addition
 - Ft. Dodge – North Ft. Dodge circuit #2, addition
 - Move Ft. Dodge terminal of Shooting Star 115kV
 - Fort Randall – Meadow Grove – Kelly 230kV circuit #1, rerate (320MVA)
- Upgrades assigned to DISIS-2010-001 Interconnection Customers:
 - Beaver County 345kV Expansion (Tap & Tie Hitchland – Woodward circuit #2 into Beaver County 345kV)
 - Switch 2749 – Wildorado 69kV circuit #1, rebuild
- Upgrades assigned to DISIS-2010-002 Interconnection Customers:
 - Buckner – Spearville 345kV circuit #1, replace terminal equipment
 - Twin Church – Dixon County 230kV circuit #1, rerate (320MVA)

Potential Upgrades Not in the Base Case

Any potential upgrades that do not have a Notification to Construct (NTC) and not explicitly listed within this report 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 fifteen different regional groups based on geographical and electrical impacts. These groupings are shown in Appendix C.

To determine interconnection impacts, fifteen different generation dispatch scenarios of the spring base case models were developed to accommodate the regional groupings.

Power Flow

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 equal distribution across the SPP footprint. Certain projects that requested Network Resource Interconnection Service were dispatched in 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 each interconnection request modeled at 100% nameplate.

Peaking units were not dispatched in the 2014 spring model. To study peaking units' impacts, the 2014 summer and winter, 2019 summer and winter, and 2024 summer peak 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.

Dynamic Stability

For each group, all interconnection requests were dispatched at 100% nameplate output while the other groups were dispatched at 20% output for wind requests and 100% output for thermal requests.

Identification of Network Constraints

The initial set of network constraints were found by using PTI 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 have requested Network Resource Interconnection Service (NRIS) were also studied in the NRIS analysis to determine if any constraint had at least a 3% DF. If so, these constraints were considered for mitigation.

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 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 PTDF 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:

$$\text{Request X Impact Factor on Upgrade Project 1} = \text{PTDF}(\%)(X) * \text{MW}(X) = X_1$$

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

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

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

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

- 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.

Required Interconnection Facilities

The requirement to interconnect the 2,568MW of restudied 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 Appendix F by upgrade. The interconnection requirements for the restudied cluster total \$119,851,105. Interconnection Facilities specific to each generation interconnection request are listed in Appendix E. A preliminary one-line drawing for each generation interconnection request are listed in Appendix D.

A list of constraints that were identified and used for mitigation are listed in Appendix G. Listed within Appendix G are the ERIS constraints with greater than or equal to a 20% DF, as well as, the NRIS constraints that have a DF of 3% or greater. Other Network Constraints which are not requiring mitigation are shown in Appendix H. 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.

Power Flow Analysis

Power Flow Analysis Methodology

The ACCC function of PSS/E 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. NERC Category "B" and "C" contingencies were evaluated.

Power Flow Analysis

A power flow analysis was conducted for each Interconnection Customer's facility using modified versions of the 2014 spring peak, 2014 summer and winter peak, and 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 each Customer's project indicates that criteria violations will occur on the OKGE, SPS and WFEC transmission systems under system intact and contingency conditions in the peak seasons.

Cluster Group 1 (Woodward Area)

In addition to the 2,731.3 MW of previously queued generation in the area, 948.9 MW of new interconnection service was studied.

No ERIS constraints were identified for this restudy.

For NRIS there additional overloads were identified. The Mooreland – FPL Switch – Woodward 138kV circuit 1 and Glass Mountain – Mooreland 138kV circuit 1 will need to be rebuilt to mitigate thermal overloads. The Northwest 345/138 kV transformer is a constraint but is currently allocated as a prior queued upgrade and mitigated by a Transmission Service Request upgrade from SPP-NTC-20137 with an In-Service Date (ISD) of 6/1/2015.

NRIS Constraints

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FPL SWITCH - MOORELAND 138KV CKT 1	287	101.4026	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FPL SWITCH - WOODWARD 138KV CKT 1	153	149.1002	NORTHWEST - TATONGA7 345.00 345KV CKT 1
GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	101.8566	NORTHWEST - TATONGA7 345.00 345KV CKT 1
NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1	493	103.4776	NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1

Cluster Group 2 (Hitchland Area)

In addition to the 2,142.2 MW of previously queued generation in the area, 520.0 MW of new interconnection service was studied. The previously identified ERIS mitigation, Beaver-Buckner 345kV line, is no longer required due to withdrawal of equally queued Interconnection Requests.

No ERIS constraints were identified for this restudy.

For NRIS several overloads were observed. Shared with group 1, FPL Switch – Woodward 138kV will need to be mitigated for thermal overloading. A second Hitchland 230/115/13.2kV transformer is

needed due to the overloads caused by the outage of the Hitchland Interchange – Ochiltree 230kV line. Also Canyon East Sub – Randall County Interchange 115kV circuit 1 overload currently allocated as a prior queued upgrade and mitigated by a Transmission Service Request upgrade from SPP-NTC-200262 with an In-Service Date (ISD) of 5/1/2016. There is also a need for a multi-element project TUO 345kV – New Deal 345/115kV – Stanton 115kV to mitigate the overloads on TUO 230/115kV transformer circuit 1 caused by the outage of TUO 230/115kV transformer circuit 2. This project is detailed within the withdrawn SPP-NTC-200184. Other NRIS overloads are Indiana – Stanton 115kV and the Wolfforth Interchange 230/115kV transformer.

NRIS Constraints

MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	99.9	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FPL SWITCH - WOODWARD 138KV CKT 1	153	151.6497	NORTHWEST - TATONGA 345.00 345KV CKT 1
HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	112.6111	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
INDIANA SUB - STANTON SUB 115KV CKT 1	160	107.6735	CARLISLE INTERCHANGE - TUO INTERCHANGE 230KV CKT 1
OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1	185	112.8609	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
TUO INTERCHANGE (GE M102345) 230/115/13.2KV TRANSFORMER CKT 1	252	114.383	TUO INTERCHANGE (ENRCO 136401) 230/115/13.2KV TRANSFORMER CKT 2
WOLFFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1	168	102.7194	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1

Cluster Group 3 (Spearville Area)

In addition to the 2,388.8 MW of previously queued generation in the area, 1,099.1 MW of new interconnection service was studied. With the withdrawal of prior queued and current study requests, the Beaver-Buckner 345kV line is no longer required for Interconnection Service for Group 3 projects and no new overloads were identified for this restudy.

Cluster Group 4 (NW Kansas Group)

In addition to the 1,687.1 MW of previously queued generation in the area, 201.0 MW of new interconnection service was studied.

This group was not analyzed for this restudy and previously identified results remain valid.

Cluster Group 5 (Amarillo Area)

In addition to the 692.6 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

Cluster Group 6 (South Texas Panhandle/New Mexico)

In addition to the 1,761.0 MW of previously queued generation in the area, 92.3 MW of new interconnection service was studied.

This group was not analyzed for this restudy and previously identified results remain valid.

Cluster Group 7 (Southwestern Oklahoma)

In addition to the 1,568.2 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

Cluster Group 8 (South Central Kansas/North Oklahoma)

In addition to the 1,754.6 MW of previously queued generation in the area, 4.5 MW of new interconnection service was studied.

This group was not analyzed for this restudy and previously identified results remain valid.

Cluster Group 9/10 (Nebraska)

In addition to the 1,265.6 MW of previously queued generation in the area, 193.6 MW of new interconnection service was studied.

This group was not analyzed for this restudy and previously identified results remain valid.

Cluster Group 12 (Northwest Arkansas)

In addition to the 0.0 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

Cluster Group 13 (Northwest Missouri)

In addition to the 84.6 MW of previously queued generation in the area, 201.2 MW of new interconnection service was studied.

This group was not analyzed for this restudy and previously identified results remain valid.

Cluster Group 14 (South Central Oklahoma)

In addition to the 0.0 MW of previously queued generation in the area, 0.0 MW of new interconnection service was studied. No new constraints were found in this area.

Curtailment 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 under certain system conditions to allow system operators to maintain the reliability of the transmission network.

Stability Analysis

A stability analysis was conducted for each Interconnection Customer's facility using modified versions of the 2013 series SPP Model Development Working Group (MDWG) Models 2014 winter, 2015 summer, and 2024 summer peak dynamic models. The stability analysis was conducted with all upgrades in service that were identified in the power flow analysis. For each group, the interconnection requests were studied at 100% nameplate output while the other groups were dispatched at 20% output for wind requests and 100% output for fossil requests. The output of the Interconnection Customer's facility was offset in each model by a reduction in output of existing online SPP generation. The following synopsis is included for each group.

Cluster Group 1 (Woodward Area)

The Group 1 stability analysis was not performed again for this restudy.

Cluster Group 2 (Hitchland Area)

The Group 2 stability analysis was not performed again for this restudy.

Cluster Group 3 (Spearville Area)

The Group 3 stability analysis for this restudy was performed by SPP Staff. The analysis was performed to evaluate the impacts of the removal of the previously assigned Beaver-Buckner 345kV line. Stability analysis has determined that when all previously assigned and currently assigned network upgrades are placed in-service the transmission system will remain stable and low voltage ride through requirements are satisfied for the contingencies studied.

Power Factor analysis was not performed again for this restudy. With the power factor requirements and all network upgrades in service, all interconnection request in Group 3 will meet FERC Order #661A low voltage ride through (LVRT) requirements.

Cluster Group 4 (Mingo Area)

There was no stability analysis conducted in the Mingo area due to no requests in the area.

Cluster Group 5 (Amarillo Area)

There was no stability analysis conducted in the Amarillo area due to no requests in the area.

Cluster Group 6 (South Texas Panhandle/New Mexico)

The Group 6 stability analysis was not performed again for this restudy.

Cluster Group 7 (Southwest Oklahoma Area)

There was no stability analysis conducted in the Southwest Oklahoma area due to no requests in the area.

Cluster Group 8 (South Central Kansas/North Oklahoma)

The Group 8 stability analysis was not performed again for this restudy.

Cluster Group 9/10 (Nebraska)

The Group 9/10 stability analysis was not performed again for this restudy.

Cluster Group 11 (North Central Kansas Area)

The Group 11 stability analysis was not performed again for this restudy.

Cluster Group 12 (Northwest Arkansas Area)

There was no stability analysis conducted in the Northwest Arkansas area due to no requests in the area.

Cluster Group 13 (Northwest Missouri Area)

The Group 13 stability analysis was not performed again for this restudy.

Cluster Group 14 (South Central Oklahoma)

There was no stability analysis conducted in the Northwest Arkansas area due to no requests in the area.

Cluster Group 15 (reserved)

This group has been retired and all prior Group 15 requests have been re-designated as Group 9/10 requests.

Conclusion

Only those requests within DISIS groups 1, 2 and 3 are included within this restudy. The results for the previous restudy are still valid for the remaining groups included within this DISIS-2011-001 study. The minimum cost of interconnecting 2,568MW of new interconnection requests included in this Definitive Interconnection System Impact Re-Study is estimated at \$119,851,105 for the Allocated Network Upgrades and Transmission Owner Interconnection Facilities are listed in Appendix 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 short circuit analysis. These studies will be performed if the Interconnection Customer executes the appropriate Interconnection Facilities Study Agreement and provides the required data along with demonstration of Site Control and the appropriate deposit. At the time of the Interconnection Facilities 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 Impact Study

See next page.

A: Generation Interconnection Requests Considered for Impact Restudy

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date	In Service Date Delayed Until no earlier than*
ASGI-2011-002	20.00	ER	SPS	Herring 115kV	Herring 115kV		TBD
GEN-2011-007	250.10	ER	OKGE	Tap Cimarron - Woodring (Matthewson) 345kV	Tap Cimarron - Woodring (Mathewson) 345kV	11/30/2011	12/31/2014
GEN-2011-008	600.00	ER	SUNCMKEC	Clark County 345kV	Clark County 345kV	12/1/2015	12/1/2015
GEN-2011-010	100.80	ER	OKGE	Minco 345kV	Minco 345kV	12/1/2012	On-Line
GEN-2011-014	201.00	ER	OKGE	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	12/31/2013	12/31/2014
GEN-2011-016	200.10	ER	SUNCMKEC	Spearville 345kV	Spearville 345kV	12/1/2013	12/31/2014
GEN-2011-017	299.00	ER	SUNCMKEC	Tap Spearville - PostRock 345kV	Tap Spearville - PostRock (GEN-2011-017T) 345kV	12/1/2013	12/31/2014
GEN-2011-019	299.00	ER/NR	OKGE	Woodward 345kV	Woodward 345kV	12/31/2012	12/31/2014
GEN-2011-020	299.00	ER/NR	OKGE	Woodward 345kV	Woodward 345kV	12/31/2012	12/31/2014
GEN-2011-022	299.00	ER/NR	SPS	Hitchland 345kV	Hitchland 345kV	12/31/2012	12/31/2014
Total: 2,568.00							

Requests included in Appendix A are those found to be affected and considered for this system impact restudy.

B: Prior Queued Interconnection Requests

See next page.

B: Generation Interconnection Requests in Impact Study

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date	In Service Date Delayed Until no earlier than*
ASGI-2011-002	20.00	ER	SPS	Herring 115kV	Herring 115kV		TBD
ASGI-2011-003	10.00	ER	SPS	Hendricks 115kV	Hendricks 115kV		TBD
GEN-2010-055	4.50	ER	AEPW	Wekiwa 138kV	Wekiwa 138kV	12/31/2011	On-Line
GEN-2010-056	151.20	ER/NR	MIPU	Tap Saint Joseph - Cooper 345kV	Tap Saint Joseph - Cooper 345kV	6/1/2012	TBD
GEN-2010-057	201.00	ER/NR	MIDW	Rice County 230kV	Rice County 230kV	8/1/2012	On-Line
GEN-2011-007	250.10	ER	OKGE	Tap Cimarron - Woodring (Matthewson) 345kV	Tap Cimarron - Woodring (Mathewson) 345kV	11/30/2011	12/31/2014
GEN-2011-008	600.00	ER	SUNCMKEC	Clark County 345kV	Clark County 345kV	12/1/2015	12/1/2015
GEN-2011-010	100.80	ER	OKGE	Minco 345kV	Minco 345kV	12/1/2012	On-Line
GEN-2011-011	50.00	ER	KACP	Iatan 345kV	Iatan 345kV	12/31/2010	On-Line
GEN-2011-014	201.00	ER/NR	OKGE	Tap Hitchland - Woodward Ckt 1 (Beaver County) 345kV	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	12/31/2013	12/31/2014
GEN-2011-016	200.10	ER	SUNCMKEC	Spearville 345kV	Spearville 345kV	12/1/2013	12/31/2014
GEN-2011-017	299.00	ER	SUNCMKEC	Tap Spearville - PostRock 345kV	Tap Spearville - PostRock (GEN-2011-017T) 345kV	12/1/2013	12/31/2014
GEN-2011-018	73.60	ER/NR	NPPD	Steele City 115kV	Steele City 115kV	12/1/2013	On-Line
GEN-2011-019	299.00	ER/NR	OKGE	Woodward 345kV	Woodward 345kV	12/31/2012	12/31/2014
GEN-2011-020	299.00	ER/NR	OKGE	Woodward 345kV	Woodward 345kV	12/31/2012	12/31/2014
GEN-2011-022	299.00	ER/NR	SPS	Hitchland 345kV	Hitchland 345kV	12/31/2012	12/31/2014
GEN-2011-025	82.30	ER	SPS	Tap Floyd County - Crosby County 115kV	Tap Floyd County - Crosby County 115kV	6/30/2012	12/31/2014
GEN-2011-027	120.00	ER/NR	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)	12/31/2012	TBD
Total: 3,260.60							

Appendix B is a complete list of Generation Interconnection Requests in the original system impact study.

C: Study Groupings

See next page

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
PRIOR QUEUED SUBTOTAL	2,731.30		
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
CURRENT CLUSTER SUBTOTAL	948.90		
AREA TOTAL	3,680.20		

GROUP 2: HITCHLAND AREA

Request	Capacity	Area	Proposed Point of Interconnection
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
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	2,142.20		
ASGI-2011-002	20.00	SPS	Herring 115kV
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2011-022	299.00	SPS	Hitchland 345kV
CURRENT CLUSTER SUBTOTAL	520.00		
AREA TOTAL	2,662.20		

GROUP 3: SPEARVILLE AREA

Request	Capacity	Area	Proposed Point of Interconnection
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-2007-040	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
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV
PRIOR QUEUED SUBTOTAL	2,388.80		
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
CURRENT CLUSTER SUBTOTAL	1,099.10		
AREA TOTAL	3,487.90		

GROUP 4/11: NW KANSAS AREA

Request	Capacity	Area	Proposed Point of Interconnection
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
PRIOR QUEUED SUBTOTAL	1,687.10		
GEN-2010-057	201.00	MIDW	Rice County 230kV
CURRENT CLUSTER SUBTOTAL	201.00		
AREA TOTAL	1,888.10		

GROUP 5: AMARILLO AREA

Request	Capacity	Area	Proposed Point of Interconnection
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
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV
PRIOR QUEUED SUBTOTAL	692.60		
AREA TOTAL	692.60		

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
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
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	1,761.00		
ASGI-2011-003	10.00	SPS	Hendricks 115kV
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV
CURRENT CLUSTER SUBTOTAL	92.30		
AREA TOTAL	1,853.30		

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
PRIOR QUEUED SUBTOTAL	1,568.20		
AREA TOTAL	1,568.20		

GROUP 8: N-OK/S-KS AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Shilder (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
PRIOR QUEUED SUBTOTAL	1,754.60		
GEN-2010-055	4.50	AEPW	Wekiwa 138kV
CURRENT CLUSTER SUBTOTAL	4.50		
AREA TOTAL	1,759.10		

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 (Madison County) 230kV
GEN-2008-119O	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
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	1,265.60		
GEN-2011-018	73.60	NPPD	Steele City 115kV
GEN-2011-027	120.00	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)
CURRENT CLUSTER SUBTOTAL	193.60		
AREA TOTAL	1,459.20		

GROUP 12: NW-AR AREA

Request	Capacity	Area	Proposed Point of Interconnection
AREA TOTAL	0.00		

GROUP 13: NW MISSOURI AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV
GEN-2010-036	4.60	WERE	6th Street 115kV
PRIOR QUEUED SUBTOTAL	84.60		
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV
GEN-2011-011	50.00	KACP	Iatan 345kV
CURRENT CLUSTER SUBTOTAL	201.20		
AREA TOTAL	285.80		

GROUP 14: S-OKLAHOMA AREA

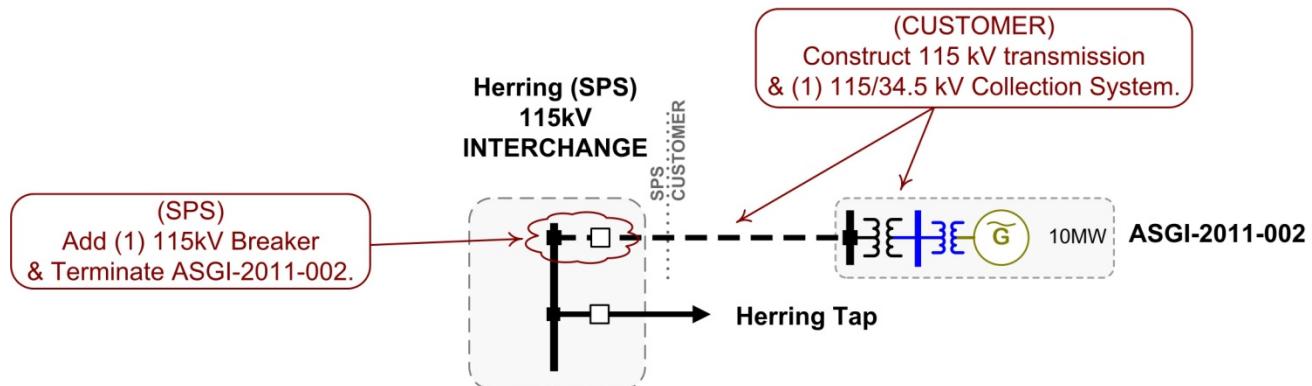
Request	Capacity	Area	Proposed Point of Interconnection
AREA TOTAL	0.00		

CLUSTER TOTAL (CURRENT STUDY)	3,260.6	MW
PQ TOTAL (PRIOR QUEUED)	16,076.0	MW
CLUSTER TOTAL (INCLUDING PRIOR QUEUED)	19,336.6	MW

D: Proposed Point of Interconnection One line Diagrams

Refer to most recent Facility study for each request for an updated one-line.

ASGI-2011-002



GEN-2011-007

Refer to Facility Study for an updated one-line

GEN-2011-008

Refer to Facility Study for an updated one-line

GEN-2011-010

Refer to Facility Study for an updated one-line

GEN-2011-014

Refer to Facility Study for an updated one-line

GEN-2011-016

Refer to Facility Study for an updated one-line

GEN-2011-017

Refer to Facility Study for an updated one-line

GEN-2011-019

Refer to Facility Study for an updated one-line

GEN-2011-020

****Refer to Facility Study for an updated one-line****

GEN-2011-022

****Refer to Facility Study for an updated one-line****

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 a 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
ASGI-2011-002			
ASGI 2011-002 Interconnection Costs See Oneline Diagram.	Current Study	\$0.00	\$0.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service	\$249,247,072.00	
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service	\$226,040,727.00	
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	In-Service	\$8,883,760.00	
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service	\$5,776,280.00	
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service	\$426,504,292.00	
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service	\$6,585,986.00	
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service	\$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).	In-Service	\$249,247,072.00	
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated	\$3,500,000.00	
Border - Tuco Interchange 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	
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 - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated	\$207,782,000.00	
Current Study Total		\$0.00	

* 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
GEN-2011-007			
GEN-2011-007 Interconnection Costs See Oneline Diagram.	Current Study	\$9,444,353.00	\$9,444,353.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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.)	In-Service		\$249,247,072.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
		Current Study Total	\$9,444,353.00
GEN-2011-008			
GEN-2011-008 Interconnection Costs See Oneline Diagram.	Current Study	\$3,236,246.00	\$3,236,246.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: PostRock - Axtell 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$136,000,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
GEN-2011-017 Tap - Postrock 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service		\$226,040,727.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	In-Service		\$8,883,760.00
* Withdrawal of higher queued projects will cause a restudy and may result in higher costs			
Friday, July 25, 2014		 Southwest Power Pool	
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Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Post Rock 345/230/13.8KV Autotransformer CKT 1 Balanced Portfolio: PostRock Autotransformer 345/230/13.8kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$3,994,000.00
Spearville - GEN-2011-017T 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV 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
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
	Current Study Total	\$3,236,246.00	

GEN-2011-010

GEN-2011-010 Interconnection Costs See Oneline Diagram.	Current Study	\$3,654,353.00	\$3,654,353.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00

* 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 - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Current Study Total		\$3,654,353.00	

GEN-2011-014

GEN-2011-014 Interconnection Costs See Oneline Diagram.	Current Study	\$7,500,000.00	\$7,500,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service	\$249,247,072.00	
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service	\$226,040,727.00	
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	In-Service	\$8,883,760.00	
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service	\$5,776,280.00	
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service	\$426,504,292.00	
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service	\$6,585,986.00	
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service	\$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).	In-Service	\$249,247,072.00	

* 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
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Tuco Interchange 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
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 - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
	Current Study Total		\$7,500,000.00

GEN-2011-016

GEN-2011-016 Interconnection Costs See Oneline Diagram.	Current Study	\$8,000,000.00	\$8,000,000.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: PostRock - Axtell 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$136,000,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
GEN-2011-017 Tap - Postrock 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service		\$226,040,727.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	In-Service		\$8,883,760.00
Post Rock 345/230/13.8kV Autotransformer CKT 1 Balanced Portfolio: PostRock Autotransformer 345/230/13.8kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$3,994,000.00
Spearville - GEN-2011-017T 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$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 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV 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
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 - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
	Current Study Total	\$8,000,000.00	
GEN-2011-017			
GEN-2011-017 Interconnection Costs See Oneline Diagram.	Current Study	\$11,532,284.00	\$11,532,284.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: PostRock - Axtell 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$136,000,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
GEN-2011-017 Tap - Postrock 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service		\$226,040,727.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	In-Service		\$8,883,760.00

* 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
Post Rock 345/230/13.8KV Autotransformer CKT 1 Balanced Portfolio: PostRock Autotransformer 345/230/13.8kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$3,994,000.00
Spearville - GEN-2011-017T 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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.)	In-Service		\$249,247,072.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV 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
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 - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
		Current Study Total	\$11,532,284.00

GEN-2011-019

FPL Switch - Mooreland 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 0.2 miles of 138kV line	Current Study	\$410,000.00	\$820,000.00
FPL Switch - Woodward 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 12 miles of 138kV line	Current Study	\$2,884,688.92	\$6,509,948.00

* 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
GEN-2011-019 Interconnection Costs See Oneline Diagram.	Current Study	\$3,654,353.00	\$3,654,353.00
Glass Mountain - Mooreland 138kV NRIS only required upgrade: Rebuild approximatley 24 miles of 138kV line	Current Study	\$7,536,233.50	\$15,072,467.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Northwest 345/138k/13.8kVAutotransformer CKT 3 NRIS only required upgrade: Per 2009-AG2-AFS6	Previously Allocated		\$15,000,000.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Current Study Total		\$14,485,275.42	

GEN-2011-020

FPL Switch - Mooreland 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 0.2 miles of 138kV line	Current Study	\$410,000.00	\$820,000.00
FPL Switch - Woodward 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 12 miles of 138kV line	Current Study	\$2,884,688.92	\$6,509,948.00
GEN-2011-020 Interconnection Costs See Oneline Diagram.	Current Study	\$3,654,353.00	\$3,654,353.00
Glass Mountain - Mooreland 138kV NRIS only required upgrade: Rebuild approximatley 24 miles of 138kV line	Current Study	\$7,536,233.50	\$15,072,467.00

* 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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Northwest 345/138k/13.8kVAutotransformer CKT 3 NRIS only required upgrade: Per 2009-AG2-AFS6	Previously Allocated		\$15,000,000.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
	Current Study Total		\$14,485,275.42

GEN-2011-022

FPL Switch - Woodward 138kV CKT 1 NRIS only required upgrade: Rebuild approximately 12 miles of 138kV line	Current Study	\$740,570.17	\$6,509,948.00
GEN-2011-022 Interconnection Costs See Oneline Diagram.	Current Study	\$3,281,952.00	\$3,281,952.00
TUCO - New Deal - Stanton 345/115kV Project NRIS only required upgrade: Build TUCO - New Deal 345kV, New Deal - Stanton 115kV and New Deal 345/115kV tranformer CKT 1. Total project E&C costs shown.	Current Study	\$37,490,796.00	\$37,490,796.00
Wolfforth Interchange 230/115/13.2kV Transformer CKT 1 NRIS only required upgrade: Replace existing Wolfforth Interchange Transformer	Current Study	\$6,000,000.00	\$6,000,000.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$249,247,072.00
Hitchland - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	In-Service		\$226,040,727.00

* 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
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown.)	In-Service		\$8,883,760.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	In-Service		\$426,504,292.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138KV Transformer CKT 1 (Total Project E&C Cost Shown.)	In-Service		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	In-Service		\$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).	In-Service		\$249,247,072.00
Beaver County 345kV Expansion Beaver County Expansion: Tap & Tie in Hitchland - Woodward 345kV CKT 2	Previously Allocated		\$3,500,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Canyon East - Randall 115kV line CKT 1 NRIS only required upgrade: Per SPP-2011-AG3-AFS-11 for In Service 5/1/2016. Rebuild approximately 14 miles 115kV Transmission line.	Previously Allocated		\$13,609,088.00
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
Hitchland 230/115/13.2kV Transformer CKT 2 NRIS only required upgrade: Build 230/115/13.2kV Transformer CKT 2 per SPP-2011-AG3-AFS-11.	Previously Allocated		\$6,000,000.00
Indiana Sub - Stanton Sub 115kV CKT 1 NRIS only required upgrade: Rebuild approximately 1.5 miles of 115kV line	Previously Allocated		\$1,200,000.00
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 - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Current Study Total		\$47,513,318.17	
TOTAL CURRENT STUDY COSTS:		\$119,851,105.01	

* 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

ASGI 2011-002 Interconnection Costs	\$0.00
See Oneline Diagram.	
ASGI-2011-002	\$0.00
Total Allocated Costs	\$0.00
FPL Switch - Mooreland 138kV CKT 1	
NRIS only required upgrade: Rebuild approximately 0.2 miles of 138kV line	
GEN-2011-019	\$410,000.00
GEN-2011-020	\$410,000.00
Total Allocated Costs	\$820,000.00
FPL Switch - Woodward 138kV CKT 1	
NRIS only required upgrade: Rebuild approximately 12 miles of 138kV line	
GEN-2011-019	\$2,884,688.92
GEN-2011-020	\$2,884,688.92
GEN-2011-022	\$740,570.17
Total Allocated Costs	\$6,509,948.00
GEN-2011-007 Interconnection Costs	
See Oneline Diagram.	
GEN-2011-007	\$9,444,353.00
Total Allocated Costs	\$9,444,353.00
GEN-2011-008 Interconnection Costs	
See Oneline Diagram.	
GEN-2011-008	\$3,236,246.00
Total Allocated Costs	\$3,236,246.00
GEN-2011-010 Interconnection Costs	
See Oneline Diagram.	
GEN-2011-010	\$3,654,353.00
Total Allocated Costs	\$3,654,353.00
GEN-2011-014 Interconnection Costs	
See Oneline Diagram.	
GEN-2011-014	\$7,500,000.00
Total Allocated Costs	\$7,500,000.00

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

GEN-2011-016 Interconnection Costs **\$8,000,000.00**

See Oneline Diagram.

GEN-2011-016	\$8,000,000.00
Total Allocated Costs	\$8,000,000.00

GEN-2011-017 Interconnection Costs **\$11,532,284.00**

See Oneline Diagram.

GEN-2011-017	\$11,532,284.00
Total Allocated Costs	\$11,532,284.00

GEN-2011-019 Interconnection Costs **\$3,654,353.00**

See Oneline Diagram.

GEN-2011-019	\$3,654,353.00
Total Allocated Costs	\$3,654,353.00

GEN-2011-020 Interconnection Costs **\$3,654,353.00**

See Oneline Diagram.

GEN-2011-020	\$3,654,353.00
Total Allocated Costs	\$3,654,353.00

GEN-2011-022 Interconnection Costs **\$3,281,952.00**

See Oneline Diagram.

GEN-2011-022	\$3,281,952.00
Total Allocated Costs	\$3,281,952.00

Glass Mountain - Mooreland 138kV **\$15,072,467.00**

NRIS only required upgrade: Rebuild approximatley 24 miles of 138kV line

GEN-2011-019	\$7,536,233.50
GEN-2011-020	\$7,536,233.50
Total Allocated Costs	\$15,072,467.00

TUCO - New Deal - Stanton 345/115kV Project **\$37,490,796.00**

NRIS only required upgrade: Build TUCO - New Deal 345kV, New Deal - Stanton 115kV and New Deal 345/115kV tranformer CKT 1. Total project E&C cos

GEN-2011-022	\$37,490,796.00
Total Allocated Costs	\$37,490,796.00

Wolfforth Interchange 230/115/13.2kV Transformer CKT 1 **\$6,000,000.00**

NRIS only required upgrade: Replace existing Wolffforth Interchange Transformer

GEN-2011-022	\$6,000,000.00
Total Allocated Costs	\$6,000,000.00

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

G: Power Flow Analysis (Constraints For Mitigation)

See next page.

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TC%LOADING		CONTINGENCY
								TDF	(% MVA)	
FDNS	01NR	0	14G	G11_019	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.1331	101.4026	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01NR	0	14G	G11_019	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1331	149.1002	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01NR	0	14G	G11_019	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08989	105.835	GEN520997 1-MORLND2
FDNS	01NR	0	14G	G11_019	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10138	104.4877	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01NR	0	14G	G11_019	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08989	99.5	GEN520998 1-MORLND3
FDNS	01NR	0	14G	G11_019	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.04335	101.8566	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	00NR	0	14SP	G11_019	FROM->TO	NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1	493	0.04888	103.4776	NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	00NR	0	14SP	G11_019	FROM->TO	NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1	493	0.04888	101.5698	NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01NR	0	14G	G11_020	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.1331	101.4026	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01NR	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1331	149.1002	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01NR	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08989	105.835	GEN520997 1-MORLND2
FDNS	01NR	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10138	104.4877	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01NR	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08989	99.5	GEN520998 1-MORLND3
FDNS	01NR	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.04335	101.8566	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	00NR	0	14SP	G11_020	FROM->TO	NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1	493	0.04888	103.4776	NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	00NR	0	14SP	G11_020	FROM->TO	NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1	493	0.04888	101.5698	NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	TO->FROM	CANYON EAST SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1	96	0.05262	99.9	BUSHLAND INTERCHANGE - DEAF SMITH COUNTY INTERCHANGE 230KV CKT 1
FDNS	02NR	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03082	151.6497	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02NR	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03082	139.0329	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02NR	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03622	100.9381	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	02NR	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03651	99.6	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.11921	112.6111	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.11921	112.3857	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.11921	110.0695	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.11921	109.9055	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	106.0733	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	104.8793	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	104.4147	SPP-SWPS-04
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	103.7856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	103.6946	SPP-SWPS-04
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.10492	103.1513	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.15731	102.7222	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.10492	101.4908	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.1322	101.4666	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.1322	100.273	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.09756	100.2713	BASE CASE
FDNS	00NR	0	24SP	G11_022	FROM->TO	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1	185	0.06878	112.8609	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1	185	0.06878	109.9939	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_022	FROM->TO	TUCO INTERCHANGE (GE_M102345) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04041	114.383	TUCO INTERCHANGE (ENRCO 136401) 230/115/13.2KV TRANSFORMER CKT 2
FDNS	00NR	0	24SP	G11_022	FROM->TO	TUCO INTERCHANGE (GE_M102345) 230/115/13.2KV TRANSFORMER CKT 1	252	0.04041	111.2644	TUCO INTERCHANGE (ENRCO 136401) 230/115/13.2KV TRANSFORMER CKT 2
FDNS	00NR	0	24SP	G11_022	FROM->TO	WOLFFORTH INTERCHANGE (WH_7001668) 230/115/13.2KV TRANSFORMER CKT 1	168	0.03773	102.7194	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1
FDNS	00NR	3	24SP	G11_022	TO->FROM	INDIANA SUB - STANTON SUB 115KV CKT 1	160	0.06597	107.6735	CARLISLE INTERCHANGE - TUO INTERCHANGE 230KV CKT 1
FDNS	00NR	3	24SP	G11_022	TO->FROM	INDIANA SUB - STANTON SUB 115KV CKT 1	160	0.04442	104.0382	ALLEN SUB - LUBBOCK SOUTH INTERCHANGE 115KV CKT 1

H: Power Flow Analysis (Other Constraints Not Requiring Mitigation)

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SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	
							(MVA)	TDF	(% MVA)	
FDNS	3	0	14G	ASGI_11_002	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.03851	107.3062	DBL-WICH-THI
FDNS	3	0	14G	ASGI_11_002	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.03573	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.03557	100.178	DBL-WICH-THI
FDNS	3	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03573	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03557	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03613	174.5251	DBL-WICH-THI
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03581	161.7988	DBL-WICH-THI
FDNS	2	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03581	161.1641	DBL-WICH-THI
FDNS	1	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03619	153.2095	DBL-WICH-THI
FDNS	04ALL	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03608	124.3736	DBL-WICH-THI
FDNS	4	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03614	115.616	DBL-WICH-THI
FDNS	06ALL	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03609	111.9227	DBL-WICH-THI
FDNS	6	0	14G	ASGI_11_002	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03616	106.1801	DBL-WICH-THI
FDNS	01ALL	0	14G	ASGI_11_002	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05449	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05804	111.3114	DBL-THIS-WWR
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.0532	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05007	100.6018	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0532	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04905	171.5111	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05708	171.4127	DBL-THIS-WWR
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0532	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05449	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05804	155.3323	DBL-THIS-WWR
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05314	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05333	149.5202	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05333	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0379	145.4261	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04246	144.5746	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04024	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04024	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04145	141.0899	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05173	140.5843	SPP-SWPS-03
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04145	139.7753	SPP-SWPS-05
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04145	139.6941	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	139.4402	GEN520997 1-MORLND2
FDNS	1	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05426	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04923	138.9304	DBL-WICH-THI
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04923	138.4576	DBL-WICH-THI
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05314	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05333	137.085	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05333	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	136.1179	SPP-SWPS-02A
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05007	135.6533	DBL-WICH-THI
FDNS	3	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04925	133.9212	DBL-WICH-THI
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05732	133.8574	DBL-THIS-WWR
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05732	133.505	DBL-THIS-WWR
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	133.1324	GEN520998 1-MORLND3
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0379	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0418	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	131.8675	BASE CASE
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04246	131.4121	SPP-AEPW-32
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	130.4648	SPP-SWPS-02
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05167	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04224	129.0538	SPP-SWPS-01

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03799	121.6823	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03799	121.417	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03465	120.9713	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03411	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03346	120.2552	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03458	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03504	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	119.8233	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	119.8142	GEN514805 1-SOONER UNIT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	119.6035	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03465	119.1732	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	118.9611	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03458	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04019	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03519	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03286	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03475	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03354	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03382	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04033	118.1243	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04033	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03459	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03446	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03395	117.406	SPP-MKEC-08
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03423	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03375	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0339	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03374	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04019	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03438	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0339	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03446	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04033	116.3972	DEWEY - IODINE 138KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04033	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04998	114.425	DBL-WICH-THI
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03346	113.9504	GEN520998 1-MORLND3
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05186	113.6465	SPP-SWPS-03
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	113.5367	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	113.5183	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	113.4085	GEN520998 1-MORLND3
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05186	113.3303	SPP-SWPS-03
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	113.1874	GEN520998 1-MORLND3
FDNS	3	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05335	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	112.6267	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03306	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03306	112.5496	SPP-AEPW-01
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03268	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0388	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03268	112.3492	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1</td				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0327	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03429	111.5464	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.3598	GEN645011 1-NEBRASKA CITY 1
FNSL	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03713	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03068	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03068	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03429	110.4585	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ASGI_11_002		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	110.4429	SPP-SWPS-02A
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	110.1417	SPP-SWPS-02A
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03773	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03186	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03186	108.6903	ROMAN NOSE - SOUTHHARD 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03399	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03786	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04255	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ASGI_11_002		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03799	108.1395	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03346	107.9284	BASE CASE
FDNS	2		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03799	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03186	107.875	DEWEY - SOUTHHARD 138KV CKT 1
FDNS	02ASGI_11_002		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04191	107.5143	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03038	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	02ASGI_11_002		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	107.4308	BASE CASE
FDNS	2		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04191	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03357	107.1622	BASE CASE
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03256	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	ASGI_11_002	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	107.0735	GEN560286 1-G10-01-1WTG 0.69

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	106.2982	SPP-SWPS-03
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05175	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03773	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05175	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03116	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	105.8806	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03038	105.7916	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	105.6278	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04043	105.5933	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04042	105.564	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03429	105.4641	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05175	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0426	104.9026	SPP-AEPW-32
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	104.818	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	104.7822	SPP-SWPS-02
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0518	104.7729	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	104.6136	SPP-SWPS-05
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	104.602	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04261	104.6006	SPP-AEPW-32
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03058	104.5851	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	104.5662	SPP-SWPS-02
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05181	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	104.5543	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	3	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0336	104.5519	GEN520997 1-MORLND2
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	104.3621	SPP-SWPS-05
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04155	104.3028	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0412	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03728	103.9516	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03728	103.9516	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03454	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04183	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03728	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03728	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03399	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03971	103.6215	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0397	103.6023	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03971	103.3595	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03802	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0397	103.3404	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0302	103.2221	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05175	103.1118	SPP-SWPS-02A
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03127	102.7473	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03127	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04238	102.5203	SPP-SWPS-01
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0426	102.4745	OHLAUNION - TUOC INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0412	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04238	102.2144	SPP-SWPS-01
FDNS	2	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04261	102.1659	OHLAUNION - TUOC INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03461	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0335	101.9989	GEN525562 1-TOLK GEN #2 24 KV
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05449	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03429	101.5169	BASE CASE
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0301	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	ASGI_11_002	TO->FROM	F				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	00ASGI_11_002	0	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	101.066	SPP-SWPS-V29
FDNS	00ASGI_11_002	0	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	101.0432	KINGSMILL INTERCHANGE - LLANO ESTACADO WIND GEN 115KV CKT 1
FDNS	0	0	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	100.3691	SPP-SWPS-V29
FDNS	0	0	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	100.3433	KINGSMILL INTERCHANGE - LLANO ESTACADO WIND GEN 115KV CKT 1
FDNS	3	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03573	210.9694	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03557	196.4738	DBL-WICH-THI
FDNS	01ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03613	184.9343	DBL-WICH-THI
FDNS	02ASGI_11_002	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03581	172.2651	DBL-WICH-THI
FDNS	2	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03581	171.6329	DBL-WICH-THI
FDNS	1	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03619	163.6954	DBL-WICH-THI
FDNS	04ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03608	134.8716	DBL-WICH-THI
FDNS	4	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03614	126.1269	DBL-WICH-THI
FDNS	06ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03609	122.5025	DBL-WICH-THI
FDNS	6	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03616	116.7585	DBL-WICH-THI
FDNS	09ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03617	108.0581	DBL-WICH-THI
FDNS	9	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03623	105.8323	DBL-WICH-THI
FDNS	13	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03629	102.5236	DBL-WICH-THI
FDNS	13ALL	0	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03632	102.4117	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	KINGSMILL INTERCHANGE - MCCULLOUGH SUB 69KV CKT 1	88	0.03906	107.4374	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03554	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	ASGI_11_002	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03554	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	ASGI_11_002	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03605	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	02ALL	0	14G	ASGI_11_002	-	Non-converged Contingency	-	0.3352	-	DBL-BVR-WWRD
FNSL-Blown up	03ALL	0	14G	ASGI_11_002	-	Non-converged Contingency	-	0.18753	-	DBL-WICH-THI
FDNS	01ALL	0	14G	ASGI_11_002	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.21631	101.6493	DBL-THIS-WWR
FDNS	04ALL	0	14G	ASGI_11_002	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03341	104.9034	DBL-WICH-THI
FDNS	3	0	14G	ASGI_11_002	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03296	101.6027	DBL-WICH-THI
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	SPSSPPTIESB1	620	0.33724	126.0236	BASE CASE
FDNS	02ALL	0	14G	ASGI_11_002	FROM->TO	SPSSPPTIESC	620	0.33724	126.0236	BASE CASE
FDNS	0	2	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	100.3691	SPP-SWPS-V29
FDNS	0	2	14SP	ASGI_11_002	FROM->TO	GRAY COUNTY INTERCHANGE (WH RHP17221) 115/69/13.2KV TRANSFORMER CKT 1	84	0.03113	100.3434	KINGSMILL INTERCHANGE - LLANO ESTACADO WIND GEN 115KV CKT 1
FDNS	09ALL	2	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03617	108.0525	DBL-WICH-THI
FDNS	9	2	14G	ASGI_11_002	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03623	105.8302	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_007	FROM->TO	LAWEASOKLUNI	425	0.05719	107	BASE CASE
FDNS	00G11_007	0	24SP	G11_007	FROM->TO	TUCXFR345230	300	0.03406	100.3534	BASE CASE
FDNS	03G11_008	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08592	111.4946	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.06054	111.0298	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08596	107.3062	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.06662	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.06662	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.05867	104.3454	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.05867	104.2389	SPP-SWPS-05
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.06054	103.3782	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.06064	102.9886	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.05872	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.05872	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_008	0	14G	G11_008	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.0636	112.9908	DBL-WICH-THI
FDNS	3	0	14G	G11_008	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.06362	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_008	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.06346	100.178	DBL-WICH-THI
FDNS	03G11_008	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0636	208.4247	DBL-WICH-THI
FDNS	3	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06362	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06346	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06402	174.5251	DBL-WICH-THI
FDNS	2	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0637	161.1641	DBL-WICH-THI
FDNS	1	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06407	153.2095	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03353	142.8522	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03353	142.8522	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	04ALL	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06396	124.3736	DBL-WICH-THI
FDNS	03G11_008	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03368	122.9202	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_008	0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03368	122.9202	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_						

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	3		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0337	118.9027 THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0337	118.9027 THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	4		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06403	115.616 DBL-WICH-THI
FDNS	06ALL		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06398	111.9227 DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03363	106.6993 THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03363	106.6993 THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	6		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.06405	106.1801 DBL-WICH-THI
FDNS	03G11_008		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03275	104.4802 DBL-THIS-WWR
FDNS	3		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03275	100.6259 DBL-THIS-WWR
FDNS	01ALL		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03394	100.5299 THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.03394	100.5299 THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL		0	14G	G11_008	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04878	117.5663 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.0475	100.6585 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.06124	100.6018 DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0475	180.1986 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06021	171.5111 DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0475	168.7142 TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04878	168.0709 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04743	150.5079 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04763	149.1543 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0371	145.4261 WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03326	144.5746 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03896	143.2695 IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03896	141.6454 DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0332	140.5843 SPP-SWPS-03
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	140.4089 ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	140.3859 ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06038	140.2001 DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	139.4402 GEN520997 1-MORLND2
FDNS	1		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04855	139.3277 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	139.0617 GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0604	138.4576 DBL-WICH-THI
FDNS	03ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04743	137.4811 TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04763	136.7268 TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	136.1179 SPP-SWPS-02A
FDNS	01ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06124	135.6533 DBL-WICH-THI
FDNS	3		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06041	133.9212 DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	133.1324 GEN520998 1-MORLND3
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0371	132.452 WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03312	132.3451 GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	131.8675 BASE CASE
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03326	131.4121 SPP-AEPW-32
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	130.4767 STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	130.4648 SPP-SWPS-02
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03319	130.4448 STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04762	129.9666 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03336	129.0538 SPP-SWPS-01
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03326	128.9376 OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03944	127.8347 THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03944	127.8347 THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04765	125.6543 NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03388	122.6759 RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03559	122.6584 1
FDNS	03ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03706	122.3906 WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03718	121.417 WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03079	120.9713 BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03559	120.8931 SPP-SWPS-04
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03559	120.856 Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0397	120.7628 RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1</

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03684	119.5036	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03079	119.1732	BUCKNER 7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.9611	GEN515787 1-OOKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03608	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03891	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03461	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03336	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03397	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03353	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03415	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03905	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03504	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03378	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03369	117.406	SPP-MKEC-08
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0348	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04762	117.1061	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03368	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03374	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03338	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03891	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03303	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0328	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03378	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03905	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06114	114.4225	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03297	113.9504	GEN520998 1-MORLND3
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03334	113.3303	SPP-SWPS-03
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03308	113.1874	GEN520998 1-MORLND3
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03378	113.0572	DBL-HTCH-BVR
FDNS	3		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04765	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03277	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03276	112.5496	SPP-AEPW-01
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03232	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03232	112.3492	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03346	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03276	112.1517	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.1236	GEN524295 1-SPNSPUR_WND10.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.1225	GEN515393 1-OGEWND2G
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.0027	GEN542957 1-IATAN UNIT #1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.8334	GEN562023 1-G11_020_3 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.8334	GEN562026 1-G11_019_3 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.7652	GEN523461 1-BLACKHAWK GEN #1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.7137	GEN523462 1-BLACKHAWK GEN #2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.7055	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.6514	GEN645001 1-FORT CALHOUN 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03223	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0338	111.5464	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0394	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0394	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03251	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03251	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0338	110.4585	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	110.1417	SPP-SWPS-02A
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03087	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03259	109.1922	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03176	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03176	108.6903	ROMAN NOSE - SOUTHHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03959	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03706	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03335	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03297	107.9284	BASE CASE
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03718	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03176	107.875	DEWEY - SOUTHHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0328	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03309	107.2413	GEN520997 1-MORLND2
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03323	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03308	107.1622	BASE CASE
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03285	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0735	GEN560286 1-G10-01-1WTG 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0735	GEN560287 1-G10-01-2WTG 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.9567	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8321	GEN560371 1-G07-46 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7195	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03719	106.7195	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7191	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.699	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0338	106.6933	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5149	GEN560256 1-G10-14-1 0.6900
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0328	106.3772	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03328	106.2982	SPP-SWPS-03
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03328	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03087	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03328	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03382	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0328	105.7916	C_CITY_13

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03024	104.5851	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	104.5662	SPP-SWPS-02
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03333	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03311	104.5519	GEN520997 1-MORLND2
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03993	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03604	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03315	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03954	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03954	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03959	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03668	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	3		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03722	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03668	103.3236	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03378	103.2897	DBL-BVR-WWRD
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03328	103.118	SPP-SWPS-02A
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03394	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03906	102.4291	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03993	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03351	102.2144	SPP-SWPS-01
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03341	102.1659	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03494	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.9989	GEN525562 1-TOLK GEN #2 24 KV
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03546	101.8299	1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03307	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03307	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04878	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0338	101.5169	BASE CASE
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03748	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.4141	GEN562017 1-G11_022_3 0.6900
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03748	101.2821	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03426	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.9769	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03296	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03309	100.8413	GEN520998 1-MORLND3
FDNS	03G11_008		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03906	100.6694	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.5602	GEN560121 1-G08-47 0.5750
FDNS	2		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03307	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03029	100.4185	IMO TAP - MEN TAP 138KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03546	100.1122	SPP-SWPS-04
FDNS	01ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03546	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03335	99.8	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03029	99.7	CLEO CORNER - MEN TAP 138KV CKT 1
FDNS	03ALL		0	14G	G11_008	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03424	99.5	MINGO - SETAB 345KV CKT 1
FDNS	03G11_008		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0636	218.8152	DBL-WICH-THI
FDNS	3		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06362	210.9694	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06346	196.4738	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06402	184.9343	DBL-WICH-THI
FDNS	2		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0637	171.6329	DBL-WICH-THI
FDNS	1		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06407	163.6954	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.03353	152.824	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.03353	152.824	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	04ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06396	134.8716	DBL-WICH-THI
FDNS	03G11_008		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.03368	133.2403	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_008		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.03368	133.2403	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.03265	131.9482	DBL-THIS-WWR
FDNS	3		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0337	129.2757	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0337	129.2757	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	4		0	14G	G11_008	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.06403	126.1269	DBL-WICH-THI

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	3	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03275	110.7697	DBL-THIS-WWR
FDNS	03ALL	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03534	108.876	DBL-SPRVL-CL
FDNS	09ALL	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.06406	108.0581	DBL-WICH-THI
FDNS	9	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.06412	105.8323	DBL-WICH-THI
FDNS	2	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03375	104.8769	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03375	104.8769	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	13	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.06418	102.5236	DBL-WICH-THI
FDNS	13ALL	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0642	102.4117	DBL-WICH-THI
FDNS	1	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03396	100.2725	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	1	0	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.03396	100.2725	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10896	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10896	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_008	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10947	107.8148	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.08361	104.4069	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10948	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.08581	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.08581	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_008	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.08818	99.9	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FNSL-Blown up	3	0	14G	G11_008	-	Non-converged Contingency	-	0.55949	-	DBL-THIS-CLR
FNSL-Blown up	03ALL	0	14G	G11_008	-	Non-converged Contingency	-	0.55831	-	DBL-THIS-CLR
FNSL-Blown up	03ALL	0	14G	G11_008	-	Non-converged Contingency	-	0.32852	-	DBL-WICH-THI
FNSL-Blown up	03G11_008	0	14G	G11_008	-	Non-converged Contingency	-	0.55944	-	DBL-THIS-CLR
FDNS	01ALL	0	14G	G11_008	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.03082	101.6493	DBL-THIS-WWR
FDNS	04ALL	0	14G	G11_008	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03754	115.0433	DBL-THIS-CLR
FDNS	4	0	14G	G11_008	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03755	101.0487	DBL-THIS-CLR
FDNS	04ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11306	114.9028	DBL-THIS-CLR
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06226	111.5167	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.05451	106.0378	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03G11_008	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.07256	105.2938	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.07304	104.9034	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.05823	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.05823	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.05135	101.6522	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	3	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.07259	101.6027	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.05135	101.5821	SPP-SWPS-05
FDNS	04ALL	0	14G	G11_008	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06306	100.846	AXTELL - POST ROCK 345KV CKT 1
FDNS	09ALL	2	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.06406	108.0525	DBL-WICH-THI
FDNS	9	2	14G	G11_008	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.06412	105.8302	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_010	FROM->TO	LAWEASOKLUNI	425	0.08264	107	BASE CASE
FDNS	00G11_010	0	24SP	G11_010	FROM->TO	TUCXFR345230	300	0.03821	101.0864	BASE CASE
FDNS	3	0	14G	G11_014	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.04583	107.3062	DBL-WICH-THI
FDNS	3	0	14G	G11_014	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04337	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_014	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.0432	100.178	DBL-WICH-THI
FDNS	3	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04337	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0432	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04376	174.5251	DBL-WICH-THI
FDNS	02G11_014	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04343	168.2937	DBL-WICH-THI
FDNS	2	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04344	161.1641	DBL-WICH-THI
FDNS	1	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04382	153.2095	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04371	124.3736	DBL-WICH-THI
FDNS	4	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04377	115.616	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04372	111.9227	DBL-WICH-THI
FDNS	6	0	14G	G11_014	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04379	106.1801	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_014	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1	153	0.03191	102.4803	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	316	0.09915	100.4007	DBL-BVR-WWRD
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1	1052	0.5195	100.6672	DBL-BVR-WWRD
FDNS	02G11_014	0	14G	G11_014	FROM->TO	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1	1052	0.5195	102.8926	DBL-BVR-WWRD
FDNS	01ALL	0	14G	G11_014	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.08718	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.08939	111.3114	DBL-THIS-WWR
FDNS	02ALL	0	14G	G11_014	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.08589	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.07922	100.6018	DBL-WICH-THI

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08939	155.3323	DBL-THIS-WWR
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08583	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07839	147.9242	DBL-WICH-THI
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08606	145.8297	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06679	145.4261	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06343	144.5746	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08867	143.7856	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06991	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06991	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06802	141.0899	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06522	140.5843	SPP-SWPS-03
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06802	139.7753	SPP-SWPS-05
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06802	139.6941	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	139.4402	GEN520997 1-MORLND2
FDNS	1		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08695	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07838	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08583	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	136.1179	SPP-SWPS-02A
FDNS	01ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07922	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07839	133.9212	DBL-WICH-THI
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08867	133.505	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	133.1324	GEN520998 1-MORLND3
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06679	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06238	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	131.8675	BASE CASE
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06343	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06513	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06346	129.0538	SPP-SWPS-01
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06684	128.9448	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06343	128.9376	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06682	128.9223	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0669	128.4689	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06378	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06378	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08604	125.6543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	1		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08937	125.5323	DBL-THIS-WWR
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	125.5041	GEN520997 1-MORLND2
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07003	125.2848	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07003	123.5556	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05706	122.6759	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06408	122.6584	1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06675	122.3906	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06688	121.4117	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06058	120.9713	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06408	120.8931	SPP-SWPS-04
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06408	120.8556	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06116	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06538	120.7006	SPP-SWPS-03
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	120.4374	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	120.4278	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05928	120.2552	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06058	119.1732	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	119.1131	GEN520998 1-MORLND3
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	118.9611	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06054	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06986	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06119	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05863	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0607	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06007	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06148	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06064	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06087	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05987	117.406	SPP-MKEC-08
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06013	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05961	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0598	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05959	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	116.9306	SPP-SWPS-02A
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06986	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05961	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05919	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06087	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06814	115.4464	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0669	115.201	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07912	114.425	DBL-WICH-THI
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	114.3754	BASE CASE
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06251	114.1319	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06814	114.0688	SPP-SWPS-05
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06814	114.0128	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05928	113.9504	GEN520998 1-MORLND3
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06536	113.3303	SPP-SWPS-03
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05939	113.1874	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09635	113.0572	DBL-HTCH-BVR
FDNS	3	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08604	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05894	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05894	112.5496	SPP-AEPW-01
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05838	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06769	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05838	112.3492	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05983	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05894	112.1517	KNOBHILL (KNOBHL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	112.1236	GEN524295 1-SPNNSPUR_WND10.6900
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	112.1225	GEN515393 1-OGEWND2G
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	112.0027	GEN542957 1-IATAN UNIT #1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.8334	GEN562023 1-G11_020_3 0.6900
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.8334	GEN562026 1-G11_019_3 0.6900
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.7652	GEN523461 1-BLACKHAWK GEN #1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0636	111.7417	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.7137	GEN523462 1-BLACKHAWK GEN #2
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.7055	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	1			

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	111.2457	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	111.2106	SPP-SWPS-02
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	111.2029	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06374	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06374	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06697	110.7875	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06696	110.7667	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05787	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0639	110.6306	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0639	110.6306	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05787	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06011	110.4585	GEN515787 1-OOKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	110.1417	SPP-SWPS-02A
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05795	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06363	109.3092	SPP-SWPS-01
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0636	109.2518	OKLAUNION - TUOC INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05761	109.1922	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05713	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05713	108.6903	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06104	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	02G11_014		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05714	108.5237	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06675	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06352	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05928	107.9284	BASE CASE
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06688	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05713	107.875	DEWEY - SOUTHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05606	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06248	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05939	107.1622	BASE CASE
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05917	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_014	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	107.0735	GEN560286 1-G10-01-1WTG 0.6900
FDNS	02ALL		0	14G	G11_014					

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0653	106.2982	SPP-SWPS-03
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05509	106.2636	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06522	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05795	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06522	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06414	105.9367	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06123	105.8958	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05606	105.7916	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06812	105.6278	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06767	105.5933	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06766	105.564	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06011	105.4641	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06522	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05495	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0551	104.6457	DOVER SW - OKEENE 138KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	104.602	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06358	104.6006	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05434	104.5851	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	104.5772	GEN514805 1-SOONER UNIT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	104.5662	SPP-SWPS-02
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06527	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05942	104.5519	GEN520997 1-MORLND2
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06812	104.3621	SPP-SWPS-05
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06812	104.3028	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06226	104.2962	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06414	104.2667	SPP-SWPS-04
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06414	104.1927	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06226	104.1281	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07088	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0605	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	103.8322	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0624	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06065	103.6586	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06388	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06388	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06104	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05872	103.5801	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06206	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06696	103.3595	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06691	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06694	103.3404	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06206	103.3236	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	103.2929	GEN520922 1-SLEEPING BEAR
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05369	103.2221	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06522	103.118	SPP-SWPS-02A
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06069	103.0794	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06017	103.0639	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06114	103.048	MINGO - SETAB 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05941	102.7504	GEN514806 1-SOONER UNIT 2
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06065	102.699	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05711	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05509	102.4607	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 13				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05997	101.8883	SPP-MKEC-08
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06395	101.8299	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06081	101.7649	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05019	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05019	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0599	101.6	FLATRDG3 - HARPER 138KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08718	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06011	101.5169	BASE CASE
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06286	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05929	101.4555	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06024	101.4269	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	101.4141	GEN562017 1-G11_022_3 0.6900
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06286	101.2821	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06063	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	100.9769	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05495	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05932	100.5602	GEN560121 1-G08-47 0.5750
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05291	100.5484	WOODWARD - WOODWARD EHV 138KV CKT 1
FDNS	2	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05506	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05299	100.4185	IMO TAP - MEN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06395	100.1122	SPP-SWPS-04
FDNS	01ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06769	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06395	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06352	99.8	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05299	99.7	CLEO CORNER - MEN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06098	99.5	MINGO - SETAB 345KV CKT 1
FDNS	02G11_014	0	14G	G11_014	TO->FROM	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	351	0.08894	102.5927	DBL-BVR-WWRD
FDNS	3	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04337	210.9694	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0432	196.4738	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04376	184.9343	DBL-WICH-THI
FDNS	02G11_014	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04343	178.7386	DBL-WICH-THI
FDNS	2	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04344	171.6329	DBL-WICH-THI
FDNS	1	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04382	163.6954	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04371	134.8716	DBL-WICH-THI
FDNS	4	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04377	126.1269	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04372	122.5025	DBL-WICH-THI
FDNS	6	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04379	116.7585	DBL-WICH-THI
FDNS	09ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0438	108.0581	DBL-WICH-THI
FDNS	9	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04387	105.8323	DBL-WICH-THI
FDNS	13	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04392	102.5236	DBL-WICH-THI
FDNS	13ALL	0	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04395	102.4117	DBL-WICH-THI
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04166	112.471	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04166	112.257	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04166	109.8393	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04166	109.6646	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.05506	105.6533	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.05506	104.384	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.05506	103.788	SPP-SWPS-04
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.05506	103.4056	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	0	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04168	102.9614	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.0368	102.8823	MOORE COUNTY INTERCHANGE (ENRCo 136402) 230/115/13.2KV TRANSFORMER CKT
FDNS	0	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.04168	102.7437	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT	288	0.05506	102.6194	SPP-SWPS-04

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.05506	102.258	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.0463	101.2169	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.0368	100.7667	MOORE COUNTY INTERCHANGE (ENRCo 136402) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.04168	100.5896	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.04168	100.4259	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03412	100	BASE CASE
FDNS	00G11_014	0	24SP	G11_014	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.0463	99.9	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.04044	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_014	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.04044	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_014	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.04095	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	02ALL	0	14G	G11_014	-	Non-converged Contingency	-	0.56253	-	DBL-BVR-WWRD
FNSL-Blown up	03ALL	0	14G	G11_014	-	Non-converged Contingency	-	0.2278	-	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_014	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.28244	101.6493	DBL-THIS-WWR
FDNS	01ALL	0	14G	G11_014	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1	153	0.03191	105.9216	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	04ALL	0	14G	G11_014	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03936	104.9034	DBL-WICH-THI
FDNS	3	0	14G	G11_014	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03891	101.6027	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_014	FROM->TO	SPSSPPTIESB1	620	0.27302	126.0236	BASE CASE
FDNS	02ALL	0	14G	G11_014	FROM->TO	SPSSPPTIESC	620	0.27302	126.0236	BASE CASE
FDNS	09ALL	2	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0438	108.0525	DBL-WICH-THI
FDNS	9	2	14G	G11_014	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04387	105.8302	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIMARRON RIVER TAP - KISMET 3 115.00 115KV CKT 1	115.1	0.03105	109.9692	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	03G11_016	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.13056	114.0199	DBL-IRON-CLR
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.13008	112.1609	DBL-SPRVL-CL
FDNS	03G11_016	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.09556	111.9271	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07895	111.0298	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.1306	107.7407	DBL-IRON-CLR
FDNS	3	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.0956	107.3062	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07892	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07892	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07665	104.3454	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07665	104.2389	SPP-SWPS-05
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07895	103.3782	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07783	102.9886	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07279	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07279	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_016	0	14G	G11_016	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.05444	112.6158	DBL-WICH-THI
FDNS	3	0	14G	G11_016	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.05446	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_016	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.05429	100.178	DBL-WICH-THI
FDNS	03G11_016	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05444	207.7684	DBL-WICH-THI
FDNS	3	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05446	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05429	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05485	174.5251	DBL-WICH-THI
FDNS	2	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05453	161.1641	DBL-WICH-THI
FDNS	1	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05491	153.2095	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0548	124.3736	DBL-WICH-THI
FDNS	4	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05487	115.616	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05482	111.9227	DBL-WICH-THI
FDNS	6	0	14G	G11_016	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05488	106.1801	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_016	FROM->TO	CUDAHY - KISMET 3 115.00 115KV CKT 1	115.1	0.03105	111.8487	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	01ALL	0	14G	G11_016	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04692	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_016	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04563	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_016	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05544	100.6018	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04563	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05442	171.5111	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04563	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04692	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04557	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04576	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_016	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03563	145.4261	WOODWARD (WOODWRD2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03742	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03742	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	140.5843	SPP-SWPS-03
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0546	139.5776	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	139.4402	GEN520997 1-MORLND2
FDNS	1		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04669	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0546	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04557	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04576	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	136.1179	SPP-SWPS-02A
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05544	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05461	133.9212	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	133.1324	GEN520998 1-MORLND3
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03563	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03195	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	131.8675	BASE CASE
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03202	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03215	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04578	129.5714	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03212	129.0538	SPP-SWPS-01
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03202	128.9376	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03708	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03708	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04579	125.6543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03252	122.6759	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03441	122.6584	1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0356	122.3906	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03572	121.4117	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03441	120.8931	SPP-SWPS-04
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03441	120.856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03808	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03167	120.2552	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	119.9939	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03549	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0332	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	119.8142	GEN514805 1-SOONER UNIT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03531	119.8124	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03178	119.6035	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03531	119.5036	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	118.9611	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03549	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03737	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03356	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03204	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03282	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03221	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0328	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03751	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03359	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03245	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03216	117.406	SPP-MKEC-08
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03381	117.1404	AXTELL - POST ROCK

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03245	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03751	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05534	114.4225	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03167	113.9504	GEN520998 1-MORLND3
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03229	113.3303	SPP-SWPS-03
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03178	113.1874	GEN520998 1-MORLND3
FDNS	3		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04579	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03148	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03148	112.5496	SPP-AEPW-01
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03105	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03653	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03105	112.3492	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03214	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03147	112.1517	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	112.1236	GEN524295 1-SPNSPUR_WND10.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	112.1225	GEN515393 1-OGEWND2G
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	112.0027	GEN542957 1-IATAN UNIT #1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.8334	GEN562023 1-G11_020_3 0.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.8334	GEN562026 1-G11_019_3 0.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.7652	GEN523461 1-BLACKHAWK GEN #1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.7137	GEN523462 1-BLACKHAWK GEN #2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.7055	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.6514	GEN645001 1-FORT CALHOUN 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03096	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0325	111.5464	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.3598	GEN645011 1-NEBRASKA CITY 1
FNSL	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03703	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03703	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03119	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03119	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0325	110.4585	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2		0	14G	G11_016	TO->FROM FPL				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03051	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03051	108.6903	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03796	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0356	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03211	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03167	107.9284	BASE CASE
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03572	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03051	107.875	DEWEY - SOUTHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03149	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03206	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03178	107.1622	BASE CASE
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03156	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	107.0735	GEN560286 1-G10-01-1WTG 0.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	107.0735	GEN560287 1-G10-01-2WTG 0.6900
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03181	107.0184	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.9567	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.8321	GEN560371 1-G07-46 0.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.7195	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.7191	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.699	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0325	106.6933	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.5149	GEN560256 1-G10-14-1 0.6900
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03149	106.3772	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03575	106.3184	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03224	106.2982	SPP-SWPS-03
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03223	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03223	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03246	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03149	105.7916	C_CITY_138 138.00 - KNOBHIILL 138KV CKT 1
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0325	105.4641	GEN520998 1-MORLND3
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03223	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03163	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	104.602	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03217	104.6006	SPP-AEPW-32
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	104.5662	SPP-SWPS-02
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03228	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03181	104.5519	GEN520997 1-MORLND2
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03839	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03544	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03198	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03718	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03718	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03796	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03515	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	3		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03575	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03515	103.3236	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03223	103.118	SPP-SWPS-02A
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03258	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03839	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03226	102.2144	SPP-SWPS-01
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03217	102.1659	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03359	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03754	102.0337	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1</td				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03595	101.2821	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03294	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	100.9769	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03163	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03181	100.588	GEN520998 1-MORLND3
FDNS	02ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0317	100.5602	GEN560121 1-G08-47 0.5750
FDNS	2		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03174	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03754	100.2745	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03428	100.1122	SPP-SWPS-04
FDNS	01ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03653	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03428	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03211	99.8	SPP-AEPW-32
FDNS	03ALL		0	14G	G11_016	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03315	99.5	MINGO - SETAB 345KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04921	149.3465	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_016	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04894	148.8732	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04922	142.0579	DBL-IRON-CLR
FDNS	03G11_016		0	14G	G11_016	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04921	125.3961	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04922	119.3326	DBL-SPRVL-CL
FDNS	03G11_016		0	14G	G11_016	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04921	138.2173	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_016	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04894	137.7771	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04922	131.1283	DBL-IRON-CLR
FDNS	03G11_016		0	14G	G11_016	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04921	114.5767	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04922	108.565	DBL-SPRVL-CL
FDNS	03G11_016		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05444	218.1622	DBL-WICH-THI
FDNS	3		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05446	210.9694	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05429	196.4738	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05485	184.9343	DBL-WICH-THI
FDNS	2		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05453	171.6329	DBL-WICH-THI
FDNS	1		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05491	163.6954	DBL-WICH-THI
FDNS	04ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0548	134.8716	DBL-WICH-THI
FDNS	4		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05487	126.1269	DBL-WICH-THI
FDNS	06ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05482	122.5025	DBL-WICH-THI
FDNS	6		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05488	116.7585	DBL-WICH-THI
FDNS	09ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0549	108.0581	DBL-WICH-THI
FDNS	9		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05496	105.8323	DBL-WICH-THI
FDNS	13		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05502	102.5236	DBL-WICH-THI
FDNS	13ALL		0	14G	G11_016	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05504	102.4117	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_016	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.03351	131.5496	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.03362	118.2778	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3		0	14G	G11_016	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.0336	116.0054	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL		0	14G	G11_016	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.03351	124.9072	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G11_016		0	14G	G11_016	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.03362	109.9894	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3		0	14G	G11_016	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.0336	107.3686	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.03351	111.4108	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04921	133.2093	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_016	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04894	132.629	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04922	126.1392	DBL-IRON-CLR
FDNS	03G11_016		0	14G	G11_016	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04921	109.578	DBL-SPRVL-CL
FDNS	3		0	14G	G11_016	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04922	103.5773	DBL-SPRVL-CL
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13689	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13689	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.1374	108.6187	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_016		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.16135	108.4954	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.16085	106.8827	DBL-SPRVL-CL
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10755	104.4069	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	3		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13741	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.16136	102.4571	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10036	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10036	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL		0	14G	G11_016	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.11159	99.9	BUCKNER7 345.00 - HOLCOMB 345KV CK

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03G11_016	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03741	117.0291	DBL-IRON-CLR
FDNS	04ALL	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03754	115.0433	DBL-THIS-CLR
FDNS	3	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03742	110.3686	DBL-IRON-CLR
FDNS	04ALL	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03754	107.4213	DBL-IRON-CLR
FDNS	03ALL	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03731	103.8018	DBL-SPRVL-CL
FDNS	4	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03755	101.0487	DBL-THIS-CLR
FDNS	04ALL	0	14G	G11_016	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.03754	100.1872	DBL-SPRVL-CL
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11306	114.9028	DBL-THIS-CLR
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.07844	111.5167	AXTELL - POST ROCK 345KV CKT 1
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11306	109.9516	DBL-IRON-CLR
FDNS	03G11_016	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11256	109.2906	DBL-IRON-CLR
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11216	108.4016	DBL-SPRVL-CL
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03364	107.3644	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.0707	106.0378	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03G11_016	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.08109	105.657	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11306	105.1772	DBL-SPRVL-CL
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.08157	104.9034	DBL-WICH-THI
FDNS	3	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.11259	103.6667	DBL-IRON-CLR
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06869	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06869	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06659	101.6522	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	3	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.08112	101.6027	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.06659	101.5821	SPP-SWPS-05
FDNS	04ALL	0	14G	G11_016	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.07924	100.846	AXTELL - POST ROCK 345KV CKT 1
FDNS	09ALL	2	14G	G11_016	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0549	108.0525	DBL-WICH-THI
FDNS	9	2	14G	G11_016	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.05496	105.8302	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.12789	112.1609	DBL-SPRVL-CL
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08605	111.0298	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03G11_017	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.1284	111.0029	DBL-IRON-CLR
FDNS	03G11_017	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.09576	109.767	DBL-WICH-THI
FDNS	3	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.12841	107.7407	DBL-IRON-CLR
FDNS	3	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.09578	107.3062	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08109	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08109	105.554	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07952	104.3454	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07952	104.2389	SPP-SWPS-05
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08605	103.3782	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.08462	102.9886	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07533	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_017	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.07533	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_017	0	14G	G11_017	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04917	110.5265	DBL-WICH-THI
FDNS	3	0	14G	G11_017	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04918	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_017	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04901	100.178	DBL-WICH-THI
FDNS	03G11_017	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04917	204.1085	DBL-WICH-THI
FDNS	3	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04918	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04901	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04957	174.5251	DBL-WICH-THI
FDNS	2	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04925	161.1641	DBL-WICH-THI
FDNS	1	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04963	153.2095	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04952	124.3736	DBL-WICH-THI
FDNS	4	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04958	115.616	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04953	111.9227	DBL-WICH-THI
FDNS	6	0	14G	G11_017	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0496	106.1801	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_017	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04433	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_017	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.04304	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_017	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.05126	100.6018	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_017	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04304	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL	0	14G	G11_017	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05024	171.5111	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_017	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04304	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_017	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04433	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS										

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	1		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0441	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05042	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04298	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05043	136.7871	DBL-WICH-THI
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04317	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	136.1179	SPP-SWPS-02A
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05126	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05044	133.9212	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03364	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0301	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0301	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03022	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03019	129.0538	SPP-SWPS-01
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0301	128.9376	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03474	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03474	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04319	127.781	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	3		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0432	125.6543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03085	122.6759	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03259	122.6584	1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0336	122.3906	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03373	121.4117	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03259	120.8931	SPP-SWPS-04
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03259	120.856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0363	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03009	119.9939	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03549	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03102	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03349	119.8124	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03001	119.6035	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03349	119.5036	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03528	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03141	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03031	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03073	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03042	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03097	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03542	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03175	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03064	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03032	117.406	SPP-MKEC-08
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03266	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03106	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03054	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03042	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03528	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03064	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03542	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04319	115.0652	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	1		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05117	114.425	DBL-WICH-THI
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03037	113.3303	SPP-SWPS-03
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 13				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03073	110.4585	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	110.1417	SPP-SWPS-02A
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03618	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0336	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03019	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03373	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03021	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03001	107.1622	BASE CASE
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03073	106.6933	GEN520922 1-SLEEPING BEAR
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03031	106.2982	SPP-SWPS-03
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0303	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0303	106.2423	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03079	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03004	105.8709	GEN520997 1-MORLND2
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03073	105.4641	GEN520998 1-MORLND3
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0303	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03376	104.9735	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03003	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	104.602	STATELINE INTERCHANGE - STLDEMARC6 230KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03025	104.6006	SPP-AEPW-32
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	104.5662	SPP-SWPS-02
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03036	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03004	104.5519	GEN520997 1-MORLND2
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0363	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03544	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03013	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03484	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03484	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03618	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03332	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	3		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03376	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03332	103.3236	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0303	103.118	SPP-SWPS-02A
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0309	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0363	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03034	102.2144	SPP-SWPS-01
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03025	102.1659	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03176	102.1603	DEWEY - TALOGA 138KV CKT 1
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03246	101.8299	1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04433	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03073	101.5169	BASE CASE
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03413	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03413	101.2821	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03116	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03003	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03544	100.6104	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	2		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03013	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03246	100.1122	SPP-SWPS-04
FDNS	01ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03454	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03246	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03019	99.8	SPP-AEPW-32
FDNS	03ALL		0	14G	G11_017	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.03097	99.5	MINGO - SETAB 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04437	148.8732	DBL-SPRVL-CL
FDNS	03G11_017		0	14G	G11_017	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04464	145.5378	DBL-IRON-CLR
FDNS	3		0	14G	G11_017	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04465	142.0579	DBL-IRON-CLR
FDNS	03G11_017		0	14G	G11_017	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04464	122.2185	DBL-SPRVL-CL
FDNS	3		0	14G	G11_017	TO->FROM GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.04465	119.3326	DBL-SPRVL-CL
FDNS	03ALL		0	14G	G11_017	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.04437	137.7771	DBL-SPRVL-CL
FDNS	03G11_017		0	14G	G11_017	FROM->TO GREENSBURG - SUN CITY 115KV CKT 1				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	2		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04925	171.6329	DBL-WICH-THI
FDNS	1		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04963	163.6954	DBL-WICH-THI
FDNS	04ALL		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04952	134.8716	DBL-WICH-THI
FDNS	4		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04958	126.1269	DBL-WICH-THI
FDNS	06ALL		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04953	122.5025	DBL-WICH-THI
FDNS	6		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.0496	116.7585	DBL-WICH-THI
FDNS	09ALL		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04962	108.0581	DBL-WICH-THI
FDNS	9		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04968	105.8323	DBL-WICH-THI
FDNS	13		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04974	102.5236	DBL-WICH-THI
FDNS	13ALL		0	14G	G11_017	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04976	102.4117	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_017	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.04426	131.5496	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.04436	117.9806	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3		0	14G	G11_017	TO->FROM HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.04435	116.0054	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL		0	14G	G11_017	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.04426	124.9072	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G11_017		0	14G	G11_017	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.04436	109.638	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3		0	14G	G11_017	FROM->TO HAYS PLANT - VINE STREET 115KV CKT 1	88	0.04435	107.3686	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.04426	111.4108	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04437	132.629	DBL-SPRVL-CL
FDNS	03G11_017		0	14G	G11_017	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04464	129.5176	DBL-IRON-CLR
FDNS	3		0	14G	G11_017	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04465	126.1392	DBL-IRON-CLR
FDNS	03G11_017		0	14G	G11_017	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04464	106.4467	DBL-SPRVL-CL
FDNS	3		0	14G	G11_017	TO->FROM MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.04465	103.5773	DBL-SPRVL-CL
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13689	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13008	106.8827	DBL-SPRVL-CL
FDNS	03G11_017		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.1374	106.1762	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_017		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13059	105.0888	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.10034	104.4069	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	3		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13741	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.13059	102.4571	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.07474	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.07474	100.1254	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL		0	14G	G11_017	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.08434	99.9	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	TO->FROM N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.04426	103.7448	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FNSL-Blown up	3		0	14G	G11_017	- Non-converged Contingency	-	0.41295	-	DBL-THIS-CLR
FNSL-Blown up	03ALL		0	14G	G11_017	- Non-converged Contingency	-	0.41177	-	DBL-IRON-CLR
FNSL-Blown up	03ALL		0	14G	G11_017	- Non-converged Contingency	-	0.41177	-	DBL-THIS-CLR
FNSL-Blown up	03ALL		0	14G	G11_017	- Non-converged Contingency	-	0.24499	-	DBL-WICH-THI
FNSL-Blown up	03G11_017		0	14G	G11_017	- Non-converged Contingency	-	0.41293	-	DBL-THIS-CLR
FDNS	01ALL		0	14G	G11_017	TO->FROM NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.03767	101.6493	DBL-THIS-WWR
FDNS	04ALL		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03798	115.0433	DBL-THIS-CLR
FDNS	03G11_017		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03786	113.9157	DBL-IRON-CLR
FDNS	3		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03786	110.3686	DBL-IRON-CLR
FDNS	04ALL		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03798	107.4213	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03774	103.8018	DBL-SPRVL-CL
FDNS	4		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03799	101.0487	DBL-THIS-CLR
FDNS	04ALL		0	14G	G11_017	FROM->TO SEWARD - ST JOHN 115KV CKT 1	87.6	0.03798	100.1872	DBL-SPRVL-CL
FDNS	04ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.12527	114.9028	DBL-THIS-CLR
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.1014	111.5167	AXTELL - POST ROCK 345KV CKT 1
FDNS	04ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.12527	109.9516	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.12438	108.4016	DBL-SPRVL-CL
FDNS	04ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03201	107.3644	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03G11_017		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.12479	106.8804	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.08821	106.0378	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	04ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.12527	105.1772	DBL-SPRVL-CL
FDNS	04ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.09597	104.9034	DBL-WICH-THI
FDNS	03G11_017		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.09551	104.0639	DBL-WICH-THI
FDNS	3		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.1248	103.6667	DBL-IRON-CLR
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.0846	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.0846	102.6556	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.08311	101.6522	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	3		0	14G	G11_017	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.09553		

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_019	FROM->TO CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04675	100.178	DBL-WICH-THI
FDNS	3		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04691	200.5164	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04675	186.1623	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04731	174.5251	DBL-WICH-THI
FDNS	01G11_019		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04735	165.3447	DBL-WICH-THI
FDNS	2		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04699	161.1641	DBL-WICH-THI
FDNS	01NR		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05296	159.425	DBL-WICH-THI
FDNS	1		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04736	153.2095	DBL-WICH-THI
FDNS	04ALL		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04725	124.3736	DBL-WICH-THI
FDNS	4		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04732	115.616	DBL-WICH-THI
FDNS	06ALL		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04727	111.9227	DBL-WICH-THI
FDNS	6		0	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04734	106.1801	DBL-WICH-THI
FDNS	00G11_019		0	19WP	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04769	104.6811	DBL-WICH-THI
FDNS	00G11_019		0	14WP	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04695	101.7215	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_019	TO->FROM EL RENO - ROMAN NOSE 138KV CKT 1	153	0.03973	102.4803	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.11404	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.12323	111.3114	DBL-THIS-WWR
FDNS	01G11_019		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.1139	107.4351	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.12322	101.3255	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.11276	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.10115	100.6018	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11276	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10012	171.5111	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12227	171.4127	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11276	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11404	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1139	160.6374	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12323	155.3323	DBL-THIS-WWR
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1127	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11289	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12322	148.6302	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08937	145.4261	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08172	144.5746	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09324	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09324	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	141.0899	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08034	140.5843	SPP-SWPS-03
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	139.7753	SPP-SWPS-05
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	139.6941	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	139.4402	GEN520997 1-MORLND2
FDNS	1		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11382	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10031	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1127	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11289	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	136.1179	SPP-SWPS-02A
FDNS	01NR		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.13208	135.7346	DBL-THIS-WWR
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10115	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10032	133.9212	DBL-WICH-THI
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12252	133.505	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	133.1324	GEN520998 1-MORLND3
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10109	132.8045	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08937	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07995	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	131.8675	BASE CASE
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08172	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	3		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11291	125.6543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	1		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12321	125.5323	DBL-THIS-WWR
FDNS	01NR		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11286	122.8912	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07648	122.6759	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08193	122.6584	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08933	122.3906	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08945	121.417	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07958	120.9713	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08193	120.8931	SPP-SWPS-04
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08193	120.856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08097	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	120.2552	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07405	119.9939	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0805	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08047	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	119.8142	GEN514805 1-SOONER UNIT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	119.8124	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	119.6035	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	119.5036	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07958	119.1732	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.9611	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0805	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09319	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08064	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07847	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08026	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08062	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08278	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09333	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0808	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08148	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08008	117.406	SPP-MKEC-08
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08021	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07962	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07994	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07963	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09319	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08148	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09333	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10105	114.425	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	113.9504	GEN520998 1-MORLND3
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08048	113.3303	SPP-SWPS-03
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	113.1874	GEN520998 1-MORLND3
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09017	113.167	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09635	113.0572	DBL-HTCH-BVR
FDNS	3		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11291	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	112.8994	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	112.5496	SPP-AEPW-01
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07835	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09027	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.8334	GEN562023 1-G11_020_3 0.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.8334	GEN562026 1-G11_019_3 0.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.7652	GEN523461 1-BLACKHAWK GEN #1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.7137	GEN523462 1-BLACKHAWK GEN #2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.7055	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.6514	GEN645001 1-FORT CALHOUN 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07756	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	111.5464	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3598	GEN645011 1-NEBRASKA CITY 1
FNSL	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08428	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08428	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07843	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07843	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	110.4585	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	110.1417	SPP-SWPS-02A
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07534	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07844	109.1922	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09627	109.048	DBL-HTCH-BVR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	108.6903	ROMAN NOSE - SOUTHHARD 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08085	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08933	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08181	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	107.9284	BASE CASE
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08945	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	107.875	DEWEY - SOUTHHARD 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1139	107.6413	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07538	107.4887	BYRON_138 138.00 - SANDY_CN_13813

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.7191	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.699	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	106.6933	GEN520922 1-SLEEPING BEAR
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	106.6907	GEN520998 1-MORLND3
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.5149	GEN560256 1-G10-14-1 0.6900
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07538	106.3772	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08042	106.2982	SPP-SWPS-03
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07534	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07642	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0941	105.9261	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	105.912	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07538	105.7916	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	105.6278	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09134	105.5933	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09131	105.564	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	105.4641	GEN520998 1-MORLND3
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07399	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07441	104.6457	DOVER SW - OKEENE 138KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.602	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08187	104.6006	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07282	104.5851	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.5662	SPP-SWPS-02
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07953	104.5519	GEN520997 1-MORLND2
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	104.3621	SPP-SWPS-05
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	104.3028	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0941	104.2732	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09421	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07998	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09127	103.7402	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09125	103.7134	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08442	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08442	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08085	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08586	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09062	103.3595	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08949	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09059	103.3404	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08586	103.3236	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09635	103.2897	DBL-BVR-WWRD
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07196	103.2221	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	103.118	SPP-SWPS-02A
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	103.068	GEN520922 1-SLEEPING BEAR
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07653	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09421	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08201	102.2144	SPP-SWPS-01
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08187	102.1659	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08357	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	101.9989	GEN525562 1-TOLK GEN #2 24 KV
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	101.8299	1
FDNS	02ALL</td									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08666	101.2821	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.081	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	100.9769	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07399	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09017	100.5996	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	100.5602	GEN560121 1-G08-47 0.5750
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07086	100.5484	WOODWARD - WOODWARD EHV 138KV CKT 1
FDNS	2		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07409	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08657	100.4201	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07185	100.4185	IMO TAP - MEN TAP 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08657	100.2435	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	100.1122	SPP-SWPS-04
FDNS	01ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09027	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08181	99.8	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07185	99.7	CLEO CORNER - MEN TAP 138KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09627	99.5	DBL-BVR-WWRD
FDNS	03ALL		0	14G	G11_019	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08042	99.5	MINGO - SETAB 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03325	114.7415	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03735	113.6077	DBL-THIS-WWR
FDNS	01ALL		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03012	106.5445	DBL-WICH-THI
FDNS	01G11_019		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03321	104.7787	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_019		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03736	103.3202	DBL-THIS-WWR
FDNS	01NR		0	14G	G11_019	TO->FROM GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.04423	99.6	DBL-THIS-WWR
FDNS	3		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04691	210.9694	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04675	196.4738	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04731	184.9343	DBL-WICH-THI
FDNS	01G11_019		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04735	175.7798	DBL-WICH-THI
FDNS	2		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04699	171.6329	DBL-WICH-THI
FDNS	01NR		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05296	169.8752	DBL-WICH-THI
FDNS	1		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04736	163.6954	DBL-WICH-THI
FDNS	04ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04725	134.8716	DBL-WICH-THI
FDNS	4		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04732	126.1269	DBL-WICH-THI
FDNS	06ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04727	122.5025	DBL-WICH-THI
FDNS	6		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04734	116.7585	DBL-WICH-THI
FDNS	00G11_019		0	19WP	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04769	116.0942	DBL-WICH-THI
FDNS	00G11_019		0	14WP	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04695	111.9553	DBL-WICH-THI
FDNS	09ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04735	108.0581	DBL-WICH-THI
FDNS	9		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04741	105.8323	DBL-WICH-THI
FDNS	13		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04747	102.5236	DBL-WICH-THI
FDNS	13ALL		0	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04749	102.4117	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_019	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03317	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_019	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03317	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3		0	14G	G11_019	TO->FROM MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03369	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	03ALL		0	14G	G11_019	- Non-converged Contingency	-	0.24973	-	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_019	TO->FROM NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.37178	101.6493	DBL-THIS-WWR
FDNS	01ALL		0	14G	G11_019	TO->FROM ROMAN NOSE - SOUTHARD 138KV CKT 1	153	0.03973	105.9216	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	04ALL		0	14G	G11_019	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03426	104.9034	DBL-WICH-THI
FDNS	3		0	14G	G11_019	FROM->TO SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03381	101.6027	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_019	FROM->TO SPSSPPTIESB1	620	0.10991	126.0236	BASE CASE
FDNS	02ALL		0	14G	G11_019	FROM->TO SPSSPPTIESC	620	0.10991	126.0236	BASE CASE
FDNS	00G11_019		0	24SP	G11_019	FROM->TO TUO INTERCHANGE (GE_M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.04918	102.2854	TUO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
FDNS	00G11_019		0	24SP	G11_019	FROM->TO TUO INTERCHANGE (GE_M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.04918	101.2371	TUO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
FDNS	00G11_019		0	24SP	G11_019	FROM->TO TUO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	560	0.04853	101.0323	TUO INTERCHANGE (GE_M1022338) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00G11_019		0	24SP	G11_019	FROM->TO TUO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	560	0.04853	99.9	TUO INTERCHANGE (GE_M1022338) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	09ALL		2	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04735	108.0525	DBL-WICH-THI
FDNS	9		2	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.04741	105.8302	DBL-WICH-THI
FDNS	01NR		3	14G	G11_019	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05251	158.3447	DBL-WICH-THI
FDNS	01NR		3	14G	G11_019	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.05251	168.8052	DBL-WICH-THI
FDNS	3		0	14G	G11_020	TO->FROM CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.03982	107.3062	DBL-WICH-THI
FDNS	3		0	14G	G11_020</					

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01NR		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05296	159.425	DBL-WICH-THI
FDNS	1		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04736	153.2095	DBL-WICH-THI
FDNS	04ALL		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04725	124.3736	DBL-WICH-THI
FDNS	4		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04732	115.616	DBL-WICH-THI
FDNS	06ALL		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04727	111.9227	DBL-WICH-THI
FDNS	6		0	14G	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04734	106.1801	DBL-WICH-THI
FDNS	00G11_020		0	19WP	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04769	104.6811	DBL-WICH-THI
FDNS	00G11_020		0	14WP	G11_020	TO->FROM CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04695	101.7215	DBL-WICH-THI
FDNS	01ALL		0	14G	G11_020	TO->FROM EL RENO - ROMAN NOSE 138KV CKT 1	153	0.03973	102.4803	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.11404	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.12323	111.3114	DBL-THIS-WWR
FDNS	01G11_020		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.1139	107.4351	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_020		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.12322	101.3255	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.11276	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_020	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.10115	100.6018	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11276	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10012	171.5111	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12227	171.4127	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11276	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11404	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_020		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1139	160.6374	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12323	155.3323	DBL-THIS-WWR
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1127	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11289	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_020		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12322	148.6302	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08937	145.4261	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08172	144.5746	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09324	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09324	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	141.0899	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08034	140.5843	SPP-SWPS-03
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	139.7753	SPP-SWPS-05
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08261	139.6941	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	139.4402	GEN520997 1-MORLND2
FDNS	1		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11382	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10031	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1127	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11289	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	136.1179	SPP-SWPS-02A
FDNS	01NR		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.13208	135.7346	DBL-THIS-WWR
FDNS	01ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10115	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10032	133.9212	DBL-WICH-THI
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12252	133.505	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	133.1324	GEN520998 1-MORLND3
FDNS	01G11_020		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10109	132.8045	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08937	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07995	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	131.8675	BASE CASE
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08172	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08032	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08187	129.0538	SPP-SWPS-01
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0905	128.9448	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08172	128.9376	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09048	128.9223	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08432	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT				

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08933	122.3906	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08945	121.417	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07958	120.9713	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08193	120.8931	SPP-SWPS-04
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08193	120.856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08097	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	120.2552	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07405	119.9939	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0805	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08047	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	119.8142	GEN514805 1-SOONER UNIT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	119.8124	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	119.6035	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08602	119.5036	BORDER 7345.00 - TUOCO INTERCHANGE 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07958	119.1732	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.9611	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0805	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09319	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08064	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07847	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08026	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08062	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08278	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09333	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0808	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08148	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08008	117.406	SPP-MKEC-08
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08021	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07962	117.0442	SMOKYHIL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07994	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07963	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09319	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08148	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09333	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.10105	114.425	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	113.9504	GEN520998 1-MORLND3
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08048	113.3303	SPP-SWPS-03
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	113.2049	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	113.1874	GEN520998 1-MORLND3
FDNS	01G11_020		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09017	113.167	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09635	113.0572	DBL-HTCH-BVR
FDNS	3		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11291	112.9197	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01G11_020		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	112.8994	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	112.5524	LYDIA - VALLIANT 345KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07904	112.5496	SPP-AEPW-01
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07835	112.4529	DOVER - TWIN LAKES 138KV CKT 1
FDNS	01ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09027	112.4236	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	112.4015	GEN515365 1-CENT 21 34.500
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07835	112.3492	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0802	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07898	112.1517	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_020	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	112.1236	GEN524295 1-SPNSPUR_WND10.6900
FDNS	02ALL									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07756	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	111.5464	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3598	GEN645011 1-NEBRASKA CITY 1
FNSL	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08428	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08428	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07843	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07843	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	110.4585	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	110.1417	SPP-SWPS-02A
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07534	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07844	109.1922	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09627	109.048	DBL-HTCH-BVR
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	108.6903	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	108.5759	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08085	108.5709	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08933	108.4548	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08181	108.3232	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07939	107.9284	BASE CASE
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08945	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0767	107.875	DEWEY - SOUTHARD 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.1139	107.6413	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07538	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08006	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0795	107.1622	BASE CASE
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07966	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	107.0735	GEN560286 1-G10-01-1WTG 0.6900
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	107.0735	GEN560287 1-G10-01-2WTG 0.6900
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.9567	GEN659118 1-LARAMIE RIVER UNIT1</td

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08042	106.2982	SPP-SWPS-03
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07534	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07642	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0941	105.9261	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	105.912	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07538	105.7916	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	105.6278	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09134	105.5933	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09131	105.564	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	105.4641	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07399	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07441	104.6457	DOVER SW - OKEENE 138KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.602	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08187	104.6006	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07282	104.5851	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.5662	SPP-SWPS-02
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	104.5568	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	3	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07953	104.5519	GEN520997 1-MORLND2
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	104.3621	SPP-SWPS-05
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08271	104.3028	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0941	104.2732	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09421	103.9792	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08046	103.8348	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07998	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09127	103.7402	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09125	103.7134	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08442	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08442	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08085	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08586	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09062	103.3595	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08949	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09059	103.3404	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08586	103.3236	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09635	103.2897	DBL-BVR-WWRD
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07196	103.2221	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0804	103.118	SPP-SWPS-02A
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	103.068	GEN520922 1-SLEEPING BEAR
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07653	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09421	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08201	102.2144	SPP-SWPS-01
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08187	102.1659	OAKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08357	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07943	101.9989	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	101.8299	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08262	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08262	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	00G11_020	0	19SP	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.12505	101.5752	DBL-THIS-WWR
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08014	101.5677	BASE CASE
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.11404	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08022	101.5169	BASE CASE
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08666	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07086	100.5484	WOODWARD - WOODWARD EHV 138KV CKT 1
FDNS	2	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07409	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08657	100.4201	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07185	100.4185	IMO TAP - MEN TAP 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08657	100.2435	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	100.1122	SPP-SWPS-04
FDNS	01ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09027	100	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0818	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08181	99.8	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07185	99.7	CLEO CORNER - MEN TAP 138KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.09627	99.5	DBL-BVR-WWRD
FDNS	03ALL	0	14G	G11_020	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.08042	99.5	MINGO - SETAB 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03325	114.7415	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03735	113.6077	DBL-THIS-WWR
FDNS	01ALL	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03012	106.5445	DBL-WICH-THI
FDNS	01G11_020	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03321	104.7787	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_020	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.03736	103.3202	DBL-THIS-WWR
FDNS	01NR	0	14G	G11_020	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.04423	99.6	DBL-THIS-WWR
FDNS	3	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04691	210.9694	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04675	196.4738	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04731	184.9343	DBL-WICH-THI
FDNS	01G11_020	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04735	175.7798	DBL-WICH-THI
FDNS	2	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04699	171.6329	DBL-WICH-THI
FDNS	01NR	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.05296	169.8752	DBL-WICH-THI
FDNS	1	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04736	163.6954	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04725	134.8716	DBL-WICH-THI
FDNS	4	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04732	126.1269	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04727	122.5025	DBL-WICH-THI
FDNS	6	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04734	116.7585	DBL-WICH-THI
FDNS	00G11_020	0	19WP	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04769	116.0942	DBL-WICH-THI
FDNS	00G11_020	0	14WP	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04695	111.9553	DBL-WICH-THI
FDNS	09ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04735	108.0581	DBL-WICH-THI
FDNS	9	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04741	105.8323	DBL-WICH-THI
FDNS	13	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04747	102.5236	DBL-WICH-THI
FDNS	13ALL	0	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04749	102.4117	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_020	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03317	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_020	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03317	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_020	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03369	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	03ALL	0	14G	G11_020	-	Non-converged Contingency	-	0.24973	-	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_020	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.37178	101.6493	DBL-THIS-WWR
FDNS	01ALL	0	14G	G11_020	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1	153	0.03973	105.9216	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	04ALL	0	14G	G11_020	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03426	104.9034	DBL-WICH-THI
FDNS	3	0	14G	G11_020	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03381	101.6027	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_020	FROM->TO	SPSSPPTIESB1	620	0.10991	126.0236	BASE CASE
FDNS	02ALL	0	14G	G11_020	FROM->TO	SPSSPPTIESC	620	0.10991	126.0236	BASE CASE
FDNS	00G11_020	0	24SP	G11_020	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.04918	102.2854	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
FDNS	00G11_020	0	24SP	G11_020	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.04918	101.2371	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
FDNS	00G11_020	0	24SP	G11_020	FROM->TO	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	560	0.04853	101.0323	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	00G11_020	0	24SP	G11_020	FROM->TO	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	560	0.04853	99.9	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	09ALL	2	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04735	108.0525	DBL-WICH-THI
FDNS	9	2	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04741	105.8302	DBL-WICH-THI
FDNS	01NR	3	14G	G11_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.05251	158.3447	DBL-WICH-THI
FDNS	01NR	3	14G	G11_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.05251	168.8052	DBL-WICH-THI
FDNS	3	0	14G	G11_022	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.04753	107.3062	DBL-WICH-THI
FDNS	3	0	14G	G11_022	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.04236	108.4745	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_022	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.0422	100.178	DBL-WICH-THI
FDNS	3	0	14G	G11_022	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04236	200.5164	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_022	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.0422	186.1623	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_022	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04276	174.5251	DBL-WICH-THI
FDNS	02G11_022	0	14G	G11_022	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.04233	173.7814	DBL-WICH-THI
FDNS	2	0	14G	G11_022	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.		

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL		0	14G	G11_022	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.0796	117.5663	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_022	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.07984	111.3114	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_022	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.07831	100.6585	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_022	FROM->TO FPL SWITCH - MOORELAND 138KV CKT 1	287	0.07303	100.6018	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07831	180.1986	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07201	171.5111	DBL-WICH-THI
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07888	171.4127	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07831	168.7142	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0796	168.0709	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07837	164.1974	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07984	155.3323	DBL-THIS-WWR
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0721	154.4335	DBL-WICH-THI
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07837	152.306	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.079	151.2082	DBL-THIS-WWR
FDNS	03ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07825	150.5079	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	2		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07844	149.1543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06042	145.4261	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05827	144.5746	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06333	143.2695	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06333	141.6454	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06391	141.0899	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06095	140.5843	SPP-SWPS-03
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	140.4089	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	140.3859	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06391	139.7753	SPP-SWPS-05
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06391	139.6941	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	139.4402	GEN520997 1-MORLND2
FDNS	1		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07937	139.3277	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	139.0617	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	2		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07219	138.4576	DBL-WICH-THI
FDNS	03ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07825	137.4811	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07844	136.7268	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	136.1179	SPP-SWPS-02A
FDNS	01ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07303	135.6533	DBL-WICH-THI
FDNS	3		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07221	133.9212	DBL-WICH-THI
FDNS	2		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07913	133.505	DBL-THIS-WWR
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	133.1324	GEN520998 1-MORLND3
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06046	132.7754	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06042	132.452	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05742	132.3451	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	131.8675	BASE CASE
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05827	131.4121	SPP-AEPW-32
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	130.4767	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	130.4648	SPP-SWPS-02
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06085	130.4448	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06337	129.8049	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	129.0564	GEN520997 1-MORLND2
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05827	129.0538	SPP-SWPS-01
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06016	128.9448	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05827	128.9376	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05833	128.9281	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06015	128.9223	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06337	128.086	DEWEY - IODINE 138KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05799	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02ALL		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05799	127.8347	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06101	126.3315	SPP-SWPS-03
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	126.2983	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_022		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	126.2842	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	3		0	14G	G11_022	TO->FROM FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07846	125.6543	NORTHWEST - TATONGA7 345.00 345KV CKT 1
FDNS	1									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	122.1588	SPP-SWPS-02A
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06394	121.7857	SPP-SWPS-05
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06394	121.7162	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06051	121.417	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05522	120.9713	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05905	120.8931	SPP-SWPS-04
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05905	120.856	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05557	120.7628	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05361	120.2552	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04965	119.9939	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05491	119.9356	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05555	119.8771	MINGO - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	119.8142	GEN514805 1-SOONER UNIT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05551	119.8124	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05372	119.6035	GEN520997 1-MORLND2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06046	119.5166	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05551	119.5036	BORDER 7345.00 - TUOC INTERCHANGE 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05522	119.1732	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05747	119.0758	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	118.9611	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05491	118.8209	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	118.7534	BASE CASE
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06328	118.6908	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05571	118.5248	MINGO - RED WILLOW 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05303	118.4578	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	118.4511	GEN520922 1-SLEEPING BEAR
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05519	118.1994	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05427	118.1913	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05547	118.1524	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	118.0648	GEN514806 1-SOONER UNIT 2
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06342	117.8446	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05496	117.6385	BENTON - WICHITA 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05505	117.4729	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05833	117.4106	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05416	117.406	SPP-MKEC-08
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05447	117.1404	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05397	117.0442	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05412	117.0326	FLATRDG3 - HARPER 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05393	116.9405	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06328	116.9205	DEWEY - IODINE 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	116.839	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	116.8036	SPP-SWPS-02
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06091	116.7968	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	116.7018	CONWAY SUB - NICHOLS STATION 115KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05359	116.6529	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05505	116.6068	FARGO JCT - FT SUPPLY 69KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06342	116.1177	DEWEY - IODINE 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06022	115.2509	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05804	115.2386	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05804	115.2386	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06021	115.229	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05833	114.9324	SPP-SWPS-01
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05833	114.8515	OKLAUNION - TUOC INTERCHANGE 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	114.6299	NC1_GEN-NEBRASKA CITY 1
FDNS	1	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.07294	114.425	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05361	113.9504	GEN520998 1-MORLND3
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06109	113.3303	SPP-SWPS-03
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06099	113.2228	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06099	113.2049	ELK CITY 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05409	112.3355	IODINE - MOORELAND 138KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06099	112.2831	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05328	112.1517	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	112.1236	GEN524295 1-SPNSPUR_WND10.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05161	112.0362	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	112.0027	GEN542957 1-IATAN UNIT #1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.8334	GEN562023 1-G11_020_3 0.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.8334	GEN562026 1-G11_019_3 0.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.7652	GEN523461 1-BLACKHAWK GEN #1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.7137	GEN523462 1-BLACKHAWK GEN #2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.7055	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.6514	GEN645001 1-FORT CALHOUN 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05238	111.5967	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.5854	GEN523201 1-EXCELN4-WTG10.6000
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05444	111.5464	GEN520997 1-MORLND2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.4836	EASTDC - WELSH 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.4608	GEN659111 2-LELAND OLDS UNIT2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.4251	GEN542962 2-IATAN UNIT #2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.3598	GEN645011 1-NEBRASKA CITY 1
FNSL	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.3028	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.3028	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.0494	GEN523122 1-NBLWND-WTG210.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.0197	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	111.0193	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.9875	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.9742	GEN523121 1-NBLWND-WTG110.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.9511	GEN527162 1-MUSTANG GEN #2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.951	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05794	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05794	110.9163	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.903	GEN560584 1-G06-44-2 4.1600
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.8801	GEN523107 1-NOVUS_WND 14.1600
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.8384	GEN523123 1-NBLWND-WTG310.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.7825	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05206	110.7202	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.6481	GEN645012 2-NEBRASKA CITY 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.6149	GEN526334 1-JONES_4 116.500
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.5257	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05206	110.5074	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.4974	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05444	110.4585	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.4285	GEN527163 1-MUSTANG GEN #3 22 KV
										POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05907	110.3516	1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.3171	GEN640009 1-COOPER NUCLEAR STATION
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06099	110.1417	SPP-SWPS-02A
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05305	110.0677	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	110.0595	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.9986	GEN560586 1-G06-44-4 4.1600
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.9628	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.9064	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05558	109.7551	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04967	109.6262	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.5963	GEN526331 1-JONES GEN #1 22 KV
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.5434	GEN560585 1-G06-44-3 4.1600
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05173	109.1922	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05161	109.0594	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	109.0246	GEN526332 1-JONES GEN #2 21 KV
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05161	108.6	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05527	108.0722	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05552	108.0573	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05361	107.9284	BASE CASE
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06051	107.8758	WOODWARD - WOODWARD 69KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05161	107.875	DEWEY - SOUTHARD 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05552	107.7727	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05495	107.7079	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	107.6373	GEN515787 1-OOKA WIND ENERGY CENTER
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05061	107.4887	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05306	107.3267	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05559	107.2471	MINGO - SETAB 345KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05753	107.234	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05372	107.1622	BASE CASE
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05339	107.1223	MOORELAND - TALOGA 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	107.1039	GEN520922 1-SLEEPING BEAR
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	107.0735	GEN560286 1-G10-01-1WTG 0.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	107.0735	GEN560287 1-G10-01-2WTG 0.6900
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.9567	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05431	106.8526	CIMARRON - NORTHWEST 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.8321	GEN560371 1-G07-46 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05495	106.7351	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.7195	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.7191	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.699	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05444	106.6933	GEN520922 1-SLEEPING BEAR
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	106.5461	GEN514806 1-SOONER UNIT 2
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.5149	GEN560256 1-G10-14-1 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05527	106.4065	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05061	106.3772	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	106.3203	GEN560257 1-G10-14-2 0.6900
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06104	106.2982	SPP-SWPS-03
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06093	106.2602	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05305	106.2522	ELK CITY - RED HILLS WIND 138KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06093	106.243	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05153	106.2423	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0555	106.2419	DEWEY - TALOGA 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05576	106.0622	MINGO - RED WILLOW 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04967	105.9287	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05499	105.8854	BENTON - WICHITA 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05509	105.8269	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05523	105.8262	HOLCOMB - SETAB 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05061	105.7916	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0542	105.7866	SPP-MKEC-08
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06401	105.6278	FINNEY SWITCHING STATION - HOLCOMB 345KV CKT 1
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	105.5933	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06099	105.564	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05416	105.4911	FLATRDG3 - HARPER 138KV CKT 1
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05444	105.4641	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06093	105.3974	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05451	105.378	AXTELL - POST ROCK 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.2874	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05397	105.277	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05362	105.2731	ELK CITY - FALCON ROAD 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	105.1127	GEN531447 1-HOLCOMB GENERATOR
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	104.774	GEN562042 1-G11_014_3 0.6900
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04958	104.7131	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04965	104.6457	DOVER SW - OKEENE 138KV CKT 1
FDNS	2	0	14G							

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05745	103.815	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05809	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05809	103.6482	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05545	103.6442	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05534	103.4332	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06028	103.3595	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06054	103.3463	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06027	103.3404	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05534	103.3236	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	103.2301	NC1_GEN-NEBRASKA CITY 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04854	103.2221	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.06093	103.118	SPP-SWPS-02A
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05164	102.5322	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0643	102.3447	DEWEY - IODINE 138KV CKT 1
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05841	102.2144	SPP-SWPS-01
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05842	102.1659	OKLAUNION - TUO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05626	102.1603	DEWEY - TALOGA 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	101.9989	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05891	101.8299	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05323	101.7017	DBL-THIS-CLR
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04562	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04562	101.6601	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0796	101.5283	TATONGA7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05444	101.5169	BASE CASE
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05615	101.4673	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	101.4141	GEN562017 1-G11_022_3 0.6900
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05615	101.2821	BORDER 7345.00 - TUO INTERCHANGE 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	101.2259	GEN560221 1-G07-62-1 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	101.2259	GEN560222 1-G07-62-2 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	101.2259	GEN560223 1-G07-62-3 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	101.2259	GEN560224 1-G07-62-4 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05361	101.213	CIMARRON - MATHWSN7 345.00 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05278	101.149	DOVER - TWIN LAKES 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	101.1399	GEN524295 1-SPNNSPUR_WND10.6900
FDNS	01ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05489	101.0475	FT SUPPLY - IODINE 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05278	101.0453	DOVER - DOVER SW 138KV CKT 1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	100.9769	GEN525561 1-TOLK GEN #1 24 KV
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.9472	GEN515365 1-CENT 21 34.500
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05332	100.9243	KNOBHILL (KNOBHL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.8565	GEN523461 1-BLACKHAWK GEN #1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04958	100.8471	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.8143	GEN523462 1-BLACKHAWK GEN #2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05412	100.8124	IODINE - MOORELAND 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.6118	EASTDC - WELSH 345KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.5658	GEN542957 1-IATAN UNIT #1
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05364	100.5602	GEN560121 1-G08-47 0.5750
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04785	100.5484	WOODWARD - WOODWARD EHV 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05241	100.4478	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	2	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04969	100.4377	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.4284	GEN515393 1-OGEWND2G
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04767	100.4185	IMO TAP - MEN TAP 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.3274	GEN645001 1-FORT CALHOUN 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.3259	GEN562023 1-G11_020_3 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.3259	GEN562026 1-G11_019_3 0.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.217	GEN523122 1-NBLWND-WTG210.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.1841	GEN659111 2-LELAND OLDS UNIT2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100.1635	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100	GEN523123 1-NBLWND-WTG310.6900
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100	GEN542962 2-IATAN UNIT #2
FNSL	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100	GEN659103 1-ANTELOPE VALLEY UNIT1
FNSL	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	100	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05891	100	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05836	99.8	SPP-AEPW-32
FDNS	02ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.04767	99.7	CLEO CORNER - MEN TAP 138KV CKT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.7	GEN526334 1-JONES_4 116.500
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.7	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.7	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.6	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.6	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.6	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05368	99.5	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	02G11_022	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.0521	99.5	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.05549	99.5	MINGO - SETAB 345KV CKT 1
FDNS	3	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04236	210.9694	DBL-WICH-THI
FDNS	02ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0422	196.4738	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04276	184.9343	DBL-WICH-THI
FDNS	02G11_022	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04233	184.1837	DBL-WICH-THI
FDNS	2	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04244	171.6329	DBL-WICH-THI
FDNS	1	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04282	163.6954	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04271	134.8716	DBL-WICH-THI
FDNS	4	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04277	126.1269	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04272	122.5025	DBL-WICH-THI
FDNS	6	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04279	116.7585	DBL-WICH-THI
FDNS	00G11_022	0	19WP	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04231	113.2042	DBL-WICH-THI
FDNS	00G11_022	0	14WP	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0422	109.3574	DBL-WICH-THI
FDNS	09ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0428	108.0581	DBL-WICH-THI
FDNS	9	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04286	105.8323	DBL-WICH-THI
FDNS	13	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04292	102.5236	DBL-WICH-THI
FDNS	13ALL	0	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04294	102.4117	DBL-WICH-THI
						HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT				
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04837	115.2403	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04837	115.0209	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04837	112.7232	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04837	112.5896	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	109.5842	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	108.9591	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	107.9906	SPP-SWPS-04
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	107.3327	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	107.2796	SPP-SWPS-04
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.06397	106.8896	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04272	105.1393	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.05378	104.5018	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.05378	103.7886	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.04272	103.6102	MOORE COUNTY INTERCHANGE (ENRCO 136402) 230/115/13.2KV TRANSFORMER CKT
FDNS	0	0	24SP	G11_022	FROM->TO	1	288	0.04809	102.9614	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_022	FROM->TO	1	288	0.04809	102.7437	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	1	288	0.03961	102.738	BASE CASE

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03961	101.8976	BASE CASE
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03961	100.7013	GEN525562 1-TOLK GEN #2 24 KV
FDNS	0	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.04809	100.5896	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03943	100.5769	OCHILTREE - TRI COUNTY REC-COLE 115KV CKT 1
FDNS	0	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.04809	100.4259	HITCHLAND INTERCHANGE - OCHILTREE 230KV CKT 1
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03961	100.2033	GEN525562 1-TOLK GEN #2 24 KV
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.07765	99.6	DBL-BVR-WWRD
FDNS	00G11_022	0	24SP	G11_022	FROM->TO	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.03961	99.5	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.04249	131.5083	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.04249	110.3108	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03091	106.8827	DBL-SPRVL-CL
FDNS	03ALL	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03062	104.4069	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.043	103.9805	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	0	14G	G11_022	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	398	0.03142	102.4571	DBL-IRON-CLR
FNSL-Blown up	3	0	14G	G11_022	-	Non-converged Contingency	-	0.03542	-	DBL-THIS-CLR
FNSL-Blown up	02ALL	0	14G	G11_022	-	Non-converged Contingency	-	0.4947	-	DBL-BVR-WWRD
FNSL-Blown up	02G11_022	0	14G	G11_022	-	Non-converged Contingency	-	0.49525	-	DBL-BVR-WWRD
FNSL-Blown up	03ALL	0	14G	G11_022	-	Non-converged Contingency	-	0.22161	-	DBL-WICH-THI
FNSL-Blown up	03ALL	0	14G	G11_022	-	Non-converged Contingency	-	0.03424	-	DBL-IRON-CLR
FNSL-Blown up	03ALL	0	14G	G11_022	-	Non-converged Contingency	-	0.03424	-	DBL-THIS-CLR
FDNS	01ALL	0	14G	G11_022	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1	1195	0.25724	101.6493	DBL-THIS-WWR
FDNS	04ALL	0	14G	G11_022	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.0408	104.9034	DBL-WICH-THI
FDNS	3	0	14G	G11_022	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.04035	101.6027	DBL-WICH-THI
FDNS	04ALL	0	14G	G11_022	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.03017	100.846	AXTELL - POST ROCK 345KV CKT 1
FDNS	02ALL	0	14G	G11_022	FROM->TO	SPSSPPTIESB1	620	0.31903	126.0236	BASE CASE
FDNS	02G11_022	0	14G	G11_022	FROM->TO	SPSSPPTIESB1	620	0.31945	109.6685	BASE CASE
FDNS	02ALL	0	14G	G11_022	FROM->TO	SPSSPPTIESC	620	0.31903	126.0236	BASE CASE
FDNS	02G11_022	0	14G	G11_022	FROM->TO	SPSSPPTIESC	620	0.31945	109.6685	BASE CASE
FDNS	00NR	0	24SP	G11_022	FROM->TO	TUXFRR345230	300	0.17657	101.5095	BASE CASE
FDNS	09ALL	2	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.0428	108.0525	DBL-WICH-THI
FDNS	9	2	14G	G11_022	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.04286	105.8302	DBL-WICH-THI

I: Power Flow Analysis (Category "C" Contingencies)

Available on request