



**Definitive Interconnection  
System Impact Study for  
Generation Interconnection  
Requests**

**(DISIS-2011-002-3)**

**December 2013  
Revised January 2014**

**Generation Interconnection**

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## Revision History

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Date	Author	Change Description
01/31/2012	SPP	Report Issued (DISIS-2011-002)
06/14/2012	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-002-1)
02/01/2013	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-002-2)
12/31/2013	SPP	Account for Withdrawn Projects, Report Re-Posted (DISIS-2011-002-3)
01/08/2013	SPP	Report Re-Posted (DISIS-2011-002-3) revised for appendix error

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## Executive Summary

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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 September 30, 2011. The customers will be referred to in this study as the DISIS-2011-002 Interconnection Customers. This System Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling approximately 2,004.1 MW of new generation which would be located within the transmission systems of American Electric Power-West (AEPW), Nebraska Public Power District (NPPD), Oklahoma Gas and Electric (OKGE), Omaha Public Power District (OPPD), Southwestern Public Service (SPS), Sunflower Electric Power Corporation/Mid-Kansas Electric Power LLC (SUNC)/(MKEC), Westar Energy (WERE), and Western Farmers Electric Cooperative (WFEC). The various generation interconnection requests have differing proposed in-service dates<sup>1</sup>. 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-2011-002 study and/or higher queued projects withdrawing.

Power flow analysis has indicated that for the power flow cases studied, 2,004.1 MW 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-2011-002 interconnection customers is \$271,890,270. These costs are shown in Appendix E and F. Interconnection Service to

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<sup>1</sup> 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-2011-002 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

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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 September 30, 2011. The customers will be referred to in this study as the DISIS-2011-002 Interconnection Customers. This System Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 2,004.1 MW of new generation which would be located within the transmission systems of American Electric Power-West (AEPW), Nebraska Public Power District (NPPD), Oklahoma Gas and Electric (OKGE), Omaha Public Power District (OPPD), Southwestern Public Service (SPS), Sunflower Electric Power Corporation/Mid-Kansas Electric Power LLC (SUNC)/(MKEC), Westar Energy (WERE), and Western Farmers Electric Cooperative (WFEC). The various generation interconnection requests have differing proposed in-service dates<sup>2</sup>. 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-2011-002 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.

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<sup>2</sup> The generation interconnection requests in-service dates will need to be deferred based on the required lead time for the Network Upgrades necessary. The Interconnection Customer's that proceed to the Facility Study will be provided a new in-service date based on the competition of the Facility Study.

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# Model Development

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## Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Definitive Interconnection System Impact Study Agreement no later than September 30, 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 Study is a single Affected System Study, located on the Golden Spread Electric Cooperative, Inc. (GSEC) system, which shares connections to the SPS system. The Affected System Study Requests has been given the designations: ASGI-2011-004 (20 MW, POI is Pleasant Hill 69kV).

## 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-2011-002 Customers have not been assigned acceleration costs for the below listed projects. The DISIS-2011-002 Customers Generation Facilities in service dates may need to be delayed until the completion of the following upgrades. If for some reason, construction

on these projects is discontinued, additional restudies will be needed to determine the interconnection needs of the DISIS Interconnection Customers.

- Hitchland 230/115kV area projects<sup>3</sup>:
  - Hitchland – Ochiltree 230kV Project, (placed in-service 2013)
- Balanced Portfolio Projects<sup>4</sup>:
  - Woodward – Border – TUCO 345kV project, scheduled for 5/19/2014 in-service
    - Woodward 345/138kV circuit #2 autotransformer
    - TUCO 345/138kV circuit #2 autotransformer
    - Reactors at Woodward and Border
  - 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 Projects<sup>5</sup>:
  - Hitchland – Woodward double circuit 345kV, scheduled for 6/30/2014 in-service
    - Hitchland 345/230kV circuit #2 autotransformer
  - Woodward – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
  - Spearville – Clark double circuit 345kV, scheduled for 12/31/2014 in-service
  - Clark – Thistle double circuit 345kV, scheduled for 12/31/2014 in-service
  - Thistle – Wichita double circuit 345kV, scheduled for 12/31/2014 in-service
  - Thistle 345/138kV autotransformer, scheduled for 12/31/2014 in-service
  - Thistle – Flat Ridge 138kV, scheduled for 12/31/2014 in-service
- Various MKEC Transmission System Upgrades<sup>6</sup>
  - Harper – Flat Ridge 138kV rebuild (placed in-service in 2013)
  - Flat Ridge – Medicine Lodge 138kV rebuild, scheduled for 12/31/2013 in-service
  - Pratt – Medicine Lodge 115kV rebuild, scheduled for 6/15/2014 in-service
  - 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-service<sup>7</sup>
- Woodward (OKGE) – Woodward (WFEC) 69kV rebuild, scheduled for 6/1/2015 in-service<sup>8</sup>
- Sheldon – SW7<sup>th</sup> and Pleasant Hill 115kV circuit #2 rebuild (placed in-service in 2013)<sup>9</sup>
- Moundridge 138/115/13.8kV autotransformer circuit #2, scheduled for 12/1/2014 in-service<sup>10</sup>

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<sup>3</sup> 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.

<sup>4</sup> Notice to Construct (NTC) issued June 2009.

<sup>5</sup> Notice to Construct (NTC) issued June 2010.

<sup>6</sup> SPP Transmission Service Projects identified in SPP-2007-AG3-AFS-9.

<sup>7</sup> SPP Transmission Service Project identified in SPP-2009-AG2-AFS6. Per SPP-NTC-20137.

<sup>8</sup> SPP Regional Reliability Project. Per SPP-NTC-20003.

<sup>9</sup> SPP Regional Reliability 2012 ITPNT Project. Per SPP-NTC-200171.

<sup>10</sup> SPP Regional Reliability 2012 ITP10 Project. Per SPP-NTC-200181.



## 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-2011-002 study and are assumed to be in service. This list may not be all inclusive. The DISIS-2011-002 Customers at this time do not have responsibility for these facilities but may later be assigned the cost of these facilities if higher queued customers terminate their GIA or withdraw from the interconnection queue. The DISIS-2011-002 Customer Generation Facilities in service dates may need to be delayed until the completion of the following upgrades.

- Upgrades assigned to ICS-2008-001 Interconnection Customers
  - Line Traps at Amarillo South – Swisher 230kV
- Upgrades assigned to DISIS-2009-001 Interconnection Customers:
  - Fort Dodge – North Fort Dodge – Spearville 115kV circuit #2
  - Albion – Petersburg – Neligh 115kV circuit #1 rerate (placed In-Service in 2011)
  - Fort Randall – Madison County – Kelly 230kV circuit #1 rerate (320MVA)
  - Spearville 345/115kV autotransformer circuit #1
- 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
  - Washita – Gracemont 138kV circuit #2 (placed In-Service in 2012)
- Upgrades assigned to DISIS-2010-002 Interconnection Customers:
  - Twin Church – Dixon County 230kV circuit #1 rerate (320MVA)
- Upgrades assigned to DISIS-2011-001 Interconnection Customers:
  - Beaver County – Buckner 345kV circuit #1 build
  - Tatonga – Matthewson - Cimarron 345kV circuit #2 build
    - Tatonga terminal equipment upgrade (1792 MVA)
  - Rice County – Circle 230kV conversion (placed In-Service in 2012)
  - Rice County – Lyons 115kV rebuild (placed In-Service in 2013)
  - Rice County 230/115kV autotransformer (placed In-Service in 2012)
  - Lyons – Wheatland 115kV rerate (199 MVA) (placed In-Service in 2012)
  - Hoskins – Dixon County – Twin Church 230kV circuit #1 rerate
  - (NRIS only) Spearville – Mullergren 230kV circuit #1 rebuild
  - (NRIS only) FPL Switch – Woodward - Mooreland 138kV circuit #1 rebuild
  - (NRIS only) Hitchland 230/115kV transformer circuit #2, build
  - (NRIS only) TUCO – New Deal 345kV Project , build

## 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.

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## Identification of Network Constraints

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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:

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

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

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

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

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

- Repeat previous for each responsible GI request for each Project

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

### Credits for Amounts Advanced for Network Upgrades

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

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## Required Interconnection Facilities

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The requirement to interconnect the 2,004.1 MW of generation into the existing and proposed transmission systems in the affected areas of the SPP transmission footprint consist of the necessary cost allocated shared facilities listed in Appendix F by upgrade. The interconnection requirements for the cluster total \$271,890,270. 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.

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## Power Flow Analysis

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### 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 NPPD, OKGE, SPS, SUNC, WFEC, and WERE transmission systems under system intact and contingency conditions in the peak seasons.

### Cluster Group 1 (Woodward Area)

In addition to the 4,230.7 MW of previously queued generation in the area, 404.4 MW of new interconnection service was studied. No new constraints were found in this area.

### Cluster Group 2 (Hitchland Area)

In addition to the 2,961.2 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 3 (Spearville Area)

In addition to the 3,837.9 MW of previously queued generation in the area, 480.0 MW of new interconnection service was studied. Power flow analysis indicates a need for G11-17T – Mullergren 345kV line and Mullergren 345/230kV transformer due to potential voltage collapse for the outage of the G11-17 Tap – Post Rock 345kV. NRIS analysis was performed and indicated Mullergren – Reno 345kV circuit 1 needs to be built due to the outage of Axtell – Post Rock 345kV line.

Group 3: ERS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
Non-converged Contingency	1793	-	G11-17T 345.00 - POST ROCK 345KV CKT 1

Group 3: NRIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
CIRCLE - MULLERGREN 230KV CKT 1	318.7	111.5813	AXTELL - POST ROCK 345KV CKT 1
SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	105.7997	AXTELL - POST ROCK 345KV CKT 1

### Cluster Group 4 (NW Kansas Group)

In addition to the 1,888.1 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 5 (Amarillo Area)

In addition to the 1,332.6 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 1,953.3 MW of previously queued generation in the area, 427.0 MW of new interconnection service was studied. With previously allocated network upgrades to higher queued customers included in the analysis, no new ERS constraints were found in this area. The replacement of the line traps on Jones – Lubbock South 230kV circuit 2 (in-service) relieved previously seen overloads on the circuit. NRIS analysis was performed and indicated the need for a second Lubbock South Interchange 230/115kV transformer for the outage of Jones Station – Lubbock East Interchange 230kV line, replacement of both Yoakum County Interchange 230/115kV transformers, and an overload of the Plant X transformer. The Plant X constraint is mitigated by an ITP Near Term project.

Group 6: NRIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	108.2174	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	115.1426	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1

YOAKUM COUNTY INTERCHANGE (PENN C010585) 230/115/13.2KV TRANSFORMER CKT 2	150	102.4271	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1
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**Cluster Group 7 (Southwestern Oklahoma)**

In addition to the 1,568.2 MW of previously queued generation in the area, 257.0 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 1,759.1 MW of previously queued generation in the area, 150.4 MW of new interconnection service was studied. No new constraints were found in this area.

**Cluster Group 9/10 (Nebraska)**

In addition to the 1,523.4 MW of previously queued generation in the area, 64.5 MW of new interconnection service was studied. Outlet issues require mitigation for GEN-2011-055 request in this group. The requirements to interconnect GEN-2011-055 include rebuilding and reconfiguration of the POI substation, as well as, replacement of some additional terminal equipment at other substations. Additionally, for interconnection customers that requested NRIS, a number of additional upgrades were identified.

Group 9: ERIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
SUB 967 - SUB 968 69KV CKT 1	47	102.0276	SUB 969 - SUB 974 69KV CKT 1
SUB 968 - SUB 969 69KV CKT 1	47	110.8602	SUB 969 - SUB 974 69KV CKT 1
SUB 969 - SUB 974 69KV CKT 1	47	111.9329	SUB 968 - SUB 969 69KV CKT 1
SUB 969 - SUB 974 69KV CKT 1	47	102.6711	SUB 967 - SUB 968 69KV CKT 1

Group 9: NRIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC%LOADING (% MVA)	CONTINGENCY
991 TAP - SUB 984 69KV CKT 1	65	108.5439	FREMONT SUB D - SUB 976 69KV CKT 1
HYDROCARBON TAP - SUB 974 69KV CKT 1	57	104.609	SUB 963 - SUB 977 69KV CKT 1
NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	108.3373	SUB 963 - SUB 977 69KV CKT 1
SUB 902 - SUB 984 69KV CKT 1	65	125.0543	FREMONT SUB D - SUB 976 69KV CKT 1

**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 285.8 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 14 (South Central Oklahoma)**

In addition to the 0.0 MW of previously queued generation in the area, 220.8 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)

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

### Cluster Group 3 (Spearville Area)

The Group 3 stability analysis for this restudy was performed by SPP Staff. 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 but the analysis from the prior study has been reported below. With the power factor requirements and all network upgrades in service, all interconnection requests in Group 3 will meet FERC Order #661A low voltage ride through (LVRT) requirements.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Power Factor Requirement at POI	
				Lagging (supplying)	Leading (absorbing)
GEN-2010-061	179.4	Siemens 2.3MW	Tap Spearville – Post Rock 345kV	0.95	0.95
GEN-2011-043	149.5	Siemens 2.3MW	Thistle 345kV	0.95	0.95
GEN-2011-044	149.5	Siemens 2.3MW	Thistle 345kV	0.95	0.95

\*As reactive power is required for all projects, the final requirement in the GIA will be the pro-forma 95% lagging to 95% leading at the point of interconnection.

### 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)**

The Group 7 stability analysis was not performed again for this restudy.

**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)**

There was no stability analysis conducted in the North Central Kansas area due to no requests in the area.

**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)**

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

**Cluster Group 14 (South Central Oklahoma)**

The Group 14 stability analysis was not performed again for this restudy.

**Cluster Group 15 (reserved)**

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

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## Conclusion

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The minimum cost of interconnecting 2,004.1 MW of new interconnection requests included in this Definitive Interconnection System Impact Study is estimated at \$271,890,270 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).

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# Appendix

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**A: Generation Interconnection Requests Considered for Impact Study**

See next page.

## **A: Generation Interconnection Requests Considered for 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-2011-004	20.00	ER	SPS	Pleasant Hill 69kV	Pleasant Hill 69kV		TBD
GEN-2010-061	180.00	ER/NR	SUNCMKEC	Tap Post Rock - Spearville 345kV	Tap Post Rock - Spearville (GEN-2011-017T) 345kV	12/31/2012	12/31/2014
GEN-2011-037	7.00	ER	WFEC	Blue Canyon 5 138kV	Blue Canyon 5 138kV	1/1/2012	
GEN-2011-040	111.00	ER/NR	OKGE	Pooleville 138kV	Tap Ratliff - Pooleville 138kV	12/31/2012	
GEN-2011-043	150.00	ER	SUNCMKEC	Thistle 345kV	Thistle 345kV	12/31/2013	12/31/2014
GEN-2011-044	150.00	ER/NR	SUNCMKEC	Thistle 345kV	Thistle 345kV	12/31/2014	12/31/2014
GEN-2011-045	205.00	ER/NR	SPS	Jones 230kV	Jones 230kV	6/1/2013	TBD
GEN-2011-046	27.00	ER/NR	SPS	Tucumcari 115kV	Lopez 115kV	6/1/2013	TBD
GEN-2011-048	175.00	ER/NR	SPS	Mustang 230kV	Mustang 230kV	3/1/2013	TBD
GEN-2011-049	250.00	ER/NR	OKGE	Border 345kV	Border 345kV	12/31/2013	TBD
GEN-2011-050	109.80	ER/NR	AEPW	Tap Rush Springs - Marlow 138kV	Rush Springs Natural Gas Tap	12/31/2013	
GEN-2011-051	104.40	ER/NR	OKGE	Tap Woodward - Tatonga 345kV	Tap Woodward - Tatonga 345kV	12/31/2013	12/31/2014
GEN-2011-054	300.00	ER	OKGE	Cimarron 345kV	Cimarron 345kV	11/30/2013	12/31/2014
GEN-2011-055	52.80	ER/NR	OPPD	South Sterling 69kV	South Sterling 69kV	12/31/2012	TBD
GEN-2011-056	3.60	ER	NPPD	Jeffrey 115kV	Jeffrey 115kV	6/30/2012	
GEN-2011-056A	3.60	ER	NPPD	John Lake 1 115kV	John 1 115kV	6/30/2012	
GEN-2011-056B	4.50	ER	NPPD	John Lake 2 115kV	John 2 115kV	6/30/2012	
GEN-2011-057	150.40	ER	WERE	Creswell 138kV	Creswell 138kV	12/31/2013	
<b>Total: 2,004.10</b>							

\*Requests that dependent upon Priority Projects or Balanced Portfolio may be delayed until 12/31/2014. Other requests in-service date to be determined after Facility Study.

## **B: Prior Queued Interconnection Requests**

See next page.

## **B: Prior Queued Interconnection Requests**

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
ASGI-2010-006	150.00	AECI	Tap Fairfax (AECI) - Shilder (AEPW) 138kV	AECI queue Affected Study
ASGI-2010-010	42.20	SPS	Lovington 115kV	Lea County Affected Study
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV	Lea County Affected Study
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV	Lea County Affected Study
ASGI-2011-001	28.80	SPS	Lovington 115kV	On-Line
ASGI-2011-002	20.00	SPS	Herring 115kV	On-Line
ASGI-2011-003	10.00	SPS	Hendricks 115kV	On-Line
GEN-2001-014	96.00	WFEC	Ft Supply 138kV	On-Line
GEN-2001-026	74.00	WFEC	Washita 138kV	On-Line
GEN-2001-033	180.00	SPS	San Juan Tap 230kV	On-Line at 120MW
GEN-2001-036	80.00	SPS	Norton 115kV	On-Line
GEN-2001-037	100.00	OKGE	FPL Moreland Tap 138kV	On-Line
GEN-2001-039A	105.00	SUNCMKEC	Tap Greensburg - Ft Dodge (Shooting Star Tap) 115kV	On-Line
GEN-2001-039M	100.00	SUNCMKEC	Central Plains Tap 115kV	On-Line
GEN-2002-004	200.00	WERE	Latham 345kV	On-Line at 150MW
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV	On-Line
GEN-2002-008	240.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2002-009	80.00	SPS	Hansford 115kV	On-Line
GEN-2002-022	240.00	SPS	Bushland 230kV	On-Line
GEN-2002-023N	0.80	NPPD	Harmony 115kV	On-Line
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV	On-Line
GEN-2003-004	100.00	WFEC	Washita 138kV	On-Line
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV	On-Line
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV	On-Line
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV	On-Line
GEN-2003-020	160.00	SPS	Martin 115kV	On-Line
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV	On-Line
GEN-2003-022	120.00	AEPW	Washita 138kV	On-Line
GEN-2004-005N	30.00	NPPD	St Francis 115kV	On Suspension
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV	On-Line at 100MW
GEN-2004-020	27.00	AEPW	Washita 34.5kV	On-Line
GEN-2004-023	20.60	WFEC	Washita 138kV	On-Line
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV	On-Line
GEN-2005-003	30.60	WFEC	Washita 138kV	On-Line
GEN-2005-008	120.00	OKGE	Woodward 138kV	On-Line
GEN-2005-012	250.00	SUNCMKEC	Ironwood 345kV	On-Line at 160MW
GEN-2005-013	201.00	WERE	Tap Latham - Neosho (Caney River) 345kV	On-Line
GEN-2006-002	101.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-006	205.50	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV	On-Line
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV	On-Line
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV	On-Line
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV	On-Line
GEN-2006-022	150.00	SUNCMKEC	RV Road 115kV	On Schedule for 2014
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV	On-Line
GEN-2006-026	604.00	SPS	Hobbs 230kV & Hobbs 115kV	On-Line
GEN-2006-031	75.00	MIDW	Knoll 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2006-035	225.00	AEPW	Sweetwater 230kV	On-Line at 132MW
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV	On Schedule for 2014
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV	On-Line
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV	On-Line
GEN-2006-040	108.00	SUNCMKEC	Mingo 115kV	On Suspension
GEN-2006-043	99.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-044	370.00	SPS	Hitchland 345kV	On-Line at 80MW
GEN-2006-044N	40.50	NPPD	North Petersburg 115kV	On-Line
GEN-2006-046	131.00	OKGE	Dewey 138kV	On-Line
GEN-2006-047	240.00	SPS	Tap Bushland - Deaf Smith (Buffalo) 230kV	On Suspension
GEN-2007-011	135.00	SUNCMKEC	Syracuse 115kV	On Suspension
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV	On-Line
GEN-2007-021	201.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-025	300.00	WERE	Viola 345kV	On-Line
GEN-2007-032	150.00	WFEC	Tap Clinton Junction - Clinton 138kV	On Schedule for 2013
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV	On-Line at 132MW
GEN-2007-043	200.00	OKGE	Minco 345kV	On-Line
GEN-2007-044	300.00	OKGE	Tatonga 345kV	On Schedule for 2014
GEN-2007-046	199.50	SPS	Hitchland 115kV	On Schedule for 2014
GEN-2007-048	400.00	SPS	Tap Amarillo S - Swisher 230kV	On Schedule for 2014
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV	On-Line at 150MW
GEN-2007-052	150.00	WFEC	Anadarko 138kV	On-Line
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV	On Schedule for 2014
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV	On-Line
GEN-2008-008	60.00	SPS	Graham 69kV	On Suspension
GEN-2008-013	300.00	OKGE	Tap Wichita - Woodring (Hunter) 345kV	On-Line at 235MW
GEN-2008-017	300.00	SUNCMKEC	Setab 345kV	On Schedule for 2015
GEN-2008-018	250.00	SPS	Finney 345kV	On Schedule for 2014
GEN-2008-019	300.00	OKGE	Tatonga 345kV	On Schedule for 2015
GEN-2008-021	42.00	WERE	Wolf Creek 345kV	On-Line
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Chaves County) 345kV	On Schedule for 2015
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV	On-Line
GEN-2008-029	250.50	OKGE	Woodward EHV 138kV	On Schedule for 2014
GEN-2008-037	101.00	WFEC	Tap Washita - Blue Canyon Wind 138kV	On-Line
GEN-2008-044	197.80	OKGE	Tatonga 345kV	On-Line
GEN-2008-047	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	IA Pending
GEN-2008-051	322.00	SPS	Potter County 345kV	On-Line at 161MW
GEN-2008-079	99.20	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV	On-Line
GEN-2008-086N02	200.00	NPPD	Tap Ft Randle - Columbus (Madison County) 230kV	On Schedule for 2014
GEN-2008-088	50.60	SPS	Vega 69kV	On Schedule for 2014
GEN-2008-092	201.00	MIDW	Post Rock 230kV	IA Pending
GEN-2008-098	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2008-1190	60.00	OPPD	S1399 161kV	On-Line
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline (Rosemont) 115kV	On Schedule for 2014
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV	On Schedule for 2016
GEN-2008-129	80.00	MIPU	Pleasant Hill 161kV	On-Line
GEN-2009-008	199.50	MIDW	South Hays 230kV	On Schedule for 2015
GEN-2009-020	48.60	MIDW	Tap Nekoma - Bazine (Walnut Creek) 69kV	On Schedule for 2015



Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2009-025	60.00	OKGE	Nardins 69kV	On-Line
GEN-2009-040	108.00	WERE	Marshall 115kV	On Schedule for 2015
GEN-2010-001	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	On Schedule for 2014 (204 MW) and 2015 (96 MW)
GEN-2010-003	100.80	WERE	Tap Lacygne - Wolf Creek (Anderson County) 345kV	On Schedule for 2015
GEN-2010-005	300.00	WERE	Viola 345kV	On-Line at 170MW
GEN-2010-006	205.00	SPS	Jones 230kV	On-Line
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV	On-Line
GEN-2010-011	29.70	OKGE	Tatonga 345kV	On Line
GEN-2010-014	358.80	SPS	Hitchland 345kV	On Schedule for 2016
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV	On Schedule for 2015
GEN-2010-020	20.00	SPS	Roswell 69kV	On Suspension
GEN-2010-036	4.60	WERE	6th Street 115kV	On-Line
GEN-2010-040	300.00	OKGE	Cimarron 345kV	On-Line
GEN-2010-041	10.50	OPPD	S 1399 161kV	IA Pending
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV	IA Pending
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV	On Schedule for 2016
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV	IA Pending
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV	On Schedule for 2014
GEN-2010-055	4.50	AEPW	Wekiwa 138kV	On-Line
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV	On Suspension
GEN-2010-057	201.00	MIDW	Rice County 230kV	On-Line
GEN-2010-058	20.00	SPS	Chaves County 115kV	On Suspension
GEN-2011-007	250.10	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV	On Schedule for 2014
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV	IA Pending
GEN-2011-010	100.80	OKGE	Minco 345kV	On-Line
GEN-2011-011	50.00	KACP	Iatan 345kV	On-Line
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	IA Pending
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV	IA Pending
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV	IA Pending
GEN-2011-018	73.60	NPPD	Steele City 115kV	On Schedule for 2013
GEN-2011-019	299.00	OKGE	Woodward 345kV	IA Pending
GEN-2011-020	299.00	OKGE	Woodward 345kV	IA Pending
GEN-2011-021	299.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV	IA Pending
GEN-2011-022	299.00	SPS	Hitchland 345kV	IA Pending
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV	On Suspension
GEN-2011-027	120.00	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)	IA Pending
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV	On-Line
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV	On-Line
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV	On-Line
NPPD Distributed (Burt County Wind)	12.00	NPPD	Tekamah & Oakland 115kV	On-Line
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV	On-Line
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV	On-Line
NPPD Distributed (Ord)	11.90	NPPD	Ord 115kV	On-Line
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV	On-Line
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV	On-Line
SPS Distributed (Etter)	20.00	SPS	Etter 115kV	On-Line
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV	On-Line
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV	On-Line
SPS Distributed (Monument)	10.00	SPS	Monument 115kV	On-Line
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV	On-Line
SPS Distributed (Ocotillo)	10.00	SPS	S_Jal 115kV	On-Line
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV	On-Line
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV	On-Line
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV	On-Line
<b>Total:</b>		<b>21,340.3</b>		

## **C: Study Groupings**

See next page

## C. Study Groups

<b>GROUP 1: WOODWARD AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
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-2008-019	300.00	OKGE	Tatonga 345kV
GEN-2008-029	250.50	OKGE	Woodward EHV 138kV
GEN-2008-044	197.80	OKGE	Tatonga 345kV
GEN-2010-011	29.70	OKGE	Tatonga 345kV
GEN-2010-040	300.00	OKGE	Cimarron 345kV
GEN-2011-007	250.10	OKGE	Tap Cimarron - Woodring (Mathewson) 345kV
GEN-2011-010	100.80	OKGE	Minco 345kV
GEN-2011-019	299.00	OKGE	Woodward 345kV
GEN-2011-020	299.00	OKGE	Woodward 345kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>4,230.70</b>		
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV
GEN-2011-054	300.00	OKGE	Cimarron 345kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>404.40</b>		
<b>AREA TOTAL</b>	<b>4,635.10</b>		

**GROUP 2: HITCHLAND AREA**

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2011-002	20.00	SPS	Herring 115kV
GEN-2002-008	240.00	SPS	Hitchland 345kV
GEN-2002-009	80.00	SPS	Hansford 115kV
GEN-2003-020	160.00	SPS	Martin 115kV
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV
GEN-2006-044	370.00	SPS	Hitchland 345kV
GEN-2007-046	199.50	SPS	Hitchland 115kV
GEN-2008-047	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2010-001	300.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2010-014	358.80	SPS	Hitchland 345kV
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2011-021	299.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (Beaver County) 345kV
GEN-2011-022	299.00	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
<b>PRIOR QUEUED SUBTOTAL</b>	<b>2,961.20</b>		
<b>AREA TOTAL</b>	<b>2,961.20</b>		

**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-2006-022	150.00	SUNCMKEC	RV Road 115kV
GEN-2007-038	200.00	SUNCMKEC	Spearville 345kV
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV
GEN-2008-018	250.00	SPS	Finney 345kV
GEN-2008-079	99.20	SUNCMKEC	Tap Cudahy - Ft Dodge 115kV
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV
GEN-2010-015	200.10	SUNCMKEC	Spearville 345kV
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV
GEN-2011-016	200.10	SUNCMKEC	Spearville 345kV
GEN-2011-017	299.00	SUNCMKEC	Tap Spearville - PostRock (GEN-2011-017T) 345kV
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>3,837.90</b>		
GEN-2010-061	180.00	SUNCMKEC	Tap Post Rock - Spearville (GEN-2011-017T) 345kV
GEN-2011-043	150.00	SUNCMKEC	Thistle 345kV
GEN-2011-044	150.00	SUNCMKEC	Thistle 345kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>480.00</b>		
<b>AREA TOTAL</b>	<b>4,317.90</b>		

**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
GEN-2010-057	201.00	MIDW	Rice County 230kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,888.10</b>		
<b>AREA TOTAL</b>	<b>1,888.10</b>		

**GROUP 5: AMARILLO AREA**

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2002-022	240.00	SPS	Bushland 230kV
GEN-2006-047	240.00	SPS	Tap Bushland - Deaf Smith (Buffalo) 230kV
GEN-2007-048	400.00	SPS	Tap Amarillo S - Swisher 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
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,332.60</b>		
<b>AREA TOTAL</b>	<b>1,332.60</b>		

<b>GROUP 6: S-TX PANHANDLE/W-TX AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
ASGI-2010-010	42.20	SPS	Lovington 115kV
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV
ASGI-2011-001	28.80	SPS	Lovington 115kV
ASGI-2011-003	10.00	SPS	Hendricks 115kV
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-2008-008	60.00	SPS	Graham 69kV
GEN-2008-022	300.00	SPS	Tap Eddy Co - Tolk (Chaves County) 345kV
GEN-2010-006	205.00	SPS	Jones 230kV
GEN-2010-020	20.00	SPS	Roswell 69kV
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV
GEN-2010-058	20.00	SPS	Chaves County 115kV
GEN-2011-025	82.30	SPS	Tap Floyd County - Crosby County 115kV
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
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,953.30</b>		
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV
GEN-2011-045	205.00	SPS	Jones 230kV
GEN-2011-046	27.00	SPS	Lopez 115kV
GEN-2011-048	175.00	SPS	Mustang 230kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>427.00</b>		
<b>AREA TOTAL</b>	<b>2,380.30</b>		

**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
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,568.20</b>		
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV
GEN-2011-049	250.00	OKGE	Border 345kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>257.00</b>		
<b>AREA TOTAL</b>	<b>1,825.20</b>		

**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
GEN-2010-055	4.50	AEPW	Wekiwa 138kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,759.10</b>		
GEN-2011-057	150.40	WERE	Creswell 138kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>150.40</b>		
<b>AREA TOTAL</b>	<b>1,909.50</b>		



<b>GROUP 9/10: NEBRASKA AREA</b>			
<b>Request</b>	<b>Capacity</b>	<b>Area</b>	<b>Proposed Point of Interconnection</b>
GEN-2002-023N	0.80	NPPD	Harmony 115kV
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV
GEN-2004-005N	30.00	NPPD	St Francis 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-2008-1190	60.00	OPPD	S1399 161kV
GEN-2008-123N	89.70	NPPD	Tap Guide Rock - Pauline (Rosemont) 115kV
GEN-2009-040	108.00	WERE	Marshall 115kV
GEN-2010-041	10.50	OPPD	S 1399 161kV
GEN-2010-051	200.00	NPPD	Tap Twin Church - Hoskins 230kV
GEN-2011-018	73.60	NPPD	Steele City 115kV
GEN-2011-027	120.00	NPPD	Tap Twin Church - Hoskins 230kV (GEN-2010-51 Tap)
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
<b>PRIOR QUEUED SUBTOTAL</b>	<b>1,523.40</b>		
GEN-2011-055	52.80	OPPD	South Sterling 69kV
GEN-2011-056	3.60	NPPD	Jeffrey 115kV
GEN-2011-056A	3.60	NPPD	John 1 115kV
GEN-2011-056B	4.50	NPPD	John 2 115kV
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>64.50</b>		
<b>AREA TOTAL</b>	<b>1,587.90</b>		

**GROUP 12: NW-AR AREA**

Request	Capacity	Area	Proposed Point of Interconnection
<b>AREA TOTAL</b>	<b>0.00</b>		

**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
GEN-2010-056	151.20	MIPU	Tap Saint Joseph - Cooper 345kV
GEN-2011-011	50.00	KACP	Iatan 345kV
<b>PRIOR QUEUED SUBTOTAL</b>	<b>285.80</b>		
<b>AREA TOTAL</b>	<b>285.80</b>		

**GROUP 14: S-OKLAHOMA AREA**

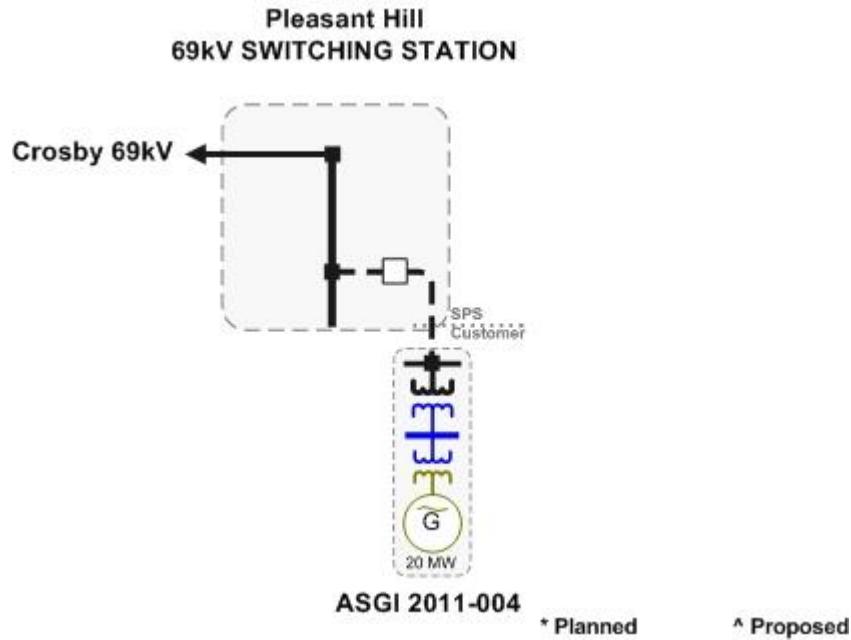
Request	Capacity	Area	Proposed Point of Interconnection
GEN-2011-040	111.00	OKGE	Tap Ratliff - Pooleville 138kV
GEN-2011-050	109.80	AEPW	Rush Springs Natural Gas Tap
<b>CURRENT CLUSTER SUBTOTAL</b>	<b>220.80</b>		
<b>AREA TOTAL</b>	<b>220.80</b>		

<b>CLUSTER TOTAL (CURRENT STUDY)</b>	<b>2,004.1</b>	<b>MW</b>
<b>PQ TOTAL (PRIOR QUEUED)</b>	<b>21,340.3</b>	<b>MW</b>
<b>CLUSTER TOTAL (INCLUDING PRIOR QUEUED)</b>	<b>23,344.4</b>	<b>MW</b>

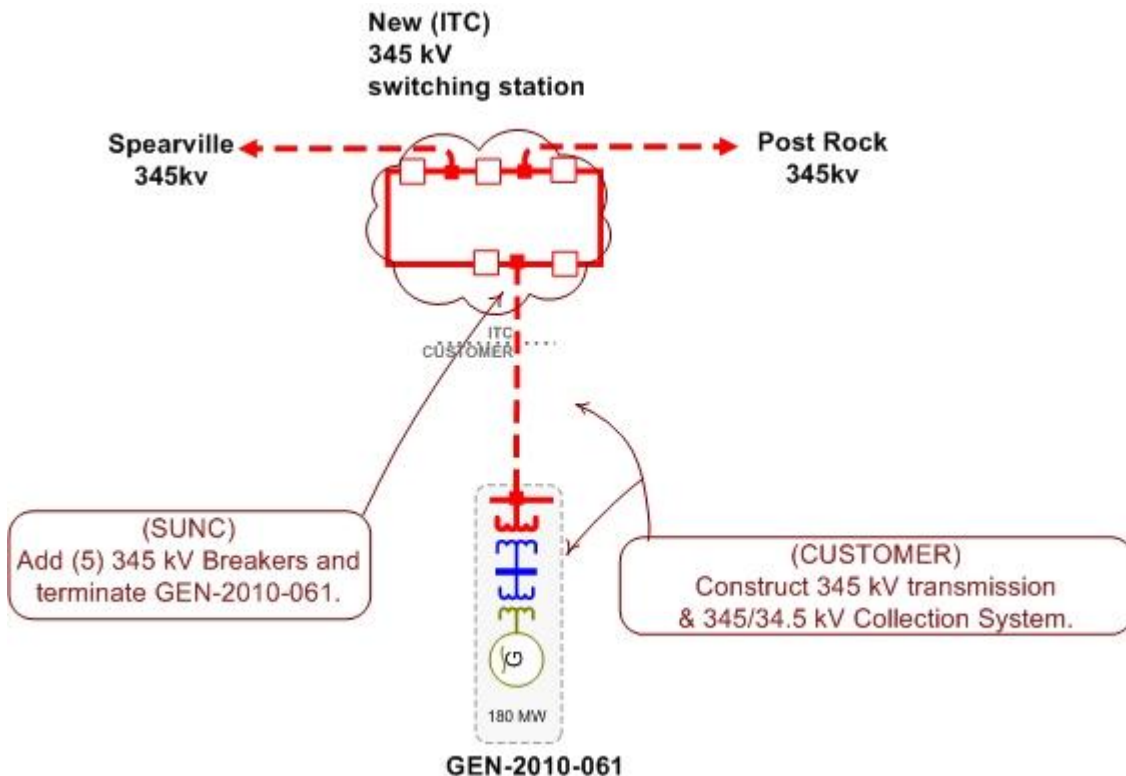
### D: Proposed Point of Interconnection One line Diagrams

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

**ASGI-2011-004**



**GEN-2010-061**



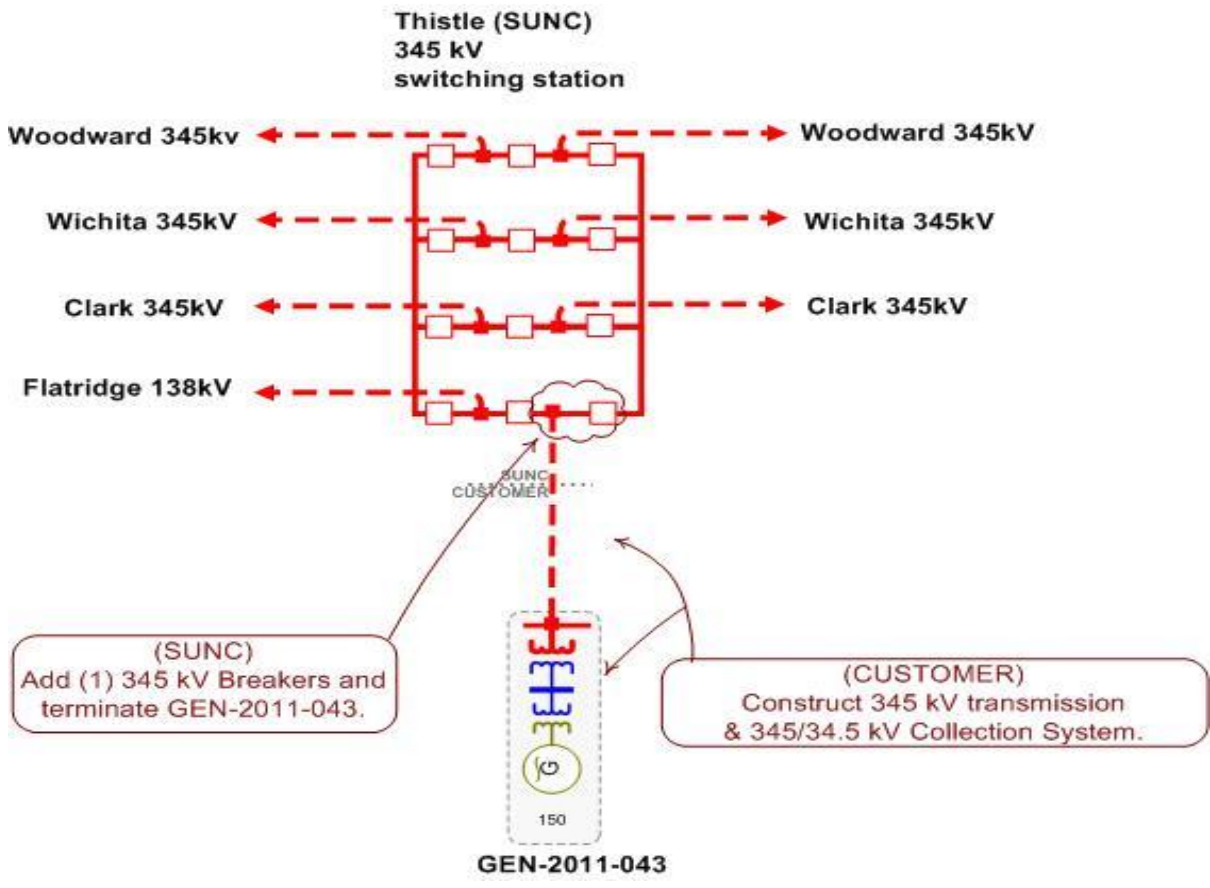
**GEN-2011-037**

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

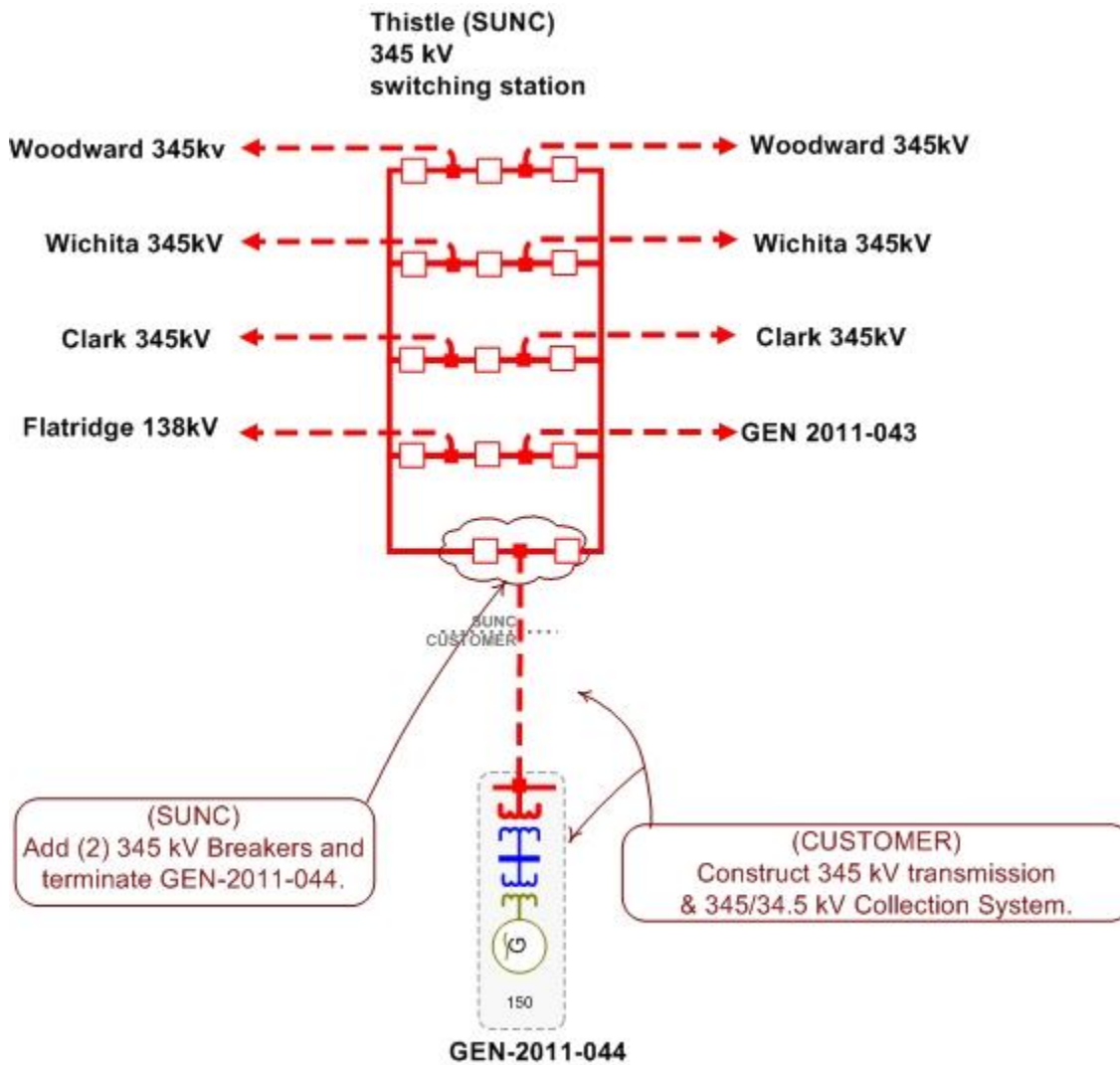
**GEN-2011-040**

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

**GEN-2011-043**



**GEN-2011-044**



**GEN-2011-045**

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

**GEN-2011-046**

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

**GEN-2011-048**

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

**GEN-2011-049**

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

**GEN-2011-050**

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

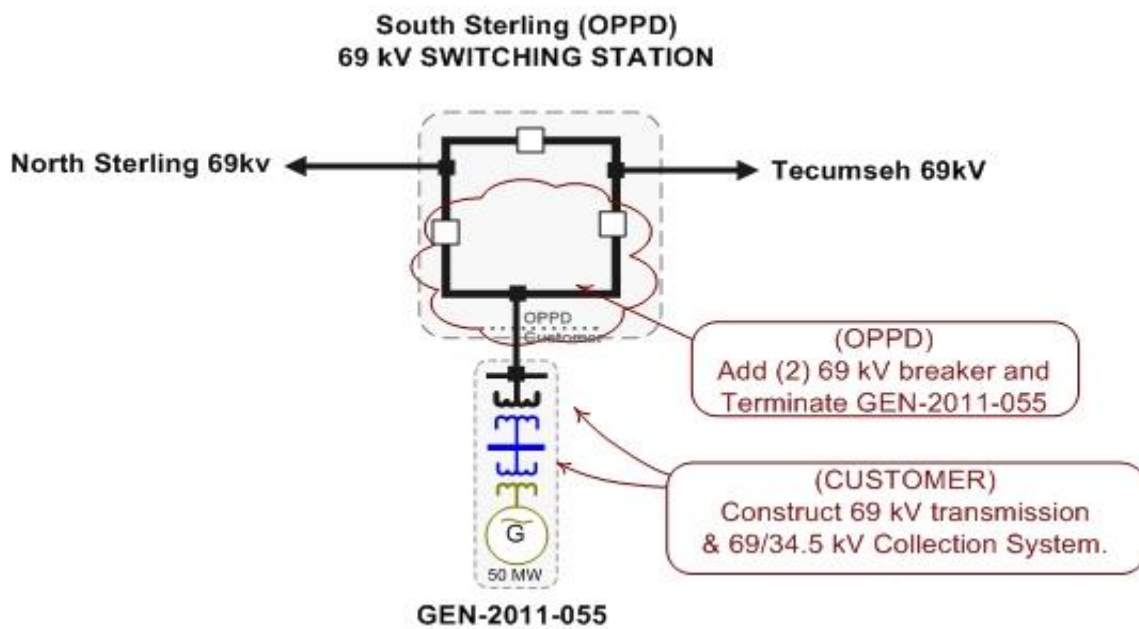
**GEN-2011-051**

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

**GEN-2011-054**

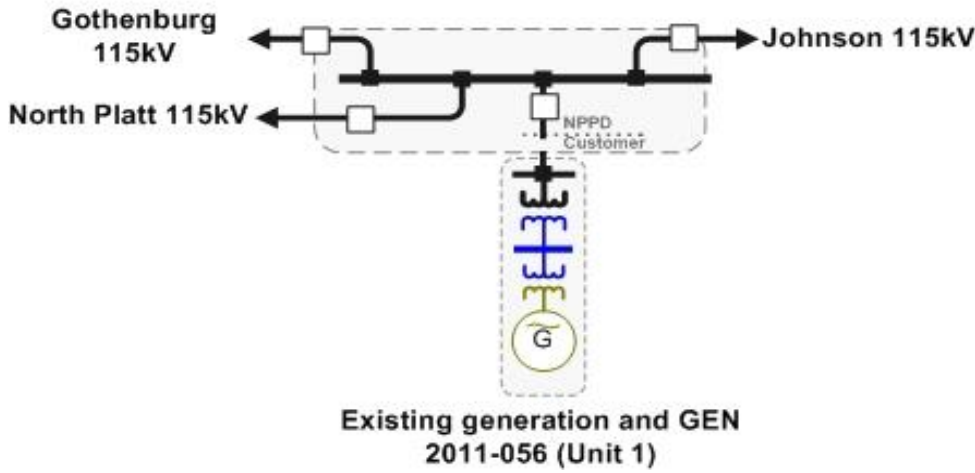
**\*\*Refer to Facility Study for an updated one-line\*\***

**GEN-2011-055**

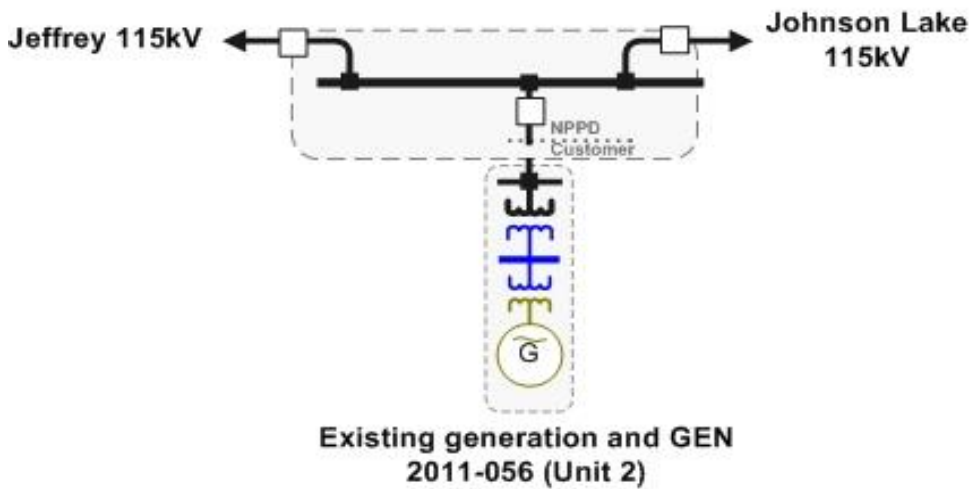


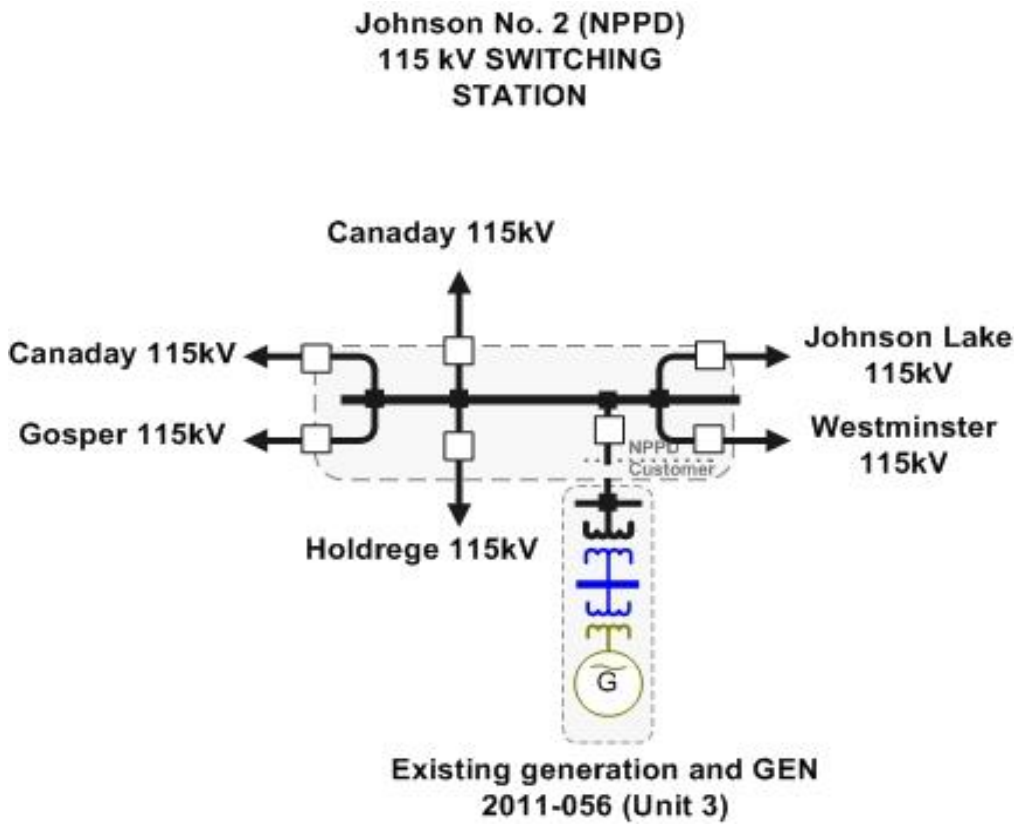
**GEN-2011-056**

**Jeffrey (NPPD)  
138 kV SWITCHING  
STATION**



**Johnson No. 1 (NPPD)  
115 kV SWITCHING  
STATION**





**GEN-2011-057**

**\*\*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
<b>ASGI-2011-004</b>			
ASGI-2011-004 Interconnection Costs See Oneline Diagram.	Current Study	\$1.00	\$1.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$1.00</b>	

## GEN-2010-061

\* 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-2010-061 Interconnection Costs See Online Diagram.	Current Study	\$9,000,000.00	\$9,000,000.00
GEN-2011-017 Tap - Mullergren 345kV CKT 1 Build approximately 55 miles of new 345kV and add new terminal at GEN-2011-017 Tap 345kV.	Current Study	\$54,911,730.96	\$67,000,000.00
Mullergren - Reno 345kV CKT 1 NRIS only required upgrade: Build approximately 92 miles of new 345kV Transmission line from Mullergren - Reno @ 3000 amps	Current Study	\$107,408,253.00	\$107,408,253.00
Mullergren 345/230/13kV Transformer CKT 1 Build new 345/230/13.8kV Transformer at Mullergren.	Current Study	\$6,556,624.59	\$8,000,000.00
Mullergren 345/230kV Substation Build new 345/230kV Substation for terminating GEN-2011-017 Tap - Mullergren 345kV line, Mullergren 345/230/13kV Transformer, and Mullergren - Great Bend 230kV.	Current Study	\$20,489,451.85	\$25,000,000.00
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
Beaver County - Buckner 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County @ 3000 amps	Previously Allocated		\$170,209,050.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV CKT 1 Replace wave trap and relays at Spearville to get the line rating up.	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
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Matthewson - Cimarron 345kV CKT 2 Build second 345kV circuit from Matthewson - Cimarron @ 3000 amps	Previously Allocated		\$42,903,753.00

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

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
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
Tatonga - Matthewson 345kV CKT 2 Build second 345kV circuit from Tatonga - Matthewson @ 3000 amps	Previously Allocated		\$104,260,473.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$198,366,060.40</b>	

### **GEN-2011-037**

GEN-2011-037 Interconnection Costs See Online Diagram.	Current Study	\$1.00	\$1.00
Clinton Jct - GEN-2007-032 Tap - Clinton 138kV Terminal Equipment Upgrade at Clinton Jct: Per GEN-2007-032 Interconnection	Previously Allocated		\$0.00
	<b>Current Study Total</b>	<b>\$1.00</b>	

### **GEN-2011-040**

GEN-2011-040 Interconnection Costs See Online Diagram.	Current Study	\$4,203,401.00	\$4,203,401.00
	<b>Current Study Total</b>	<b>\$4,203,401.00</b>	

### **GEN-2011-043**

GEN-2011-017 Tap - Mullergren 345kV CKT 1 Build approximately 55 miles of new 345kV and add new terminal at GEN-2011-017 Tap 345kV.	Current Study	\$6,044,134.52	\$67,000,000.00
GEN-2011-043 Interconnection Costs See Online Diagram.	Current Study	\$2,500,000.00	\$2,500,000.00
Mullergren 345/230/13kV Transformer CKT 1 Build new 345/230/13.8kV Transformer at Mullergren.	Current Study	\$721,687.70	\$8,000,000.00
Mullergren 345/230kV Substation Build new 345/230kV Substation for terminating GEN-2011-017 Tap - Mullergren 345kV line, Mullergren 345/230/13kV Transformer, and Mullergren - Great Bend 230kV.	Current Study	\$2,255,274.08	\$25,000,000.00

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

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
GEN-2011-017 Tap - Postrack 345kV CKT 1 Balanced Portfolio: Spearville - PostRock 345kV CKT 1 (Total Project E&C Cost Shown)	In-Service		\$84,006,000.00
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
Beaver County - Buckner 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County @ 3000 amps	Previously Allocated		\$170,209,050.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV CKT 1 Replace wave trap and relays at Spearville to get the line rating up.	Previously Allocated		\$771,000.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Matthewson - Cimarron 345kV CKT 2 Build second 345kV circuit from Matthewson - Cimarron @ 3000 amps	Previously Allocated		\$42,903,753.00
Tatonga - Matthewson 345kV CKT 2 Build second 345kV circuit from Tatonga - Matthewson @ 3000 amps	Previously Allocated		\$104,260,473.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>		<b>\$11,521,096.30</b>

\* 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-2011-044**

GEN-2011-017 Tap - Mullergren 345kV CKT 1 Build approximately 55 miles of new 345kV and add new terminal at GEN-2011-017 Tap 345kV.	Current Study	\$6,044,134.52	\$67,000,000.00
GEN-2011-044 Interconnection Costs See Online Diagram.	Current Study	\$4,000,000.00	\$4,000,000.00
Mullergren 345/230/13kV Transformer CKT 1 Build new 345/230/13.8kV Transformer at Mullergren.	Current Study	\$721,687.70	\$8,000,000.00
Mullergren 345/230kV Substation Build new 345/230kV Substation for terminating GEN-2011-017 Tap - Mullergren 345kV line, Mullergren 345/230/13kV Transformer, and Mullergren - Great Bend 230kV.	Current Study	\$2,255,274.08	\$25,000,000.00
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
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
Beaver County - Buckner 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County @ 3000 amps	Previously Allocated		\$170,209,050.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Buckner - Spearville 345kV CKT 1 Replace wave trap and relays at Spearville to get the line rating up.	Previously Allocated		\$771,000.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Matthewson - Cimarron 345kV CKT 2 Build second 345kV circuit from Matthewson - Cimarron @ 3000 amps	Previously Allocated		\$42,903,753.00
Tatonga - Matthewson 345kV CKT 2 Build second 345kV circuit from Tatonga - Matthewson @ 3000 amps	Previously Allocated		\$104,260,473.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00

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

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$13,021,096.30</b>	

### **GEN-2011-045**

GEN-2011-045 Interconnection Costs See Online Diagram.	Current Study	\$2,187,010.00	\$2,187,010.00
Lubbock South 230/115kV Autotransformer CKT 2 NRIS only required upgrade: Install 2nd 230/115/13.2kV Autotransformer	Current Study	\$3,764,017.20	\$4,000,000.00
Jones - Lubbock South 230kV CKT 2 Replace Line Traps	In-Service		\$200,000.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00

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

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$5,951,027.20</b>	

## GEN-2011-046

GEN-2011-046 Interconnection Costs See Online Diagram.	Current Study	\$3,433,559.00	\$3,433,559.00
Lubbock South 230/115kV Autotransformer CKT 2 NRIS only required upgrade: Install 2nd 230/115/13.2kV Autotransformer	Current Study	\$62,455.40	\$4,000,000.00
Yoakum 230/115/13kV Transformer CKT 1 and 2 NRIS only required upgrade: Replace existing two Yoakum 230/115/13kV transformers.	Current Study	\$105,567.91	\$7,514,514.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00

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



Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$3,601,582.31</b>	
<b>GEN-2011-048</b>			
GEN-2011-048 Interconnection Costs See Online Diagram.	Current Study	\$1,008,667.00	\$1,008,667.00
Lubbock South 230/115kV Autotransformer CKT 2 NRIS only required upgrade: Install 2nd 230/115/13.2kV Autotransformer	Current Study	\$173,527.40	\$4,000,000.00
Yoakum 230/115/13kV Transformer CKT 1 and 2 NRIS only required upgrade: Replace existing two Yoakum 230/115/13kV transformers.	Current Study	\$7,408,946.09	\$7,514,514.00
Beaver County - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Hitchland - Beaver County 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$226,040,727.00
Hitchland - Woodward 345kV CKT 2 Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$215,877,433.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00

\* 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****Current Study Total**

\$8,591,140.49

**GEN-2011-049**

GEN-2011-049 Interconnection Costs

See Online Diagram.

Current Study

\$3,654,353.00

\$3,654,353.00

Border - Tuco Interchange 345KV CKT 1

Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&amp;C Cost Shown)

Previously Allocated

\$249,247,072.00

Border - Woodward 345KV CKT 1

Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&amp;C Cost Shown)

Previously Allocated

\$249,247,072.00

Cleveland - Sooner 345KV CKT 1

Balanced Portfolio: Cleveland - Sooner 345kV CKT 1 (Total Project E&amp;C Cost Shown).

Previously Allocated

\$58,692,000.00

Hitchland - Beaver County 345kV Dbl CKT

Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&amp;C Cost Shown)

Previously Allocated

\$226,040,727.00

Matthewson - Cimarron 345kV CKT 2

Build second 345kV circuit from Matthewson - Cimarron @ 3000 amps

Previously Allocated

\$42,903,753.00

Tatonga - Matthewson 345kV CKT 2

Build second 345kV circuit from Tatonga - Matthewson @ 3000 amps

Previously Allocated

\$104,260,473.00

Thistle - Flat Ridge 138kV CKT 1

Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$5,776,280.00

Thistle - Wichita 345KV Dbl CKT

Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$426,504,292.00

Thistle - Woodward 345KV Dbl CKT

Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&amp;C Cost Shown)

Previously Allocated

\$207,782,000.00

Thistle 345/138KV Transformer CKT 1

Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$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&amp;C Cost Shown)

Previously Allocated

\$14,900,907.00

Woodward XFMR 345/138/13.8kV CKT 2

Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 &amp; 50 MVAR Reactor (Total Project E&amp;C Cost Shown).

Previously Allocated

\$249,247,072.00

**Current Study Total**

\$3,654,353.00

**GEN-2011-050**

GEN-2011-050 Interconnection Costs

See Online Diagram.

Current Study

\$7,310,940.00

\$7,310,940.00

\* 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****Current Study Total**

\$7,310,940.00

**GEN-2011-051**

GEN-2011-051 Interconnection Costs

See Online Diagram.

Current Study

\$9,276,873.00

\$9,276,873.00

Border - Tuco Interchange 345KV CKT 1

Balanced Portfolio: Tuco - Woodward 345KV CKT 1 (Total Project E&amp;C Cost Shown)

Previously Allocated

\$249,247,072.00

Border - Woodward 345KV CKT 1

Balanced Portfolio: Tuco - Woodward 345KV CKT 1 (Total Project E&amp;C Cost Shown)

Previously Allocated

\$249,247,072.00

FPL Switch - Mooreland 138KV CKT 1

NRIS only required upgrade: Rebuild approximately 0.2 miles of 138KV line

Previously Allocated

\$820,000.00

FPL Switch - Woodward 138KV CKT 1

NRIS only required upgrade: Rebuild approximately 12 miles of 138KV line

Previously Allocated

\$6,509,948.00

Hitchland 345/230KV Autotransformer CKT 2

Priority Project: Hitchland 345/230KV Autotransformer CKT 2 (Total Project E&amp;C Cost Shown).

Previously Allocated

\$8,883,760.00

Matthewson - Cimarron 345KV CKT 2

Build second 345KV circuit from Matthewson - Cimarron @ 3000 amps

Previously Allocated

\$42,903,753.00

Tatonga - Matthewson 345KV CKT 2

Build second 345KV circuit from Tatonga - Matthewson @ 3000 amps

Previously Allocated

\$104,260,473.00

Thistle - Flat Ridge 138KV CKT 1

Priority Project: Thistle - Flat Ridge 138KV CKT 1 (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$5,776,280.00

Thistle - Wichita 345KV Dbl CKT

Priority Project: Thistle - Wichita Dbl 345KV CKT (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$426,504,292.00

Thistle - Woodward 345KV Dbl CKT

Priority Project: Thistle - Woodward Dbl 345KV CKT (Total Project E&amp;C Cost Shown)

Previously Allocated

\$207,782,000.00

Thistle 345/138KV Transformer CKT 1

Priority Project: Thistle 345/138KV Transformer CKT 1 (Total Project E&amp;C Cost Shown.)

Previously Allocated

\$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&amp;C Cost Shown)

Previously Allocated

\$14,900,907.00

Woodward XFMR 345/138/13.8KV CKT 2

Balanced Portfolio: Woodward 345/138KV Transformer CKT 2 &amp; 50 MVAR Reactor (Total Project E&amp;C Cost Shown).

Previously Allocated

\$249,247,072.00

**Current Study Total**

\$9,276,873.00

**GEN-2011-054**

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

Tuesday, December 31, 2013



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<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
GEN-2011-054 Interconnection Costs See Online Diagram.	Current Study	\$10,000.00	\$10,000.00
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
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$249,247,072.00
Hitchland 345/230kV Autotransformer CKT 2 Priority Project: Hitchland 345/230kV Autotransformer CKT 2 (Total Project E&C Cost Shown).	Previously Allocated		\$8,883,760.00
Thistle - Flat Ridge 138kV CKT 1 Priority Project: Thistle - Flat Ridge 138kV CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$5,776,280.00
Thistle - Wichita 345KV Dbl CKT Priority Project: Thistle - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$426,504,292.00
Thistle - Woodward 345KV Dbl CKT Priority Project: Thistle - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$207,782,000.00
Thistle 345/138KV Transformer CKT 1 Priority Project: Thistle 345/138kV Transformer CKT 1 (Total Project E&C Cost Shown.)	Previously Allocated		\$6,585,986.00
TUCO Interchange 345/230/13.2KV Autotransformer CKT 2 Balanced Portfolio: TUCO 345/230 kV Transformer CKT 2 (Total Project E&C Cost Shown)	Previously Allocated		\$14,900,907.00
Woodward XFMR 345/138/13.8kV CKT 2 Balanced Portfolio: Woodward 345/138kV Transformer CKT 2 & 50 MVAR Reactor (Total Project E&C Cost Shown).	Previously Allocated		\$249,247,072.00
	<b>Current Study Total</b>	<b>\$10,000.00</b>	

## GEN-2011-055

GEN-2011-055 Interconnection Costs See Online Diagram.	Current Study	\$4,300,000.00	\$4,300,000.00
Hydro Carbon Tap - Sub974 69kV CKT 1 NRIS only required upgrade: Rewire CT on Sub 974	Current Study	\$10,000.00	\$10,000.00
Nebraska City U Syracuse - SUB 970 CKT 1 NRIS only required upgrade: Replace Terminal Equipment	Current Study	\$16,000.00	\$16,000.00
SUB 967 - SUB 968 69kV CKT 1 Replace terminal equipment	Current Study	\$16,000.00	\$16,000.00
SUB 968 - SUB 969 69kV CKT 1 Mitigated by replacing terminal equipment at Sub 969	Current Study	\$0.00	\$0.00

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

<b>Interconnection Request and Upgrades</b>	<b>Upgrade Type</b>	<b>Allocated Cost</b>	<b>Upgrade Cost</b>
SUB 969 - SUB 974 69kV CKT 1 Mitigated by replacing terminal equipment at Sub 969	Current Study	\$0.00	\$0.00
<b>Current Study Total</b>		<b>\$4,342,000.00</b>	
<b>GEN-2011-057</b>			
GEN-2011-057 Interconnection Costs See Oneline Diagram.	Current Study	\$2,040,698.00	\$2,040,698.00
Cleveland - Sooner 345KV CKT 1 Balanced Portfolio: Cleveland - Sooner 345kV CKT 1 (Total Project E&C Cost Shown).	Previously Allocated		\$58,692,000.00
<b>Current Study Total</b>		<b>\$2,040,698.00</b>	
<b>TOTAL CURRENT STUDY COSTS:</b>		<b>\$271,890,270.00</b>	

\* 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

<b>ASGI-2011-004 Interconnection Costs</b>		<b>\$1.00</b>
See Online Diagram.		
	ASGI-2011-004	\$1.00
	<b>Total Allocated Costs</b>	<b>\$1.00</b>
<b>GEN-2010-061 Interconnection Costs</b>		<b>\$9,000,000.00</b>
See Online Diagram.		
	GEN-2010-061	\$9,000,000.00
	<b>Total Allocated Costs</b>	<b>\$9,000,000.00</b>
<b>GEN-2011-017 Tap - Mullergren 345kV CKT 1</b>		<b>\$67,000,000.00</b>
Build approximately 55 miles of new 345kV and add new terminal at GEN-2011-017 Tap 345kV.		
	GEN-2010-061	\$54,911,730.96
	GEN-2011-043	\$6,044,134.52
	GEN-2011-044	\$6,044,134.52
	<b>Total Allocated Costs</b>	<b>\$67,000,000.00</b>
<b>GEN-2011-037 Interconnection Costs</b>		<b>\$1.00</b>
See Online Diagram.		
	GEN-2011-037	\$1.00
	<b>Total Allocated Costs</b>	<b>\$1.00</b>
<b>GEN-2011-040 Interconnection Costs</b>		<b>\$4,203,401.00</b>
See Online Diagram.		
	GEN-2011-040	\$4,203,401.00
	<b>Total Allocated Costs</b>	<b>\$4,203,401.00</b>
<b>GEN-2011-043 Interconnection Costs</b>		<b>\$2,500,000.00</b>
See Online Diagram.		
	GEN-2011-043	\$2,500,000.00
	<b>Total Allocated Costs</b>	<b>\$2,500,000.00</b>
<b>GEN-2011-044 Interconnection Costs</b>		<b>\$4,000,000.00</b>
See Online Diagram.		
	GEN-2011-044	\$4,000,000.00
	<b>Total Allocated Costs</b>	<b>\$4,000,000.00</b>

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

<b>GEN-2011-045 Interconnection Costs</b>		<b>\$2,187,010.00</b>
See Online Diagram.		
	GEN-2011-045	\$2,187,010.00
	<b>Total Allocated Costs</b>	<b>\$2,187,010.00</b>
<b>GEN-2011-046 Interconnection Costs</b>		<b>\$3,433,559.00</b>
See Online Diagram.		
	GEN-2011-046	\$3,433,559.00
	<b>Total Allocated Costs</b>	<b>\$3,433,559.00</b>
<b>GEN-2011-048 Interconnection Costs</b>		<b>\$1,008,667.00</b>
See Online Diagram.		
	GEN-2011-048	\$1,008,667.00
	<b>Total Allocated Costs</b>	<b>\$1,008,667.00</b>
<b>GEN-2011-049 Interconnection Costs</b>		<b>\$3,654,353.00</b>
See Online Diagram.		
	GEN-2011-049	\$3,654,353.00
	<b>Total Allocated Costs</b>	<b>\$3,654,353.00</b>
<b>GEN-2011-050 Interconnection Costs</b>		<b>\$7,310,940.00</b>
See Online Diagram.		
	GEN-2011-050	\$7,310,940.00
	<b>Total Allocated Costs</b>	<b>\$7,310,940.00</b>
<b>GEN-2011-051 Interconnection Costs</b>		<b>\$9,276,873.00</b>
See Online Diagram.		
	GEN-2011-051	\$9,276,873.00
	<b>Total Allocated Costs</b>	<b>\$9,276,873.00</b>
<b>GEN-2011-054 Interconnection Costs</b>		<b>\$10,000.00</b>
See Online Diagram.		
	GEN-2011-054	\$10,000.00
	<b>Total Allocated Costs</b>	<b>\$10,000.00</b>
<b>GEN-2011-055 Interconnection Costs</b>		<b>\$4,300,000.00</b>
See Online Diagram.		
	GEN-2011-055	\$4,300,000.00
	<b>Total Allocated Costs</b>	<b>\$4,300,000.00</b>

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



**GEN-2011-057 Interconnection Costs** **\$2,040,698.00**

See Online Diagram.

GEN-2011-057 \$2,040,698.00

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**Total Allocated Costs** **\$2,040,698.00**

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**Hydro Carbon Tap - Sub974 69kV CKT 1** **\$10,000.00**

NRIS only required upgrade: Rewire CT on Sub 974

GEN-2011-055 \$10,000.00

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**Total Allocated Costs** **\$10,000.00**

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**Lubbock South 230/115kV Autotransformer CKT 2** **\$4,000,000.00**

NRIS only required upgrade: Install 2nd 230/115/13.2kV Autotransformer

GEN-2011-045 \$3,764,017.20

GEN-2011-046 \$62,455.40

GEN-2011-048 \$173,527.40

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**Total Allocated Costs** **\$4,000,000.00**

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**Mullergren - Reno 345kV CKT 1** **\$107,408,253.00**

NRIS only required upgrade: Build approximately 92 miles of new 345kV Transmission line from Mullergren - Reno @ 3000 amps

GEN-2010-061 \$107,408,253.00

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**Total Allocated Costs** **\$107,408,253.00**

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**Mullergren 345/230/13kV Transformer CKT 1** **\$8,000,000.00**

Build new 345/230/13.8kV Transformer at Mullergren.

GEN-2010-061 \$6,556,624.59

GEN-2011-043 \$721,687.70

GEN-2011-044 \$721,687.70

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**Total Allocated Costs** **\$8,000,000.00**

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**Mullergren 345/230kV Substation** **\$25,000,000.00**

Build new 345/230kV Substation for terminating GEN-2011-017 Tap - Mullergren 345kV line, Mullergren 345/230/13kV Transformer, and Mullergren - Great

GEN-2010-061 \$20,489,451.85

GEN-2011-043 \$2,255,274.08

GEN-2011-044 \$2,255,274.08

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**Total Allocated Costs** **\$25,000,000.00**

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**Nebraska City U Syracuse - SUB 970 CKT 1** **\$16,000.00**

NRIS only required upgrade: Replace Terminal Equipment

GEN-2011-055 \$16,000.00

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**Total Allocated Costs** **\$16,000.00**

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

**SUB 967 - SUB 968 69kV CKT 1** **\$16,000.00**

Replace terminal equipment

GEN-2011-055 \$16,000.00

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**Total Allocated Costs** **\$16,000.00**

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**SUB 968 - SUB 969 69kV CKT 1** **\$0.00**

Mitigated by replacing terminal equipment at Sub 969

GEN-2011-055 \$0.00

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**Total Allocated Costs** **\$0.00**

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**SUB 969 - SUB 974 69kV CKT 1** **\$0.00**

Mitigated by replacing terminal equipment at Sub 969

GEN-2011-055 \$0.00

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**Total Allocated Costs** **\$0.00**

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**Yoakum 230/115/13kV Transformer CKT 1 and 2** **\$7,514,514.00**

NRIS only required upgrade: Replace existing two Yoakum 230/115/13kV transformers.

GEN-2011-046 \$105,567.91

GEN-2011-048 \$7,408,946.09

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**Total Allocated Costs** **\$7,514,514.00**

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\* 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)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL-Blown up	03ALL	0	14G	ASG1_11_004		Non-converged Contingency	1793	0.054	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03NR	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.031	111.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	03NR	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.046	101.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03NR	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.031	100.8	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FNSL-Blown up	03ALL	0	14G	G10_061		Non-converged Contingency	1793	0.272	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03NR	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.036	105.8	AXTELL - POST ROCK 345KV CKT 1
FDNS	03NR	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.037	102.1	AXTELL - POST ROCK 345KV CKT 1
FDNS	03NR	3	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.031	111.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	03NR	3	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.046	101.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03NR	3	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.031	100.8	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	03NR	3	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.037	102.1	AXTELL - POST ROCK 345KV CKT 1
FNSL-Blown up	03ALL	0	14G	G11_043		Non-converged Contingency	1793	0.068	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	03ALL	0	14G	G11_044		Non-converged Contingency	1793	0.068	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	00NR	0	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.104	108.2	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00NR	0	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.104	103.0	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00NR	0	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.107	101.4	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	3	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.104	108.3	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00NR	3	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.104	103.1	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00NR	3	14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.107	101.4	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.1	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.1	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.4	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.4	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	108.4	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	106.4	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.5	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	0	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	101.9	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.6	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.6	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.9	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	108.8	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	106.8	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.8	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	3	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	102.3	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR	4	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.3	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	4	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.3	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.6	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	4	14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.6	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (PENN C010585) 230/115/13.2KV TRANSFORMER CKT 2	150	0.054	102.4	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	3	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (PENN C010585) 230/115/13.2KV TRANSFORMER CKT 2	150	0.054	102.4	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	131.2	DENVER CITY INTERCHANGE N. - EL PASO SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	126.4	EL PASO SUB - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.031	120.4	SUNDOWN INTERCHANGE (WH XD570381) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	117.6	ODC TAP - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.040	117.0	MUSTANG STATION N. - SEAGRAVES INTERCHANGE 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.066	116.5	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.070	115.5	AMOCO SWITCHING STATION - YOAKUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	115.2	DENVER CITY INTERCHANGE N. - EL PASO SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.046	113.7	MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	113.7	Bennett Sub - ODC TAP 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	112.1	GEN527162 1-MUSTANG GEN #2
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	112.1	GEN527161 1-MUSTANG GEN #1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.053	111.6	YOAKUM COUNTY INTERCHANGE (YOAKUM 2) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	111.4	EL PASO SUB - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.033	111.3	AMOCO TAP - SUNDOWN INTERCHANGE 115KV CKT 1
FDNS	00NR	4	19WP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.039	111.3	DENVER CITY INTERCHANGE N. - EL PASO SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.034	111.2	WOLFORTH INTERCHANGE (WH 7001668) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.033	110.9	HOCKLEY COUNTY INTERCHANGE - LAMB COUNTY INTERCHANGE 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	110.9	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	110.9	LAMB COUNTY INTERCHANGE (WH ALM20172) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	108.6	BASE CASE
FDNS	00NR	4	19WP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.039	107.8	EL PASO SUB - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.031	106.8	SUNDOWN INTERCHANGE (WH XD570381) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00NR	4	19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.5	LUBBOCK SOUTH INTERCHANGE (LIKE POTTER) 230/115/13.2KV TRANSFORMER CKT 2
FDNS	00NR	4	19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.3	GRASSLAND INTERCHANGE - JONES STATION 230KV CKT 1
FDNS	00NR	4	19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.3	GRASSLAND INTERCHANGE (UPDATE_LATER) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.3	LYNN COUNTY INTERCHANGE - SOUTH PLAINS REC-WOODROW INTERCHANGE 115KV CKT 1
FDNS	00NR	4	19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.3	LUBBOCK SOUTH INTERCHANGE - SOUTH PLAINS REC-WOODROW INTERCHANGE 115KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL	00NR	4	14SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.0	GRASSLAND INTERCHANGE - JONES STATION 230KV CKT 1
FDNS	00NR	4	14SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.0	GRASSLAND INTERCHANGE (PENN 0105951) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.053	104.4	YOKUM COUNTY INTERCHANGE (YOKAUM 2) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.066	104.4	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	104.2	ODC TAP - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.040	104.1	MUSTANG STATION N. - SEAGRAVES INTERCHANGE 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	103.2	ARCO WILLARD TAP - YOKAUM COUNTY INTERCHANGE 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.070	103.0	AMOCO SWITCHING STATION - YOKAUM COUNTY INTERCHANGE 230KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.046	101.8	MUSTANG STATION - SEMINOLE 230KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	101.2	Bennett Sub - ODC TAP 115KV CKT 1
FDNS	00NR	4	19WP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.039	101.0	ODC TAP - SHELL CO2 GAS SUB 115KV CKT 1
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	100.1	GEN527162 1-MUSTANG GEN #2
FDNS	00NR	4	24SP	G11_048	FROM->TO	YOKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	100.1	GEN527161 1-MUSTANG GEN #1
FNSL-Blown up	03ALL	0	14G	G11_049		Non-converged Contingency	1793	0.054	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FNSL-Blown up	03ALL	0	14G	G11_051		Non-converged Contingency	1793	0.045	-	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	00NR	0	19SP	G11_055	TO->FROM	991 TAP - SUB 984 69KV CKT 1	65	0.050	108.5	FREMONT SUB D - SUB 976 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	104.6	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	103.3	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.186	100.0	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	108.3	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	106.9	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	104.7	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	103.2	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.050	125.1	FREMONT SUB D - SUB 976 69KV CKT 1
FDNS	09G11_055	0	14G	G11_055	TO->FROM	SUB 967 - SUB 968 69KV CKT 1	47	1.000	102.0	SUB 969 - SUB 974 69KV CKT 1
FDNS	09NR	0	14G	G11_055	TO->FROM	SUB 967 - SUB 968 69KV CKT 1	47	1.000	102.0	SUB 969 - SUB 974 69KV CKT 1
FDNS	09G11_055	0	14G	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	110.9	SUB 969 - SUB 974 69KV CKT 1
FDNS	09NR	0	14G	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	110.9	SUB 969 - SUB 974 69KV CKT 1
FDNS	00G11_055	0	14SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.3	SUB 969 - SUB 974 69KV CKT 1
FDNS	00NR	0	14SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.2	SUB 969 - SUB 974 69KV CKT 1
FDNS	00G11_055	0	19SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.2	SUB 969 - SUB 974 69KV CKT 1
FDNS	00G11_055	0	24SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.2	SUB 969 - SUB 974 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.1	SUB 969 - SUB 974 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	109.1	SUB 969 - SUB 974 69KV CKT 1
FDNS	00G11_055	0	14WP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	108.4	SUB 969 - SUB 974 69KV CKT 1
FDNS	00NR	0	14WP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	108.3	SUB 969 - SUB 974 69KV CKT 1
FDNS	00G11_055	0	19WP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	108.2	SUB 969 - SUB 974 69KV CKT 1
FDNS	00NR	0	19WP	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	108.2	SUB 969 - SUB 974 69KV CKT 1
FDNS	09G11_055	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	111.9	SUB 968 - SUB 969 69KV CKT 1
FDNS	09NR	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	111.9	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	14SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.5	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.5	SUB 968 - SUB 969 69KV CKT 1
FDNS	00G11_055	0	14SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.5	SUB 968 - SUB 969 69KV CKT 1
FDNS	00G11_055	0	19SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.4	SUB 968 - SUB 969 69KV CKT 1
FDNS	00G11_055	0	24SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.4	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	19SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.4	SUB 968 - SUB 969 69KV CKT 1
FDNS	00G11_055	0	14WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.5	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	14WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.5	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	19WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.4	SUB 968 - SUB 969 69KV CKT 1
FDNS	00G11_055	0	19WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.4	SUB 968 - SUB 969 69KV CKT 1
FDNS	09G11_055	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	102.7	SUB 967 - SUB 968 69KV CKT 1
FDNS	09NR	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	102.7	SUB 967 - SUB 968 69KV CKT 1
FDNS	00NR	0	19WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	0.398	100.0	FIRTH - SHELDON 115KV CKT 1
FDNS	00G11_055	2	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.180	102.7	SUB 963 - SUB 977 69KV CKT 1
FDNS	00G11_055	2	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.180	101.2	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	3	19SP	G11_055	TO->FROM	991 TAP - SUB 984 69KV CKT 1	65	0.050	108.5	FREMONT SUB D - SUB 976 69KV CKT 1
FDNS	00NR	3	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	104.6	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	3	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	103.3	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	3	19SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.186	100.1	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	3	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	108.3	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	3	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	106.9	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	3	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	104.7	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	3	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	103.3	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FDNS	00NR	3	19SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.050	125.0	FREMONT SUB D - SUB 976 69KV CKT 1

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

See next page.

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY	
FDNS		0	0	14SP	ASGI_11_004	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.058	101.8	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	122.5	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	115.9	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	114.3	DEWEY - IODINE 138KV CKT 1	
FDNS	1	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	06ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	06ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	110.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	1	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	107.0	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	01ALL	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	0	0	14SP	ASGI_11_004	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.031	102.5	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.035	140.6	G11-17T 345.00 - POST ROCK 345KV CKT 1	
FDNS	03ALL	0	14G	ASGI_11_004	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.035	131.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	3	0	14G	ASGI_11_004	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.035	109.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FNSL-Blown up	3	0	14G	ASGI_11_004		Non-converged Contingency	0	0.156	-	DBL-WICH-THI	
FNSL-Blown up	3	0	14G	ASGI_11_004		Non-converged Contingency	0	0.140	-	DBL-TGA-MATT	
FNSL-Blown up	01ALL	0	14G	ASGI_11_004		Non-converged Contingency	0	0.145	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	0	14G	ASGI_11_004		Non-converged Contingency	0	0.154	-	DBL-WICH-THI	
FNSL-Blown up	03ALL	0	14G	ASGI_11_004		Non-converged Contingency	0	0.139	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	0	14G	ASGI_11_004		Non-converged Contingency	0	0.132	-	DBL-BVR-WWRD	
FDNS	06ALL	0	14G	ASGI_11_004	TO->FROM	PLANT X STATION - TOLK STATION EAST 230KV CKT 2	502	0.144	109.3	PLANT X STATION - TOLK STATION WEST 230KV CKT 1	
FDNS	06ALL	0	14G	ASGI_11_004	TO->FROM	PLANT X STATION - TOLK STATION WEST 230KV CKT 1	502	0.145	110.0	PLANT X STATION - TOLK STATION EAST 230KV CKT 2	
FDNS	06ALL	0	14G	ASGI_11_004	FROM->TO	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1	560	0.413	99.9	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.038	140.0	DBL-WICH-THI	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	147.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	146.6	DBL-WICH-THI	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	121.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FNSL	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	121.3	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	118.3	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	112.7	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	112.7	SPP-SWPS-02	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	112.7	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	112.3	SPP-SWPS-01	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.1	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	09ALL	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	104.0	DBL-TGA-MATT	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	101.6	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	101.6	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	100.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1	
FDNS	03ALL	2	14G	ASGI_11_004	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.037	126.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	3	2	14G	ASGI_11_004	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.037	105.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FNSL-Blown up	3	2	14G	ASGI_11_004		Non-converged Contingency	0	0.139	-	DBL-TGA-MATT	
FNSL-Blown up	3	2	14G	ASGI_11_004		Non-converged Contingency	0	0.132	-	DBL-BVR-WWRD	
FNSL-Blown up	03ALL	2	14G	ASGI_11_004		Non-converged Contingency	0	0.152	-	DBL-WICH-THI	
FNSL-Blown up	03ALL	2	14G	ASGI_11_004		Non-converged Contingency	0	0.139	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	2	14G	ASGI_11_004		Non-converged Contingency	0	0.131	-	DBL-BVR-WWRD	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.044	106.3	BENTON - WICHITA 345KV CKT 1	
FDNS	03NR	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.036	131.3	DBL-IRON-CLR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.078	114.8	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03NR	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.036	113.9	DBL-SPRVL-CL	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.078	107.4	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.077	107.2	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.072	106.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.072	106.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	105.2	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	105.2	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.066	101.7	ST JOHN - ST JOHN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.069	101.3	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.070	100.9	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1	
FDNS	00NR	0	14SP	G10_061	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.032	104.3	DBL-WICH-THI	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	154.4	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	140.0	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	136.7	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	135.2	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	135.0	DEWEY - IODINE 138KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	129.0	GEN520998 1-MORLND3	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	126.5	BASE CASE	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	126.4	WOODWARD - WOODWARD 69KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	124.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	122.6	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	122.5	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	121.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	121.5	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	121.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	120.8	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	119.4	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.8	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	118.5	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	118.4	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	117.5	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	117.2	VIOLA 7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	116.6	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	116.6	MINGO - RED WILLOW 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	116.2	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	116.1	MINGO - SETAB 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	116.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	116.0	AXTELL - POST ROCK 345KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	115.9	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	115.2	DEWEY - TALOGA 138KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	115.0	GEN520998 1-MORLND3	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.9	DEWEY - IODINE 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	114.8	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	114.7	BENTON - WICHITA 345KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	114.6	BASE CASE	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	114.5	GEN514805 1-SOONER UNIT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	114.3	DEWEY - IODINE 138KV CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.1	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	114.0	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.8	DEWEY - TALOGA 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.8	MULLERGREN - SPEARVILLE 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.8	HOLCOMB - SETAB 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.7	CIRCLE - MULLERGREN 230KV CKT 1	
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.2	FLATRDG3 - HARPER 138KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	113.1	GEN520998 1-MORLND3	
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	112.8	GEN514806 1-SOONER UNIT 2	



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.8	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.6	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.6	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.5	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	112.4	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.3	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.3	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.2	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.1	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.0	AXTELL - PAULINE 345KV CKT 1
FDNS	06ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	111.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	111.2	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	111.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	110.7	IODINE - MOORELAND 138KV CKT 1
FDNS	06ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	110.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	109.9	NC1_GEN-NEBRASKA CITY 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	108.1	GEN515389 1-TLGAWND1 34.500
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	108.0	GEN560221 1-G07-62-1 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	108.0	GEN560222 1-G07-62-2 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	108.0	GEN560223 1-G07-62-3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	108.0	GEN560224 1-G07-62-4 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.9	GEN562017 1-G11_022_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.9	GEN560522 1-G05-12-2 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	107.8	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.8	GEN560121 1-G08-47 0.5750
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	GEN562020 1-G11_021_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	GEN527162 1-MUSTANG GEN #2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	GEN515365 1-CENT 21 34.500
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.7	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	107.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	107.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.5	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.5	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.5	GEN539785 1-ENSGW 1 0.5750
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.5	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.4	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.3	GEN645001 1-FORT CALHOUN 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	107.2	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.2	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.2	GEN560696 1-G11-008-4 0.6900
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	107.2	GEN520997 1-MORLND2
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	107.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN515393 1-OGEWND2G
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.1	GEN562026 1-G11_019_3 0.6900
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	107.0	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.0	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	107.0	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.9	GEN526331 1-JONES GEN #1 22 KV
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.9	BASE CASE
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.8	GEN526334 1-JONES 4 116.500
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.8	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.8	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.7	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.6	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.5	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.5	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.5	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.5	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.3	GEN560514 1-G04_014 0.6900
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.2	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.2	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	106.0	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.9	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.9	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.9	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.8	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.8	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.8	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	105.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	105.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.4	GEN560429 1-G08-29 0.6400
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.2	GEN560693 1-G11-008-1 0.6900
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	105.1	GEN560549 1-G06-06 0.6900
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	104.9	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.8	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	104.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	104.8	GEN531503 1-CIMRRN 1 34.500
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	104.8	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	104.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	104.4	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	104.2	BASE CASE
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	104.1	GEN514805 1-SOONER UNIT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	103.7	GEN523117 1-BUFF_DUNES210.6900
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	103.6	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	103.4	GEN562032 1-G11_017_3 0.6900
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	103.2	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.1	MINGO - SETAB 345KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	102.9	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.8	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	102.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	102.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.4	MATHWSN7 345.00 - NORTHWEST 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	102.4	GEN521120 1-BUFBEAR2
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	102.4	GEN514806 1-SOONER UNIT 2
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	AXTELL - POST ROCK 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	102.3	MOORELAND - TALOGA 138KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.9	HOLCOMB - SETAB 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.8	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	101.7	GRACEMONT - MINCO 345KV CKT 1
FDNS	01ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.7	CARTER JCT - WOODWARD 69KV CKT 1
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	101.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	101.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	101.2	GEN531447 1-HOLCOMB GENERATOR
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	101.2	GEN520998 1-MORLND3
FDNS	03G10_061	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	100.4	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	1	0	14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.042	144.0	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.042	132.3	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.042	129.3	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.042	138.9	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	0	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.042	125.8	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	0	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.042	122.3	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.042	125.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.042	112.3	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.042	109.0	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.125	144.7	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.125	140.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.092	137.6	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	126.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	126.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.085	120.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.057	120.4	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.061	119.8	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.057	118.7	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.069	118.3	MULLERGREN - SOUTH HAYS 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	117.3	GEN539677 3-A. M. MULLERGREN GENERATOR
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.063	117.1	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.092	116.9	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	116.4	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	116.2	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	116.2	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	116.1	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	116.0	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03NR	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.038	115.9	DBL-SPRVL-CL
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	115.7	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	115.3	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.060	115.2	CLARKCOUNTY7345.00 - IRONWOOD7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.060	115.0	CLARKCOUNTY7345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.063	114.7	POSTROCK6 230.00 - SOUTH HAYS 230KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	114.3	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	114.2	MANNING TAP - SCOTT CITY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	114.2	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	114.2	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	114.1	NESS CITY - NESS CITY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.9	DIGHTON TAP - MANNING TAP 115KV CKT 1
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.092	113.9	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.7	ALEXANDER - NESS CITY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.5	ALEXANDER - NEKOMA 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.4	BEELER - DIGHTON TAP 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.2	BEELER - NESS CITY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	113.2	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	113.2	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.1	ALEXANDER - NINNES3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	113.0	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.8	CRKCK 3 115.00 - CUDAHY 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.8	NINNES3 115.00 - ST JOHN 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.7	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.7	CUDAHY - KISMET 3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.7	GEN640009 1-COOPER NUCLEAR STATION	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.7	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.7	CIMARRON RIVER TAP - KISMET 3 115.00 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.7	GEN542957 1-IATAN UNIT #1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.5	FLATRDG3 - HARPER 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.5	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.4	GEN645012 2-NEBRASKA CITY 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.4	MINGO (MINGO) 345/115/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.4	POTTER COUNTY INTERCHANGE (WALK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.4	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.4	ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.4	HARPER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.3	GEN560140 1-G09-08 0.7000	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.2	CLEARWATER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.051	112.2	RENO COUNTY - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.2	GEN542951 5-HAWTHORN UNIT #5	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.056	112.2	NORTH JUDSON LARGE SUB - STARTP3 115.00 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.2	GEN530594 01-SMKYP1G1 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.1	GEN645011 1-NEBRASKA CITY 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.1	GEN532663 1-LAWRENCE ENERGY CENTER UNIT 5	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.1	EMPORIA ENERGY CENTER - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.1	GEN542955 1-LACYGNE UNIT #1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.1	GEN542956 2-LACYGNE UNIT #2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.1	GEN539655 1-CLIFTON GENERATOR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	112.0	LYDIA - VALLIANT 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	112.0	SPEARVILLE (SPEARVILLE) 345/115/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	112.0	LACROSSE TAP - NEKOMA 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	111.0	BASE CASE	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	110.9	SPEARVILLE (SPWIND 1) 230/34.5/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	110.0	COVERT 3 115.00 - SMITH CENTER 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	110.0	GREENLEAF - KNOB HILL 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.9	MOUNDRIDGE - RENO COUNTY 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	109.9	COVERT 3 115.00 - WALDO 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.9	GEN599891 1-OKLAUN	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.9	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.9	CLIFTON - GREENLEAF 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.055	109.8	SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	SWISSVALE - WEST GARDNER 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	GEN527163 1-MUSTANG GEN #3 22 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	GEN562062 1-G11_043_3 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.8	GEN562065 1-G11_044_3 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	109.8	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.7	MULLERGREN (MULGREN6) 230/115/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.7	GEN531459 2-S2 GENERATOR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.7	GEN527882 1-CUNNINGHAM GEN #2 20 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.6	GEN527902 1-HOBBS PLANT #2 (CT)	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.6	GEN527901 1-HOBBS PLANT #1 (CT)	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.6	GEN526331 1-JONES GEN #1 22 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.6	ELM CREEK - NORTHWEST MANHATTAN 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.5	GEN526334 1-JONES_4 116.500	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	109.5	RUSSELL - WALDO 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	109.5	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.4	GEN526332 1-JONES GEN #2 21 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	109.3	HUNTSVILLE - ST JOHN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.0	GEN539762 1-SSWIND 1 34.500	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.0	EASTDC - WELSH 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	109.0	GEN527903 1-HOBBS PLANT #3 (ST)	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.7	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.6	GEN560522 1-G05-12-2 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.6	HOYT - STRANGER CREEK 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.5	ST JOHN - ST JOHN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.4	GEN560696 1-G11-008-4 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.4	GEN523971 1-HARRINGTON GEN #1 24 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.4	GEN523972 1-HARRINGTON GEN #2 24 KV	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.4	GEN523973 1-HARRINGTON GEN #3 24 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.4	GEN539785 1-ENSNW 1 0.5750	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.4	ELLSWTP3 115.00 - RUSSELL 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.3	CIRCLE - EAST MCPHERSON 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.1	GEN560267 1-G10-15-1 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	108.1	GEN560268 1-G10-15-2 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.0	GREAT BEND TAP - MULLERGREN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	108.0	GREAT BEND TAP - SEWARD 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.8	GEN560695 1-G11-008-3 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.7	GEN560238 1-G10-09 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.051	107.6	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.6	GEN539767 1-GRAY COUNTY WIND FARM	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.6	GEN560694 1-G11-008-2 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.6	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.053	107.3	ELLSWTP3 115.00 - MULLERGREN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.3	GEN560714 1-G10_061_3 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.2	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.2	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.2	GEN523117 1-BUFF DUNES210.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.0	GEN560329 1-G10-45 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	107.0	GEN531503 1-CIMRRN 1 34.500	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	106.7	GEN539670 4-JUDSON LARGE GENERATOR	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	106.4	GEN560693 1-G11-008-1 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	106.2	GEN539807 1-G05-12 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	106.1	GEN531447 1-HOLCOMB GENERATOR	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	105.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	105.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.051	105.8	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.051	105.7	SEWARD - ST JOHN 115KV CKT 1	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	105.4	GEN560659 1-G07-38 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	105.3	GEN560432 1-G08-124 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	105.3	GEN562035 1-G11_016_3 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	105.1	GEN560549 1-G06-06 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	104.8	GEN562032 1-G11_017_3 0.6900	
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	103.5	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.066	103.5	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	103.5	GEN542902 1-GPW_G1 0.6900	
FDNS	03ALL	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	103.3	GEN560514 1-G04_014 0.6900	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	102.0	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	102.0	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.057	100.9	MINGO - SETAB 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.069	100.9	MULLERGREN - SOUTH HAYS 230KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.058	100.4	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.054	100.1	GEN539677 3-A. M. MULLERGREN GENERATOR	
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.059	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	0	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.042	116.3	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1	
FDNS	03G10_061	0	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.042	104.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1	
FDNS	3	0	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.042	101.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1	
FNSL-Blown up	3	0	14G	G10_061			0	0.360	-	DBL-THIS-CLR	
FNSL-Blown up	3	0	14G	G10_061			0	0.232	-	DBL-WICH-THI	
FNSL-Blown up	3	0	14G	G10_061			0	0.136	-	DBL-TGA-MATT	
FNSL-Blown up	01ALL	0	14G	G10_061			0	0.141	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	0	14G	G10_061			0	0.360	-	DBL-IRON-CLR	
FNSL-Blown up	03ALL	0	14G	G10_061			0	0.360	-	DBL-THIS-CLR	
FNSL-Blown up	03ALL	0	14G	G10_061			0	0.231	-	DBL-WICH-THI	
FNSL-Blown up	03ALL	0	14G	G10_061			0	0.135	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	0	14G	G10_061			0	0.101	-	DBL-BVR-WWRD	
FNSL-Blown up	03G10_061	0	14G	G10_061			0	0.360	-	DBL-THIS-CLR	
FNSL-Blown up	03G10_061	0	14G	G10_061			0	0.232	-	DBL-WICH-THI	
FNSL-Blown up	03G10_061	0	14G	G10_061			0	0.136	-	DBL-TGA-MATT	
FNSL-Blown up	03G10_061	0	14G	G10_061			0	0.101	-	DBL-BVR-WWRD	
FNSL-Blown up	03NR	0	14G	G10_061			0	0.103	-	DBL-IRON-CLR	
FNSL-Blown up	03NR	0	14G	G10_061			0	0.103	-	DBL-THIS-CLR	
FNSL-Blown up	03NR	0	14G	G10_061			0	0.088	-	DBL-THIS-CLR	
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.094	117.6	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.081	109.8	CIRCLE - MULLERGREN 230KV CKT 1	
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.077	103.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.077	103.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03NR	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.033	102.8	DBL-IRON-CLR
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.073	102.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.073	102.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G10_061	0	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.094	101.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.045	106.9	BENTON - WICHITA 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.117	144.2	DBL-WICH-THI
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.117	140.0	DBL-WICH-THI
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.108	136.6	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	130.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	130.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.139	130.1	DBL-SPRVL-CL
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.107	129.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.140	129.0	DBL-IRON-CLR
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.108	129.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	128.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	128.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	124.0	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.140	123.8	DBL-IRON-CLR
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.096	123.2	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.101	122.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.100	122.6	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	121.9	SPP-MKEC-06
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	121.8	SEWARD - ST JOHN 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	120.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.096	120.4	HUNTSVILLE - ST JOHN 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	120.4	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.096	120.2	MIDW-CATB05
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.096	119.9	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	119.9	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	119.9	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.110	119.8	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	119.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	119.2	SPP-SWPS-05
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	119.1	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	119.1	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	119.0	AXTELL - PAULINE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	119.0	GREAT BEND TAP - SEWARD 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	119.0	GREAT BEND TAP - MULLERGREEN 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	119.0	CLARKCOUNTY7345.00 - IRONWOOD7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	118.9	MULLERGREEN - SOUTH HAYS 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	118.8	CLARKCOUNTY7345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	118.3	SPP-MKEC-02
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	118.3	MOORE - PAULINE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	118.1	ELLSWTP3 115.00 - MULLERGREEN 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	118.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	118.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.8	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	117.8	SPP-MKEC-08
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	117.6	ELM CREEK - NORTHWEST MANHATTAN 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	117.4	ELLSWTP3 115.00 - RUSSELL 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	117.4	GEN530690 1-PRWINDG1 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	117.3	BUCKNER7 345.00 - HOLCOMB 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	117.3	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.3	FLATRDG3 - HARPER 138KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.2	SPP-MKEC-09B
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.1	POSTROCK6 230.00 - SOUTH HAYS 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.1	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	117.0	GEN542955 1-LACYGNE UNIT #1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	117.0	GEN542956 2-LACYGNE UNIT #2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	117.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.9	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.9	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	116.9	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.8	SPP-MKEC-03A
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.8	SPP-MKEC-05
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.093	116.8	MEDICINE LODGE - SUN CITY 115KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	116.8	SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.8	SPP-MKEC-03B
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.7	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	116.7	GEN532663 1-LAWRENCE ENERGY CENTER UNIT 5
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.094	116.6	RUSSELL - WALDO 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.6	GRAND ISLAND - MCCOOL 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.6	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.6	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	116.5	GEN532722 1-EVANS ENERGY CENTER UNIT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	116.5	GEN542951 5-HAWTHORN UNIT #5
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.5	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.4	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.4	SPP-SWPS-04
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.4	HEIZER 6 230.00 - MULLERGRENN 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.4	MULLERGRENN (MULGRENN) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.3	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.094	116.3	COVERT 3 115.00 - WALDO 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.094	116.3	COVERT 3 115.00 - SMITH CENTER 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.2	MCCOOL - MOORE 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	116.2	G10-056T 345.00 - ST JOE 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.108	115.9	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	115.1	BASE CASE
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	115.1	NC1_GEN-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	114.2	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	114.0	EASTOWN7 345.00 - IATAN 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	114.0	POST ROCK (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	114.0	GEN560235 1-G08-92 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.9	WR-DOUBLE17
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.9	HUNTERS7 345.00 - RENFROW7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.090	113.9	CIRCLE - RENO COUNTY 115KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.9	CIRCLE - RICE 6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.9	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.093	113.9	CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.8	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.8	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.8	GEN526331 1-JONES GEN #1 22 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.086	113.8	EAST MCPHERSON - SUMMIT 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.8	GEN526334 1-JONES 4 116.500
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	GEN560140 1-G09-08 0.7000
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	LYONS - RICE CO 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.090	113.7	MORRIS COUNTY - UNIONRG6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.090	113.7	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.7	MOUNDRIDGE (MOUNDRIDGE) 138/115/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.7	WR-B3-9
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.7	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.6	HUNTERS7 345.00 - WOODRING 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	113.5	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.3	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.2	GEN531459 2-S2 GENERATOR
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.090	113.2	SUNMIT - UNIONRG6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.2	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.2	SPP-WR-335A
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.1	EAST MCPHERSON (EMCPHR1X) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.1	RICE 6 230.00 (RICE T1) 230/115/12.47KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.0	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	113.0	GEN560522 1-G05-12-2 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.9	GEN539785 1-ENSNGW 1 0.5750
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.8	GEN560696 1-G11-008-4 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	112.8	SWISSVALE - WEST GARDNER 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.090	112.8	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	112.7	WR-B3-8
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.091	112.6	MOUNDRIDGE - RENO COUNTY 115KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.6	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.6	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.6	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGRENN 230KV CKT 1	318.7	0.092	112.5	GEN560267 1-G10-15-1 0.6900

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	112.5	MIDW-CATB06
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	112.5	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	112.4	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.108	112.4	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	112.2	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	112.1	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.7	GEN560238 1-G10-09 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.7	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.7	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.6	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.6	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.1	GEN560693 1-G11-008-1 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.0	GEN560329 1-G10-45 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	111.0	GEN531503 1-CIMRRN 1 34.500
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.140	111.0	DBL-SPRVL-CL
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.8	GEN539807 1-G05-12 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.7	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.5	GEN539677 3-A. M. MULLERGEN GENERATOR
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.5	GEN560514 1-G04_014 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.5	GEN523117 1-BUFF_DUNES210.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.091	110.4	HOYT - STRANGER CREEK 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.0	GEN560659 1-G07-38 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.0	GEN560432 1-G08-124 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	110.0	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	109.8	GEN560549 1-G06-06 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	109.5	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	109.5	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.107	109.2	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	109.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	109.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	108.4	GEN531447 1-HOLCOMB GENERATOR
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.108	108.4	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	108.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	108.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.091	108.0	HOYT - JEFFREY ENERGY CENTER 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.091	107.6	WRTOD400
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.140	106.3	DBL-SPRVL-CL
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	105.8	GEN562032 1-G11_017_3 0.6900
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.107	105.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	105.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.103	105.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	105.2	MULLERGREEN - SPEARVILLE 230KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.108	104.8	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	104.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	104.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.084	104.3	CIRCLE - EAST MCPHERSON 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	103.9	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.100	103.7	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	103.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.101	103.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	103.0	SPP-MKEC-06
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	103.0	SEWARD - ST JOHN 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	102.5	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	102.3	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	102.3	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.092	102.0	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	101.8	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	101.6	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	101.4	HUNTSVILLE - ST JOHN 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	101.1	MIDW-CATB05
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	100.9	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.9	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	100.8	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.097	100.6	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.6	AXTELL - PAULINE 345KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.6	GREAT BEND TAP - SEWARD 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.6	GREAT BEND TAP - MULLERGREEN 115KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	100.5	CLARKCOUNTY7345.00 - IRONWOOD7 345.00 345KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.100	100.4	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.098	100.3	CLARKCOUNTY7345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.094	100.3	SPP-MKEC-02
FDNS		3	2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.096	100.2	MULLERGREEN - SOUTH HAYS 230KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.099	100.1	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.101	100.0	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.0	SPP-SWPS-05
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	100.0	MOORE - PAULINE 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.095	99.9	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.041	123.3	DBL-WICH-THI
FDNS		3	2 14G	G10_061	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.041	120.8	DBL-WICH-THI
FDNS	03G10_061		2 14G	G10_061	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.041	226.3	DBL-WICH-THI
FDNS		3	2 14G	G10_061	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.041	222.0	DBL-WICH-THI
FDNS	09ALL		2 14G	G10_061	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.045	110.5	DBL-WICH-THI
FDNS		9	2 14G	G10_061	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.045	104.6	DBL-WICH-THI
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	150.4	DBL-WICH-THI
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	147.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	146.6	DBL-WICH-THI
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	137.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	134.3	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	132.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	124.1	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	119.7	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.9	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	116.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	116.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	115.6	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	115.3	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	114.8	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	114.6	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	114.1	SPP-SWPS-04
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	114.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	113.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	113.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.9	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.8	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.5	BENTON - WICHITA 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.2	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	111.3	DEWEY - TALOGA 138KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	110.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	109.9	G11-17T 345.00 - MULGREEN7 345.00 345KV CKT 1
FDNS	03ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	109.8	MULGREEN7 345.00 (MULLERGRENT1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.4	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.4	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	09ALL		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	104.0	DBL-TGA-MATT
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03G10_061		2 14G	G10_061	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.3	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03G10_061		2 14G	G10_061	TO->FROM	GREAT BEND TAP - MULLERGREEN 115KV CKT 1	79.7	0.033	122.7	DBL-IRON-CLR
FDNS		3	2 14G	G10_061	TO->FROM	GREAT BEND TAP - MULLERGREEN 115KV CKT 1	79.7	0.033	117.8	DBL-IRON-CLR
FDNS	03ALL		2 14G	G10_061	TO->FROM	GREAT BEND TAP - MULLERGREEN 115KV CKT 1	79.7	0.033	113.6	DBL-SPRVL-CL
FDNS	03G10_061		2 14G	G10_061	TO->FROM	GREAT BEND TAP - MULLERGREEN 115KV CKT 1	79.7	0.033	102.5	DBL-SPRVL-CL
FDNS	03G10_061		2 14G	G10_061	FROM->TO	GREAT BEND TAP - SEWARD 115KV CKT 1	80.3	0.033	121.7	DBL-IRON-CLR
FDNS		3	2 14G	G10_061	FROM->TO	GREAT BEND TAP - SEWARD 115KV CKT 1	80.3	0.033	116.8	DBL-IRON-CLR

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G10_061	FROM->TO	GREAT BEND TAP - SEWARD 115KV CKT 1	80.3	0.033	112.7	DBL-SPRVL-CL
FDNS	03G10_061	2	14G	G10_061	FROM->TO	GREAT BEND TAP - SEWARD 115KV CKT 1	80.3	0.033	101.7	DBL-SPRVL-CL
FDNS	03G10_061	2	14G	G10_061	TO->FROM	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.030	124.6	DBL-IRON-CLR
FDNS	3	2	14G	G10_061	TO->FROM	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.030	121.3	DBL-IRON-CLR
FDNS	03G10_061	2	14G	G10_061	TO->FROM	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.030	106.8	DBL-SPRVL-CL
FDNS	3	2	14G	G10_061	TO->FROM	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	115.1	0.030	103.7	DBL-SPRVL-CL
FDNS	03G10_061	2	14G	G10_061	FROM->TO	GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.030	113.8	DBL-IRON-CLR
FDNS	3	2	14G	G10_061	FROM->TO	GREENSBURG - SUN CITY 115KV CKT 1	115.1	0.030	110.5	DBL-IRON-CLR
FDNS	03G10_061	2	14G	G10_061	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.041	236.8	DBL-WICH-THI
FDNS	3	2	14G	G10_061	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.041	232.5	DBL-WICH-THI
FDNS	09ALL	2	14G	G10_061	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.045	121.1	DBL-WICH-THI
FDNS	9	2	14G	G10_061	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.045	115.1	DBL-WICH-THI
FDNS	03ALL	2	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.044	150.7	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.044	138.6	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	HAYS PLANT - SOUTH HAYS 115KV CKT 1	99	0.044	134.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.044	146.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.044	132.8	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	2	14G	G10_061	FROM->TO	HAYS PLANT - VINE STREET 115KV CKT 1	88	0.044	128.1	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.044	133.0	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.044	119.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	KNOLL - N HAYS3 115.00 115KV CKT 1	88	0.044	114.4	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.030	108.8	DBL-IRON-CLR
FDNS	3	2	14G	G10_061	TO->FROM	MEDICINE LODGE - SUN CITY 115KV CKT 1	115.1	0.030	105.5	DBL-IRON-CLR
FDNS	03ALL	2	14G	G10_061	FROM->TO	MULLERGREY - SOUTH HAYS 230KV CKT 1	297	0.109	112.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	MULLERGREY - SPEARVILLE 230KV CKT 1	318.7	0.054	111.0	G11-17T 345.00 - MULGREN7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	MULLERGREY - SPEARVILLE 230KV CKT 1	318.7	0.054	110.8	MULGREN7 345.00 (MULLERGREY1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.044	123.0	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.044	110.9	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FDNS	3	2	14G	G10_061	TO->FROM	N HAYS3 115.00 - VINE STREET 115KV CKT 1	99	0.044	106.5	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1
FNSL-Blown up	3	2	14G	G10_061		Non-converged Contingency	0	0.335	-	DBL-THIS-CLR
FNSL-Blown up	3	2	14G	G10_061		Non-converged Contingency	0	0.131	-	DBL-TGA-MATT
FNSL-Blown up	3	2	14G	G10_061		Non-converged Contingency	0	0.095	-	DBL-BVR-WWRD
FNSL-Blown up	03ALL	2	14G	G10_061		Non-converged Contingency	0	0.334	-	DBL-IRON-CLR
FNSL-Blown up	03ALL	2	14G	G10_061		Non-converged Contingency	0	0.334	-	DBL-THIS-CLR
FNSL-Blown up	03ALL	2	14G	G10_061		Non-converged Contingency	0	0.211	-	DBL-WICH-THI
FNSL-Blown up	03ALL	2	14G	G10_061		Non-converged Contingency	0	0.130	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G10_061		Non-converged Contingency	0	0.095	-	DBL-BVR-WWRD
FNSL-Blown up	03G10_061	2	14G	G10_061		Non-converged Contingency	0	0.335	-	DBL-THIS-CLR
FNSL-Blown up	03G10_061	2	14G	G10_061		Non-converged Contingency	0	0.131	-	DBL-TGA-MATT
FNSL-Blown up	03G10_061	2	14G	G10_061		Non-converged Contingency	0	0.095	-	DBL-BVR-WWRD
FDNS	03ALL	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.033	139.2	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.041	127.0	DBL-IRON-CLR
FDNS	3	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.041	121.1	DBL-IRON-CLR
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.033	120.8	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	3	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.033	116.7	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	03ALL	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.041	116.2	DBL-SPRVL-CL
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SEWARD - ST JOHN 115KV CKT 1	87.6	0.041	103.3	DBL-SPRVL-CL
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.092	116.1	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.085	111.9	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.085	111.3	DBL-WICH-THI
FDNS	3	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.085	108.3	DBL-WICH-THI
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.075	102.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.075	102.1	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.099	102.0	DBL-SPRVL-CL
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.072	100.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.072	100.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.100	100.8	DBL-IRON-CLR
FDNS	03G10_061	2	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.092	100.3	AXTELL - POST ROCK 345KV CKT 1
FDNS	03NR	3	14G	G10_061	TO->FROM	CIRCLE - MULLERGREY 230KV CKT 1	318.7	0.036	131.3	DBL-IRON-CLR
FDNS	03NR	3	14G	G10_061	TO->FROM	CIRCLE - MULLERGREY 230KV CKT 1	318.7	0.036	113.8	DBL-SPRVL-CL
FNSL-Blown up	03NR	3	14G	G10_061		Non-converged Contingency	0	0.088	-	DBL-THIS-CLR
FDNS	03NR	3	14G	G10_061	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.033	102.8	DBL-IRON-CLR
FDNS	06ALL	0	14G	G11_037	FROM->TO	LAWEASOKLUNI	425	0.086	140.9	BASE CASE
FNSL-Blown up	3	0	14G	G11_037		Non-converged Contingency	0	0.032	-	DBL-WICH-THI
FNSL-Blown up	03ALL	0	14G	G11_037		Non-converged Contingency	0	0.031	-	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_037	FROM->TO	TUCKFR345230	300	0.046	102.8	BASE CASE
FNSL-Blown up	03ALL	2	14G	G11_037		Non-converged Contingency	0	0.030	-	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_040	FROM->TO	LAWEASOKLUNI	425	0.084	140.9	BASE CASE
FDNS	06ALL	0	14G	G11_040	FROM->TO	TUCKFR345230	300	0.051	102.8	BASE CASE

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_043	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.060	106.3	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	160.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	160.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	137.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	137.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	136.7	BENTON - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	135.4	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	135.4	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	134.4	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	134.2	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	133.1	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	132.0	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	130.5	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	130.3	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.5	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.8	CENTENNIAL - WACO 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.4	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.3	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	127.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.7	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	125.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.2	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.1	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.035	117.9	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	117.8	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	117.4	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	117.1	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	116.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	116.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.7	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.4	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.035	115.9	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.7	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.2	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	115.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.0	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.6	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	113.4	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.5	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	112.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	112.1	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.7	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.7	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.5	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.4	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.3	SMOKYH6 230.00 - SUMMIT 230KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.0	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.8	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.4	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.4	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.4	MINGO - SETAB 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.1	MULLERGREY - SPEARVILLE 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.9	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.7	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	109.7	THISTLE7 345.00 - WICHITA 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	109.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.6	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.3	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.7	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.6	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	MINGO - SETAB 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.3	MULLERGREN - SPEARVILLE 230KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	103.0	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	102.4	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	102.0	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	101.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	101.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_043	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.3	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.2	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.6	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.3	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	154.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	140.0	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	136.7	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	135.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	135.0	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	129.0	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	126.5	BASE CASE
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	126.4	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	124.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	122.6	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	122.5	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	121.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	121.5	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	120.8	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	119.5	RENFROW7 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.8	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.8	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.5	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	118.4	GEN520922 1-SLEEPING BEAR
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	117.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.5	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	117.2	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	117.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	116.2	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.0	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	115.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	115.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.5	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	115.2	DEWEY - TALOGA 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	115.0	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.8	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.7	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	114.6	BASE CASE

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.5	GEN514805 1-SOONER UNIT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	114.3	DEWEY - IODINE 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	114.1	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	114.1	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.0	GEN520922 1-SLEEPING BEAR
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.8	DEWEY - TALOGA 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.8	MULLERGREEN - SPEARVILLE 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.8	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.7	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.2	FLATRDRG3 - HARPER 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.8	GEN514806 1-SOONER UNIT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.8	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.6	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.6	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.5	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.5	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.4	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.3	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.3	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.2	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.1	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.0	AXTELL - PAULINE 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.0	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	06ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	111.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.2	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	111.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.7	IODINE - MOORELAND 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	110.5	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	06ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	110.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	110.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	NC1_GEN-NEBRASKA CITY 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	108.1	GEN515389 1-TLGAWND1 34.500
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560221 1-G07-62-1 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560222 1-G07-62-2 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560223 1-G07-62-3 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560224 1-G07-62-4 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	107.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.9	GEN562017 1-G11_022_3 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.9	GEN560522 1-G05-12-2 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.8	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.8	GEN560121 1-G08-47 0.5750
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN562020 1-G11_021_3 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN527162 1-MUSTANG GEN #2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN515365 1-CENT 21 34.500
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	LYDIA - VALLIANT 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN539785 1-ENSNW 1 0.5750
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.4	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.3	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.3	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.2	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.2	GEN560696 1-G11-008-4 0.6900

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS		1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	107.2	GEN520997 1-MORLND2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.2	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS		1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	107.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN659111 2-LELAND OLDS UNIT2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN515393 1-OGEWND2G
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN645011 1-NEBRASKA CITY 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN542962 2-IATAN UNIT #2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN562023 1-G11_020_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN562026 1-G11_019_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	107.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	107.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.0	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.9	GEN526331 1-JONES GEN #1 22 KV
FDNS		01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN526334 1-JONES_4 116.500
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	106.8	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7	GEN539670 4-JUDSON LARGE GENERATOR
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.6	GEN526332 1-JONES GEN #2 21 KV
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.6	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN560695 1-G11-008-3 0.6900
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	106.5	WOODWARD - WOODWARD 69KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN645012 2-NEBRASKA CITY 2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN562062 1-G11_043_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN562065 1-G11_044_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN542902 1-GPW_G1 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	GEN560694 1-G11-008-2 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	GEN560514 1-G04_014 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.2	GEN640009 1-COOPER NUCLEAR STATION
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.2	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.0	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN560714 1-G10_061_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN539807 1-G05-12 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	BASE CASE
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.7	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	GEN560238 1-G10-09 0.6900
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.6	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.6	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560429 1-G08-29 0.6400
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN560659 1-G07-38 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN562035 1-G11_016_3 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN560432 1-G08-124 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN560693 1-G11-008-1 0.6900
FDNS		01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.1	POTTER COUNTY INTERCHANGE (WAKU 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN560549 1-G06-06 0.6900
FDNS		3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS		03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	BYRON_138 138.00 - SANDY_CN 138138.00 138KV CKT 1
FDNS		3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	104.8	WOODWARD - WOODWARD 69KV CKT 1
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN560329 1-G10-45 0.6900
FDNS		03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN531503 1-CIMRRN 1 34.500
FDNS		01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	BASE CASE
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.2	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.1	GEN514805 1-SOONER UNIT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.7	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.7	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523117 1-BUFF_DUNES210.6900
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.6	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	GEN562032 1-G11_017_3 0.6900
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	103.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.3	ROMAN NOSE - SOUTHWARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	103.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.1	C_CITY_138 138.00 - KNOB HILL 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.7	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.5	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	MATHWSN7 345.00 - NORTHWEST 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	GEN521120 1-BUFFBEAR2
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	GEN514806 1-SOONER UNIT 2
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.4	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.3	DEWEY - SOUTHWARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.3	MOORELAND - TALOGA 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.2	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	102.1	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.9	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	101.9	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	101.9	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	101.8	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.7	GRACEMONT - MINCO 345KV CKT 1
FDNS	01ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	101.7	CARTER JCT - WOODWARD 69KV CKT 1
FDNS	1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.2	GEN531447 1-HOLCOMB GENERATOR
FDNS	1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.2	GEN520998 1-MORLND3
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	3	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	100.4	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	1	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	100.1	DOVER SW - OKEENE 138KV CKT 1
FDNS	03G11_043	0	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.0	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	171.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	171.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_043	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	148.3	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	148.3	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	147.0	BENTON - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.7	THISTLE7 345.00 - WICHITA 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	145.1	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	144.9	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	143.8	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	142.6	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	140.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	140.6	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.4	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.6	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.3	CENTENNIAL - WACO 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.2	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.1	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.6	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.5	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MINGO - SETAB 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	137.4	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.9	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.034	136.0	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	129.0	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.8	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.7	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.035	128.2	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.1	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.7	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.6	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.3	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	127.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.1	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.0	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	126.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	126.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.4	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.035	126.2	BENTON - WICHITA 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	125.4	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.7	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.2	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	123.8	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.0	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.5	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.5	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.0	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.0	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.8	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.7	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.6	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.3	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.9	MINGO - RED WILLOW 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.7	MINGO - SETAB 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.2	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.0	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.042	120.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.042	120.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.9	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.8	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.8	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	3		0	14G	G11_043	FROM->TO HARPER - MILAN TAP 138KV CKT 1	110	0.031	118.9	G11-17T 345.00 - SPEARVILLE 345KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.9	MINGO - SETAB 345KV CKT 1
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	113.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	112.7	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	112.4	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	111.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	111.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_043		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.7	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.6	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.0	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.7	GREENSBURG - SUN CITY 115KV CKT 1
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.0	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.0	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.9	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS		1	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	108.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		1	0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	108.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.9	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.7	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.3	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	104.4	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	104.2	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	103.2	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.035	102.0	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	101.6	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.2	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	101.0	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	100.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	99.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	99.9	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	99.9	GEN532722 1-EVANS ENERGY CENTER UNIT 2
FDNS	03G11_043		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	141.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS		3	0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	140.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	131.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.033	120.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_043		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	110.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	109.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_043		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	100.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043		0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	100.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		3	0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	0 14G	G11_043	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FNSL-Blown up		3	0 14G	G11_043		Non-converged Contingency	0	0.445	-	DBL-WICH-THI
FNSL-Blown up		3	0 14G	G11_043		Non-converged Contingency	0	0.148	-	DBL-TGA-MATT
FNSL-Blown up	01ALL		0 14G	G11_043		Non-converged Contingency	0	0.153	-	DBL-TGA-MATT
FNSL-Blown up	03ALL		0 14G	G11_043		Non-converged Contingency	0	0.444	-	DBL-WICH-THI
FNSL-Blown up	03ALL		0 14G	G11_043		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FNSL-Blown up	03G11_043		0 14G	G11_043		Non-converged Contingency	0	0.445	-	DBL-WICH-THI
FNSL-Blown up	03G11_043		0 14G	G11_043		Non-converged Contingency	0	0.148	-	DBL-TGA-MATT
FDNS		03ALL	2 14G	G11_043	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.060	106.9	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_043		2 14G	G11_043	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	141.6	DBL-WICH-THI
FDNS		3	2 14G	G11_043	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	140.0	DBL-WICH-THI
FDNS	03G11_043		2 14G	G11_043	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.079	123.3	DBL-WICH-THI
FDNS		3	2 14G	G11_043	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.079	120.8	DBL-WICH-THI
FDNS	03G11_043		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.079	226.3	DBL-WICH-THI
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.079	222.0	DBL-WICH-THI
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	156.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	156.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_043		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	134.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	134.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	134.6	BENTON - WICHITA 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	132.3	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	132.3	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	131.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	130.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.7	SPP-WR-416
FDNS	03ALL		2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.1	G11-17T 345.00 - POST ROCK 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	WR-B3-14
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.2	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.1	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	127.6	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.4	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	125.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	125.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.9	SPP-MKEC-12
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.8	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	121.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	120.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.7	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.2	SPP-MKEC-09B
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	116.2	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.9	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.6	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.9	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.8	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.8	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	114.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	114.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	114.2	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.7	SPP-WR-416
FDNS	03ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	113.7	DBL-SPRVL-CL
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.5	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.9	WR-B3-14
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.4	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.0	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.9	SPP-WR-416
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.7	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.4	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.4	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.1	WR-B3-14
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.9	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.8	WR-B3-12
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.7	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.6	SPP-WR-415
FDNS	09ALL	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.081	110.5	DBL-WICH-THI
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.5	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.4	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.3	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.9	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.6	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	WR-B3-12
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.9	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.8	SPP-WR-415
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	SPP-MKEC-12
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.6	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.4	MINGO - SETAB 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.3	ST JOHN - ST_JOHN 115KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	107.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	107.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.9	SPP-MKEC-12
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.8	MINGO - RED WILLOW 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.8	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.6	MINGO - SETAB 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.5	ST JOHN - ST JOHN 115KV CKT 1
FDNS		9	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.081	104.6	DBL-WICH-THI
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.1	SPP-MKEC-09B
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.8	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.5	GREENSBURG - SUN CITY 115KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	99.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	99.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	149.8	DBL-WICH-THI
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	147.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	146.6	DBL-WICH-THI
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	137.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	134.3	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	133.2	GEN520997 1-MORLND2
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	132.5	DEWEY - IODINE 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	127.0	GEN520998 1-MORLND3
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	124.1	WOODWARD - WOODWARD 69KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.8	BASE CASE
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	121.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FNLS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	121.3	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	119.7	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	119.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.3	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.3	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.7	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.2	GEN520997 1-MORLND2
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	116.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	116.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.9	GEN520997 1-MORLND2
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	115.6	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	115.3	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	114.8	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.1	SPP-SWPS-04
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	114.0	MINGO - RED WILLOW 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	113.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	113.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.7	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.4	AXTELL - POST ROCK 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.4	MINGO - SETAB 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.8	CIRCLE - MULLERGREN 230KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	SPP-SWPS-02
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	112.5	BENTON - WICHITA 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.4	GEN514805 1-SOONER UNIT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.3	SPP-SWPS-01
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.2	DEWEY - IODINE 138KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.2	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.1	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.7	GEN520922 1-SLEEPING BEAR
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	111.3	DEWEY - TALOGA 138KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.1	HOLCOMB - SETAB 345KV CKT 1
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	111.0	FLATRDG3 - HARPER 138KV CKT 1
FDNS		03G11_043	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.9	GEN520998 1-MORLND3
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.9	SPP-MKEC-08
FDNS		03ALL	2 14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.7	GEN514806 1-SOONER UNIT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	SPP-MKEC-05
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	SPP-MKEC-03A
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	110.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.4	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	SPP-MKEC-03B
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	G11-17T 345.00 - MULGREN7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	AXTELL - PAULINE 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	109.8	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.8	MULGREN7 345.00 (MULLERGRENT1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	109.8	BENTON - ROSE HILL 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.7	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.6	WRTOD400
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.6	GEN520998 1-MORLND3
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.6	NC1_GEN-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	LYDIA - VALLIANT 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	SPP-AEPW-01
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.5	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN539785 1-ENSGW 1 0.5750
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN515365 1-CENT 21 34.500
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN560696 1-G11-008-4 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	105.1	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	105.0	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN515393 1-OGEWND2G
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.9	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN562026 1-G11_019_3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN526331 1-JONES GEN #1 22 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.7	GEN526334 1-JONES_4 116.500
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.7	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	104.7	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	104.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	104.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	SPP-SWPS-05
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.5	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.3	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.3	GEN560694 1-G11-008-2 0.6900

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.3	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	GEN560514 1-G04_014 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.1	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	09ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.0	DBL-TGA-MATT
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	GEN560714 1-G10_061 3 0.6900
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	BASE CASE
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.5	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN562035 1-G11_016 3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560429 1-G08-29 0.6400
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560693 1-G11-008-1 0.6900
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.1	GEN560549 1-G06-06 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.0	BYRON_138 138.00 - SANDY_CN 138138.00 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	103.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.8	GEN531503 1-CIMRRN 1 34.500
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.3	BASE CASE
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	GEN523117 1-BUFF_DUNES210.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	GEN562032 1-G11_017 3 0.6900
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.6	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.2	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.2	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.2	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.8	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	100.6	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03G11_043	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	100.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	100.3	DEWEY - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	100.0	WOODWARD DISTRICT EHV (WWDHEV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	99.9	MOORELAND - TALOGA 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.079	236.9	DBL-WICH-THI
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.079	232.5	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	167.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	167.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	144.9	BENTON - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	142.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	142.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	141.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.8	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.3	SPP-WR-416
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.5	WR-B3-14
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.5	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	137.8	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	137.1	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.2	SPP-MKEC-12
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.2	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.1	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	131.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	131.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.5	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.3	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.9	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.6	SPP-MKEC-09B
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	126.6	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.3	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.0	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.9	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.7	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.5	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.2	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.8	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	124.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	124.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	124.6	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.4	SPP-WR-416
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	124.0	DBL-SPRVL-CL
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.5	WR-B3-14
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.6	SPP-WR-416
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.6	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.1	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.8	WR-B3-14
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.7	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.7	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	WR-B3-12
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.2	SPP-WR-415
FDNS	09ALL	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.081	121.1	DBL-WICH-THI
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.0	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.9	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.3	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.9	CIRCLE - MULLERGREEN 230KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.7	CENTENNIAL - WACO 138KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.7	WR-B3-12
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.4	SPP-WR-415
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	SPP-MKEC-12
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	118.9	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.7	MINGO - SETAB 345KV CKT 1
FDNS	03G11_043	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.6	ST JOHN - ST_JOHN 115KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.2	SPP-MKEC-12
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.2	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.1	MINGO - RED WILLOW 345KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.1	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	116.9	ST JOHN - ST JOHN 115KV CKT 1
FDNS		9	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.081	115.1	DBL-WICH-THI
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.9	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.5	SPP-MKEC-09B
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.2	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.9	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.2	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.2	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.2	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.1	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.8	SPP-MKEC-09B
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	109.6	DBL-SPRVL-CL
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.5	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.1	GREENSBURG - SUN CITY 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	108.4	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	108.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	108.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	107.7	DBL-SPRVL-CL
FDNS	03G11_043		2 14G	G11_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	101.7	DBL-IRON-CLR
FDNS	03ALL		2 14G	G11_043	FROM->TO	MULLERGREIN - SOUTH HAYS 230KV CKT 1	297	0.040	112.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		2 14G	G11_043	TO->FROM	MULLERGREIN - SPEARVILLE 230KV CKT 1	318.7	0.043	126.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_043		2 14G	G11_043	TO->FROM	MULLERGREIN - SPEARVILLE 230KV CKT 1	318.7	0.044	106.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	2 14G	G11_043	TO->FROM	MULLERGREIN - SPEARVILLE 230KV CKT 1	318.7	0.044	105.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FNSL-Blown up		3	2 14G	G11_043		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FNSL-Blown up	03ALL		2 14G	G11_043		Non-converged Contingency	0	0.442	-	DBL-WICH-THI
FNSL-Blown up	03ALL		2 14G	G11_043		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FNSL-Blown up	03G11_043		2 14G	G11_043		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FDNS	03G11_043		2 14G	G11_043	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.046	109.4	DBL-WICH-THI
FDNS		3	2 14G	G11_043	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.046	108.3	DBL-WICH-THI
FDNS	03ALL		0 14G	G11_044	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.060	106.3	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	160.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	160.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	00NR		0 19SP	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.044	142.8	DBL-WICH-THI
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	137.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	137.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	136.7	BENTON - WICHITA 345KV CKT 1
FDNS		3	0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	135.4	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	135.4	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	134.4	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	134.2	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	133.1	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	132.0	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	130.5	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	130.3	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.5	CIRCLE - MULLERGREIN 230KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.8	CENTENNIAL - WACO 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.4	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.3	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	127.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.7	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	125.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.2	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	118.1	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.035	117.9	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	117.8	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	117.4	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	117.1	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING	CONTINGENCY
							(MVA)	TDF		
FDNS	03ALL	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	116.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	116.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.7	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.4	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.035	115.9	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.7	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.2	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	115.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.0	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.6	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	113.4	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.5	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	112.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	112.1	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.7	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.7	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.5	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.4	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	00NR	0	24SP	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.043	111.4	DBL-WICH-THI
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.0	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.8	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.6	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.4	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.4	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.4	MINGO - SETAB 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.1	MULLERGREY - SPEARVILLE 230KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.9	CIRCLE - MULLERGREY 230KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.7	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	109.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	109.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.6	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.3	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.7	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.6	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	MINGO - SETAB 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.3	MULLERGREY - SPEARVILLE 230KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	103.0	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	102.4	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	102.0	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	101.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	101.6	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_044	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.3	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.2	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.6	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.3	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	00NR	0	19SP	G11_044	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.118	107.8	DBL-WICH-THI
FDNS	00NR	0	14SP	G11_044	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.119	104.3	DBL-WICH-THI
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	154.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	140.0	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	136.7	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	135.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	135.0	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	129.0	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	126.5	BASE CASE
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	126.4	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	124.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	122.6	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	122.5	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	121.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	121.5	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	120.8	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	119.5	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.8	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.8	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.5	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	118.4	GEN520922 1-SLEEPING BEAR
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	117.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.5	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	117.2	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	117.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	116.2	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	116.0	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	115.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	115.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.5	SAND RDG_138138.00 - WAKITA_138 138.00 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	115.2	DEWEY - TALOGA 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	115.0	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.8	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.7	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	114.6	BASE CASE
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.5	GEN514805 1-SOONER UNIT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	114.3	DEWEY - IODINE 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	114.1	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	114.1	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.0	GEN520922 1-SLEEPING BEAR
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.8	DEWEY - TALOGA 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.8	MULLERGREN - SPEARVILLE 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.8	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.7	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	1	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.2	FLATRDG3 - HARPER 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.8	GEN514806 1-SOONER UNIT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.8	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.6	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.6	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.5	GEN520998 1-MORLND3
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.5	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.4	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.3	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.3	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.2	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	112.1	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.0	AXTELL - PAULINE 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	112.0	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	06ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	111.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.2	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	111.0	WOODWARD - WOODWARD 69KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.7	IODINE - MOORELAND 138KV CKT 1	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	110.5	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	06ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	110.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	110.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	NC1_GEN-NEBRASKA CITY 1	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	108.1	GEN515389 1-TLGAWND1 34.500	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560221 1-G07-62-1 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560222 1-G07-62-2 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560223 1-G07-62-3 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	108.0	GEN560224 1-G07-62-4 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	107.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.9	GEN562017 1-G11_022_3 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.9	GEN560522 1-G05-12-2 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.8	IODINE - MOORELAND 138KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.8	GEN560121 1-G08-47 0.5750	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN562020 1-G11_021_3 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	EASTDC - WELSH 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN527161 1-MUSTANG GEN #1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN527162 1-MUSTANG GEN #2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN515365 1-CENT 21 34.500	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	LYDIA - VALLIANT 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.7	GEN531208 1-FLTRDG-WG1 0.6000	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN542957 1-IATAN UNIT #1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN539762 1-SSWIND 1 34.500	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN539785 1-ENSNWG 1 0.5750	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.5	GEN560267 1-G10-15-1 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN531459 2-S2 GENERATOR	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN560268 1-G10-15-2 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.4	GEN527163 1-MUSTANG GEN #3 22 KV	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.4	DOVER - TWIN LAKES 138KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.3	GEN539767 1-GRAY COUNTY WIND FARM	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.3	GEN645001 1-FORT CALHOON 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.3	DOVER - DOVER SW 138KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.2	GEN527882 1-CUNNINGHAM GEN #2 20 KV	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.2	GEN560696 1-G11-008-4 0.6900	
FDNS	03ALL	1	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	107.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	107.2	MATHWSN7 345.00 - WOODRING 345KV CKT 1	
FDNS	03ALL	1	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.038	107.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN527902 1-HOBBS PLANT #2 (CT)	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN659111 2-LELAND OLDS UNIT2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN527901 1-HOBBS PLANT #1 (CT)	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN515393 1-OWEWD2G	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN645011 1-NEBRASKA CITY 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN542962 2-IATAN UNIT #2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN562023 1-G11_020_3 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.1	GEN562026 1-G11_019_3 0.6900	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	107.0	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	107.0	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	1	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	GEN659103 1-ANTELOPE VALLEY UNIT1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.0	GEN659107 2-ANTELOPE VALLEY UNIT2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.9	GEN526331 1-JONES GEN #1 22 KV	
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN526334 1-JONES_4 116.500	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.8	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	106.8	WOODWARD - WOODWARD EHV 138KV CKT 2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.7	GEN539670 4-JUDSON LARGE GENERATOR	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.6	GEN526332 1-JONES GEN #2 21 KV	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.6	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN560695 1-G11-008-3 0.6900	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	106.5	WOODWARD - WOODWARD 69KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN645012 2-NEBRASKA CITY 2	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.5	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.3	GEN560514 1-G04_014 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.2	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.2	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	106.0	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	BASE CASE
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.9	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.8	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.7	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	GEN560238 1-G10-09 0.6900
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.6	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.6	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560429 1-G08-29 0.6400
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.2	GEN560693 1-G11-008-1 0.6900
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	105.1	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN560549 1-G06-06 0.6900
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.041	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	104.8	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN531503 1-CIMRRN 1 34.500
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	BASE CASE
FDNS	03G11_044	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.2	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	104.1	GEN514805 1-SOONER UNIT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.7	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.7	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523117 1-BUFF_DUNES210.6900
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.6	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	GEN562032 1-G11_017_3 0.6900
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	103.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	103.3	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	01ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	103.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.1	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.7	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		3	0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.5	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	MATHWSN7 345.00 - NORTHWEST 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	GEN521120 1-BUFBEAR2
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.4	GEN514806 1-SOONER UNIT 2
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.4	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	102.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	102.3	DEWEY - SOUTHDAR 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.3	MOORELAND - TALOGA 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.2	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	102.1	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.9	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	101.9	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	101.9	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	101.8	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.7	GRACEMONT - MINCO 345KV CKT 1
FDNS	01ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	101.7	CARTER JCT - WOODWARD 69KV CKT 1
FDNS	1		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.2	GEN531447 1-HOLCOMB GENERATOR
FDNS	1		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.2	GEN520998 1-MORLND3
FDNS	3		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	RENFROW4 138.00 - SAND RDG_138138.00 138KV CKT 1
FDNS	3		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	3		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	100.4	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	1		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	1		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.031	100.1	DOVER SW - OKEENE 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	100.0	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	171.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	171.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	148.3	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	148.3	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	147.0	BENTON - WICHITA 345KV CKT 1
FDNS	3		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	145.1	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	144.9	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	143.8	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	142.6	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	140.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	140.6	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.4	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.6	CIRCLE - MULLERGRN 230KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.3	CENTENNIAL - WACO 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.2	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.1	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.6	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.5	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MINGO - SETAB 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	137.4	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.9	ST JOHN - ST JOHN 115KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	136.0	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	129.0	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.8	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.7	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.035	128.2	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	128.1	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.7	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	00NR		0 24SP	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.043	127.7	DBL-WICH-THI
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.6	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.3	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_044		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	127.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.1	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL		0 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.0	GREENSBURG - SSTARTP3 115.00 115KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	126.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	126.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.4	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.035	126.2	BENTON - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	125.4	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.7	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.2	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	123.8	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.0	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.5	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.5	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.0	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.0	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.8	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.7	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.6	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.3	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.9	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.7	MINGO - SETAB 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.2	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.0	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	120.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	120.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.9	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.8	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.8	HOOVER NORTH - HOOVERS4 138.00 138KV CKT Z1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	118.9	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.9	MINGO - SETAB 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	113.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	112.7	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	112.4	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	111.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	111.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_044	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.7	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.6	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.0	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.7	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.0	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.0	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	3	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.9	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	1	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	108.8	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	1	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	108.8	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.9	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.7	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	105.3	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	104.4	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	104.2	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	103.2	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.035	102.0	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	101.6	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.2	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	101.0	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.0	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	100.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	99.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	99.9	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY	
FDNS	01ALL	0	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	99.9	GEN532722 1-EVANS ENERGY CENTER UNIT 2	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	141.6	G11-17T 345.00 - POST ROCK 345KV CKT 1	
FDNS		3	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	140.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	131.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	121.4	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.033	120.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	110.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS		3	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.040	109.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_044	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	100.7	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03G11_044	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	100.7	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS		3	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	0	14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.031	99.9	THISTLE7 345.00 - WICHITA 345KV CKT 2
FNSL-Blown up		3	0	14G	G11_044		0	0.445	-	DBL-WICH-THI	
FNSL-Blown up		3	0	14G	G11_044		0	0.148	-	DBL-TGA-MATT	
FNSL-Blown up	01ALL	0	14G	G11_044			0	0.153	-	DBL-TGA-MATT	
FNSL-Blown up	03ALL	0	14G	G11_044			0	0.444	-	DBL-WICH-THI	
FNSL-Blown up	03ALL	0	14G	G11_044			0	0.147	-	DBL-TGA-MATT	
FNSL-Blown up	03G11_044	0	14G	G11_044			0	0.445	-	DBL-WICH-THI	
FNSL-Blown up	03G11_044	0	14G	G11_044			0	0.148	-	DBL-TGA-MATT	
FNSL-Blown up	03NR	0	14G	G11_044			0	0.239	-	DBL-WICH-THI	
FNSL-Blown up	03NR	0	14G	G11_044			0	0.231	-	DBL-WICH-THI	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CHISHOLM - MAIZEE 4 138.00 138KV CKT 1	287	0.060	106.9	BENTON - WICHITA 345KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	141.6	DBL-WICH-THI	
FDNS		3	2	14G	G11_044	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.068	140.0	DBL-WICH-THI
FDNS	03G11_044	2	14G	G11_044	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.079	123.3	DBL-WICH-THI	
FDNS		3	2	14G	G11_044	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.079	120.8	DBL-WICH-THI
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.079	226.3	DBL-WICH-THI	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.079	222.0	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	156.8	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	156.8	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	134.8	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	134.8	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	134.6	BENTON - WICHITA 345KV CKT 1	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	132.3	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	132.3	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	131.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	130.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.7	SPP-WR-416	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	129.1	G11-17T 345.00 - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.9	WR-B3-14	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	128.2	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	128.1	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	127.6	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	126.4	MINGO - RED WILLOW 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	125.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	125.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.9	SPP-MKEC-12	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	124.8	ALEXANDER - SAWYER 3 115.00 115KV CKT 1	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	121.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	120.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.7	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.5	45TH ST4 138.00 - COWSKIN 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	116.2	SPP-MKEC-09B	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	116.2	BENTON - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.9	MEDICINE LODGE - SUN CITY 115KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.6	GREENSBURG - SUN CITY 115KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	115.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.9	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.8	GREENSBURG - SSTARTP3 115.00 115KV CKT 1	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.8	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	114.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	114.7	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2	
FDNS		3	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	114.2	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	114.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.7	SPP-WR-416	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	113.7	DBL-SPRVL-CL
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	113.5	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.9	WR-B3-14
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.4	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	112.0	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.9	SPP-WR-416
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.7	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.4	CIRCLE - MULLERGEN 230KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	111.4	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	111.1	WR-B3-14
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.9	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.8	WR-B3-12
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.7	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.6	SPP-WR-415
FDNS	09ALL		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.081	110.5	DBL-WICH-THI
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	110.5	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.4	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	110.3	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.9	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.6	CIRCLE - MULLERGEN 230KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	109.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	109.1	WR-B3-12
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.9	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.8	SPP-WR-415
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	SPP-MKEC-12
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.7	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	108.6	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.4	MINGO - SETAB 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	108.3	ST JOHN - ST JOHN 115KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	107.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	107.3	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.9	SPP-MKEC-12
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.9	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.8	MINGO - RED WILLOW 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.8	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.6	MINGO - SETAB 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	106.5	ST JOHN - ST JOHN 115KV CKT 1
FDNS		9	2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.081	104.6	DBL-WICH-THI
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.4	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	101.1	SPP-MKEC-09B
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.8	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.030	100.5	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	99.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	99.9	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS	03G11_044		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	149.8	DBL-WICH-THI
FDNS		3	2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	147.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	146.6	DBL-WICH-THI
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	137.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	134.3	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	133.2	GEN520997 1-MORLND2
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	132.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	127.0	GEN520998 1-MORLND3
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	124.1	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	123.8	BASE CASE
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	121.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FNSL	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	121.3	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	119.7	RENFROW7 345.00 - WIOLA 7 345.00 345KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	119.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	118.3	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	118.3	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.7	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	117.2	GEN520997 1-MORLND2	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	116.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	116.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	115.9	GEN520997 1-MORLND2	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	115.6	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	115.3	VIOLA 7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	114.8	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	114.1	SPP-SWPS-04	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	114.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	114.0	MINGO - RED WILLOW 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	113.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	113.9	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.9	G11-17T 345.00 - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	113.7	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.4	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.4	MINGO - SETAB 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	113.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.8	CIRCLE - MULLERGRN 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	SPP-SWPS-02	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.7	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.035	112.5	BENTON - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.5	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.4	GEN514805 1-SOONER UNIT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.3	SPP-SWPS-01	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.2	DEWEY - IODINE 138KV CKT 1	
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	112.2	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	112.1	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.7	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	111.3	DEWEY - TALOGA 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	111.1	HOLCOMB - SETAB 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	111.0	FLATRDG3 - HARPER 138KV CKT 1	
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.9	GEN520998 1-MORLND3	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.9	SPP-MKEC-08	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.7	GEN514806 1-SOONER UNIT 2	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	HARPER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	SPP-MKEC-05	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.5	SPP-MKEC-03A	
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	110.5	DEWEY - IODINE 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.4	GRAND ISLAND - SWEETWATER 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	CLEARWATER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	SPP-MKEC-03B	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	110.3	FARGO JCT - WOODWARD 69KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	110.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	G11-17T 345.00 - MULGRN7 345.00 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.9	AXTELL - PAULINE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	109.8	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.8	MULGRN7 345.00 (MULLERGRN1) 345/230/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	109.8	BENTON - ROSE HILL 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.7	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.6	WRTOD400	
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	109.6	GEN520998 1-MORLND3	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	107.6	NC1_GEN-NEBRASKA CITY 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	EASTDC - WELSH 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	LYDIA - VALLIANT 345KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	GEN531208 1-FLTRDG-WG1 0.6000	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.6	SPP-AEPW-01	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.5	IODINE - MOORELAND 138KV CKT 1	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560267 1-G10-15-1 0.6900	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN539785 1-ENSNW 1 0.5750	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN539762 1-SSWIND 1 34.500	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN560268 1-G10-15-2 0.6900	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN515365 1-CENT 21 34.500	
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN542957 1-IATAN UNIT #1	



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN560696 1-G11-008-4 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	105.1	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	105.0	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	105.0	GEN515393 1-OGEWND2G
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.9	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN562026 1-G11_019_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.9	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN526331 1-JONES GEN #1 22 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.8	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.7	GEN526334 1-JONES_4 116.500
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.7	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	104.7	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	104.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	104.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.6	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	SPP-SWPS-05
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.5	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.4	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.3	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	104.3	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.2	GEN560514 1-G04_014 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.1	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	09ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.0	DBL-TGA-MATT
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	GEN560714 1-G10_061_3 0.6900
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	104.0	BASE CASE
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.8	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	103.8	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.7	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.5	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560429 1-G08-29 0.6400
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	GEN560693 1-G11-008-1 0.6900
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.2	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.1	GEN560549 1-G06-06 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	103.0	BYRON_138 138.00 - SANDY_CN 138138.00 138KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.037	103.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.8	GEN560329 1-G10-45 0.6900

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.8	GEN531503 1-CIMRRN 1 34.500
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.040	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	102.3	BASE CASE
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.036	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	GEN523117 1-BUFF_DUNES210.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	GEN562032 1-G11_017_3 0.6900
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.6	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.6	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	101.2	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.2	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	101.2	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	101.1	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.034	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.8	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.039	100.6	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03G11_044	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	100.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	100.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.032	100.3	DEWEY - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.030	100.0	WOODWARD DISTRICT EHV (WWDDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_044	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.033	99.9	MOORELAND - TALOGA 138KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.079	236.9	DBL-WICH-THI
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.079	232.5	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	167.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	167.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	145.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	144.9	BENTON - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	142.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	142.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	141.9	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.8	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	140.3	SPP-WR-416
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.5	WR-B3-14
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	139.3	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	138.5	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	138.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	137.8	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	137.1	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	136.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.2	SPP-MKEC-12
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.2	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	135.1	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	131.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	131.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.5	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	127.3	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.9	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.6	SPP-MKEC-09B
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	126.6	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.3	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	126.0	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.9	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.7	45TH ST4 138.00 - EVANS ENERGY CENTER SOUTH 138KV CKT 1
FDNS	3	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.5	45TH ST4 138.00 - COWSKIN 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	125.2	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03G11_044	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.8	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL	2	14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	124.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	124.8	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	124.6	BENTON - WICHITA 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.4	SPP-WR-416
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	124.3	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1
FDNS	03ALL		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	124.0	DBL-SPRVL-CL
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.5	WR-B3-14
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	123.1	HOOVER NORTH - LAKERIDGE 138KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.6	SPP-WR-416
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	122.6	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.1	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.8	WR-B3-14
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.7	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.7	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	CENTENNIAL - WACO 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.5	WR-B3-12
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	121.2	SPP-WR-415
FDNS	09ALL		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.081	121.1	DBL-WICH-THI
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	121.0	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.9	CENTENNIAL - COWSKIN 138KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.9	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	120.8	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	120.3	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.9	CIRCLE - MULLERGREN 230KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.7	CENTENNIAL - WACO 138KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.7	WR-B3-12
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.5	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.4	SPP-WR-415
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	SPP-MKEC-12
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	AXTELL - POST ROCK 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	119.0	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	119.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	118.9	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.7	MINGO - SETAB 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	118.6	ST JOHN - ST JOHN 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.2	SPP-MKEC-12
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.2	BARBER 3 115.00 - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	117.1	MINGO - RED WILLOW 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	117.1	ALEXANDER - SAWYER 3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	116.9	ST JOHN - ST JOHN 115KV CKT 1
FDNS		9	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.081	115.1	DBL-WICH-THI
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.9	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.5	SPP-MKEC-09B
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	111.2	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.9	GREENSBURG - SUN CITY 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.2	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.2	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	110.2	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	110.1	BARBER 3 115.00 - MEDICINE LODGE 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.8	SPP-MKEC-09B
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	109.6	DBL-SPRVL-CL
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.5	MEDICINE LODGE - SUN CITY 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	109.1	GREENSBURG - SUN CITY 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.030	108.4	GREENSBURG - SSTARTP3 115.00 115KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	108.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 1
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	108.4	CLARKCOUNTY7345.00 - THISTLE7 345.00 345KV CKT 2
FDNS		3	2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	107.7	DBL-SPRVL-CL
FDNS	03G11_044		2 14G	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	101.7	DBL-IRON-CLR
FDNS	03ALL		2 14G	G11_044	FROM->TO	MULLERGREN - SOUTH HAYS 230KV CKT 1	297	0.040	112.2	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL		2 14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.043	126.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03G11_044		2 14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.044	106.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		3	2 14G	G11_044	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.044	105.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FNLS-Blown up		3	2 14G	G11_044		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FNLS-Blown up	03ALL		2 14G	G11_044		Non-converged Contingency	0	0.442	-	DBL-WICH-THI

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL-Blown up	03ALL		2 14G	G11_044		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FNSL-Blown up	03G11_044		2 14G	G11_044		Non-converged Contingency	0	0.147	-	DBL-TGA-MATT
FDNS	03G11_044		2 14G	G11_044	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.046	109.4	DBL-WICH-THI
FDNS	3		2 14G	G11_044	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	330	0.046	108.3	DBL-WICH-THI
FDNS	00NR		3 14SP	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.039	143.4	DBL-WICH-THI
FDNS	00NR		3 19SP	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.043	136.1	DBL-WICH-THI
FDNS	00NR		3 24SP	G11_044	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.042	106.0	DBL-WICH-THI
FDNS	00NR		3 19SP	G11_044	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.116	100.5	DBL-WICH-THI
FDNS	00NR		3 24SP	G11_044	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.042	122.3	DBL-WICH-THI
FNSL-Blown up	03NR		3 14G	G11_044		Non-converged Contingency	0	0.239	-	DBL-WICH-THI
FDNS	00G11_045		0 14SP	G11_045	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.044	101.8	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		0 14SP	G11_045	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.044	101.8	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.130	110.6	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00G11_045		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.130	110.6	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.130	105.3	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00G11_045		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.130	105.3	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.137	102.5	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_045		0 14SP	G11_045	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.137	102.5	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		0 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.1	SPP-SWPS-K37
FDNS	00NR		0 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.4	SPP-SWPS-K37
FDNS	00NR		0 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.4	SPP-SWPS-T04
FDNS	00NR		0 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	101.8	SPP-SWPS-T04
FDNS	00NR		3 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.6	SPP-SWPS-K37
FDNS	00NR		3 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.9	SPP-SWPS-K37
FDNS	00NR		3 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.7	SPP-SWPS-T04
FDNS	00NR		3 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	102.2	SPP-SWPS-T04
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	115.3	SPP-SWPS-K37
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.038	113.6	SPP-SWPS-K37
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	108.5	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	106.5	DEAF SMITH COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.5	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	103.4	SPP-SWPS-T04
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	102.0	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1
FDNS	00NR		4 14SP	G11_046	FROM->TO	PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1	252	0.035	101.9	SPP-SWPS-T04
FDNS	00G11_048		0 14SP	G11_048	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.058	101.8	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		0 14SP	G11_048	TO->FROM	BAILEY COUNTY REC-EARTH INTERCHANGE - PLANT X STATION 115KV CKT 1	160	0.058	101.8	DEAF SMITH COUNTY INTERCHANGE - PLANT X STATION 230KV CKT 1
FDNS	0		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.030	110.6	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00G11_048		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.030	110.6	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.030	105.3	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	00G11_048		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.030	105.3	JONES STATION - LUBBOCK EAST INTERCHANGE 230KV CKT 1
FDNS	0		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.031	102.5	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_048		0 14SP	G11_048	FROM->TO	LUBBOCK SOUTH INTERCHANGE (ABB LLM60043) 230/115/13.2KV TRANSFORMER CKT 1	252	0.031	102.5	LUBBOCK EAST INTERCHANGE (ENRCO 136162) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	0		0 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (PENN C010585) 230/115/13.2KV TRANSFORMER CKT 2	150	0.059	102.3	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00G11_048		0 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (PENN C010585) 230/115/13.2KV TRANSFORMER CKT 2	150	0.059	102.3	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1
FDNS	00NR		4 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	126.3	SPP-SWPS-V95
FDNS	00NR		4 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	111.4	SPP-SWPS-V95
FDNS	00NR		4 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	110.9	SPP-SWPS-K37
FDNS	00NR		4 19WP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.039	107.8	SPP-SWPS-V95
FDNS	00NR		4 19SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.035	106.1	SPP-SWPS-V33
FDNS	00NR		4 24SP	G11_048	FROM->TO	YOAKUM COUNTY INTERCHANGE (GE M100899) 230/115/13.2KV TRANSFORMER CKT 1	150	0.037	103.0	SPP-SWPS-V49
FDNS	00NR		0 14SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.040	149.6	DBL-WICH-THI
FDNS	00NR		0 19SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.041	142.8	DBL-WICH-THI
FDNS	07NR		0 14G	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.041	120.5	DBL-WICH-THI
FDNS	00NR		0 24SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.035	111.4	DBL-WICH-THI
FDNS	00NR		0 19SP	G11_049	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.055	107.8	DBL-WICH-THI

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS		00NR	0 14SP	G11_049	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.054	104.3	DBL-WICH-THI
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	140.0	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		00NR	0 19WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.108	139.8	DBL-TGA-MATT
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	136.7	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	135.2	GEN520997 1-MORLND2
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	135.0	DEWEY - IODINE 138KV CKT 1
FDNS		00NR	0 14SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.107	134.3	DBL-TGA-MATT
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.088	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		00NR	0 24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	130.9	DBL-TGA-MATT
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	129.0	GEN520998 1-MORLND3
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	126.5	BASE CASE
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	126.4	WOODWARD - WOODWARD 69KV CKT 1
FDNS		00NR	0 19SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.080	126.2	DBL-WICH-THI
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.062	124.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS		00NR	0 24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	122.8	DBL-G1151-TG
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	122.6	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.088	122.5	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	121.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	121.5	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	120.8	GEN520997 1-MORLND2
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	119.5	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.074	118.8	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS		3	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	118.5	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	118.4	GEN520922 1-SLEEPING BEAR
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	117.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS		3	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	117.5	GEN520997 1-MORLND2
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	117.2	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	116.6	MINGO - RED WILLOW 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	116.2	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	116.1	MINGO - SETAB 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	116.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	116.0	AXTELL - POST ROCK 345KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	115.9	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	115.5	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	115.2	DEWEY - TALOGA 138KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	115.0	GEN520998 1-MORLND3
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.8	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	114.7	BENTON - WICHITA 345KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	114.6	BASE CASE
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.5	GEN514805 1-SOONER UNIT 1
FDNS		00NR	0 24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	114.5	DBL-WWRD-G11
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS		00NR	0 19WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.080	114.3	DBL-WICH-THI
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.064	114.3	DEWEY - IODINE 138KV CKT 1
FDNS		3	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	114.1	IODINE - WOODWARD EHV 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.0	GEN520922 1-SLEEPING BEAR
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	113.8	DEWEY - TALOGA 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.8	MULLERGREN - SPEARVILLE 230KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.8	HOLCOMB - SETAB 345KV CKT 1
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	113.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS		01ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	113.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.7	CIRCLE - MULLERGREN 230KV CKT 1
FDNS		1	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.088	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.2	FLATRDG3 - HARPER 138KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS		03ALL	0 14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.8	GEN514806 1-SOONER UNIT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.8	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	112.6	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.6	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	00NR	0	14SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.078	112.6	DBL-WICH-THI
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.5	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	112.4	DEWEY - IODINE 138KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	112.3	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.3	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.2	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.1	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.0	AXTELL - PAULINE 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	112.0	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	06ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.087	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.075	111.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	111.2	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.062	111.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	110.7	IODINE - MOORELAND 138KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	110.5	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	06ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.087	110.2	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.9	NC1_GEN-NEBRASKA CITY 1
FDNS	00NR	0	14WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.078	108.5	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	108.1	GEN515389 1-TLGAWND1 34.500
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	108.0	GEN560221 1-G07-62-1 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	108.0	GEN560222 1-G07-62-2 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	108.0	GEN560223 1-G07-62-3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	108.0	GEN560224 1-G07-62-4 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	107.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.9	GEN562017 1-G11_022_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.9	GEN560522 1-G05-12-2 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	107.8	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.8	GEN560121 1-G08-47 0.5750
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	GEN562020 1-G11_021_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	GEN527162 1-MUSTANG GEN #2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	GEN515365 1-CENT 21 34.500
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	LYDIA - VALLIANT 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.7	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.5	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.5	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.5	GEN539785 1-ENSGW 1 0.5750
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.5	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.4	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	107.4	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.3	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	107.3	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.2	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.2	GEN560696 1-G11-008-4 0.6900
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	107.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	107.2	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.062	107.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN515393 1-OGEWND2G
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.1	GEN562026 1-G11_019_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.0	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.088	107.0	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.0	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.0	GEN659107 2-ANTELOPE VALLEY UNIT2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.9	GEN526331 1-JONES GEN #1 22 KV
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.062	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	106.8	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.8	GEN526334 1-JONES 4 116.500
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.8	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.8	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	106.8	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	106.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	106.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.7	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.6	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	106.6	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	106.5	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.5	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.5	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.5	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.5	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.3	GEN560514 1-G04_014 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.2	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.2	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	106.0	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.9	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.9	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.9	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.8	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.8	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.8	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	105.7	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN560429 1-G08-29 0.6400
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.2	GEN560693 1-G11-008-1 0.6900
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	105.1	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.1	GEN560549 1-G06-06 0.6900
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	105.0	BYRON_138 138.00 - SANDY_CN 138138.00 138KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	104.8	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.8	GEN531503 1-CIMRRN 1 34.500
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	104.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	104.4	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.2	BASE CASE
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	104.1	GEN514805 1-SOONER UNIT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	103.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	103.7	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	103.7	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.7	GEN523117 1-BUFF_DUNES210.6900
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	103.6	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.4	GEN562032 1-G11_017_3 0.6900
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	103.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	103.3	ROMAN NOSE - SOUTHARD 138KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.2	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	103.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	103.1	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.7	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	102.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.4	MATHWSN7 345.00 - NORTHWEST 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	102.4	GEN521120 1-BUFBEAR2
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	102.4	GEN514806 1-SOONER UNIT 2
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.4	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	102.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	102.3	DEWEY - SOUTHDARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.3	MOORELAND - TALOGA 138KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	101.9	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	101.9	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	101.9	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	101.8	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	101.7	GRACEMONT - MINCO 345KV CKT 1
FDNS	01ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	101.7	CARTER JCT - WOODWARD 69KV CKT 1
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	101.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	101.2	GEN531447 1-HOLCOMB GENERATOR
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	101.2	GEN520998 1-MORLND3
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	101.1	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	100.9	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	100.4	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	1	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	100.1	DOVER SW - OKEENE 138KV CKT 1
FDNS	07NR	0	14G	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.041	131.1	DBL-WICH-THI
FDNS	00NR	0	24SP	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.035	127.7	DBL-WICH-THI
FDNS	3	0	14G	G11_049	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.034	140.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_049	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.034	131.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	0	14G	G11_049	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.034	109.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FNSL-Blown up	3	0	14G	G11_049		Non-converged Contingency	0	0.242	-	DBL-TGA-MATT
FNSL-Blown up	3	0	14G	G11_049		Non-converged Contingency	0	0.199	-	DBL-WICH-THI
FNSL-Blown up	00NR	0	14WP	G11_049		Non-converged Contingency	0	0.329	-	DBL-TGA-MATT
FNSL-Blown up	01ALL	0	14G	G11_049		Non-converged Contingency	0	0.248	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	0	14G	G11_049		Non-converged Contingency	0	0.241	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	0	14G	G11_049		Non-converged Contingency	0	0.198	-	DBL-WICH-THI
FDNS	06ALL	0	14G	G11_049	FROM->TO	SPSSPTTIESB	620	0.122	114.6	BASE CASE
FDNS	06ALL	0	14G	G11_049	FROM->TO	SPSSPTTIESC1	620	0.122	114.6	BASE CASE
FDNS	06ALL	0	14G	G11_049	FROM->TO	TUCXFR345230	300	0.099	102.8	BASE CASE
FDNS	3	2	14G	G11_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1	318.7	0.041	140.0	DBL-WICH-THI
FDNS	3	2	14G	G11_049	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	191	0.036	120.8	DBL-WICH-THI
FDNS	3	2	14G	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.036	222.0	DBL-WICH-THI
FDNS	09ALL	2	14G	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.037	110.5	DBL-WICH-THI
FDNS	9	2	14G	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.037	104.6	DBL-WICH-THI
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.087	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.087	147.8	G11_051T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.068	146.6	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	137.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	134.3	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	133.2	GEN520997 1-MORLND2
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	132.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	127.0	GEN520998 1-MORLND3
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	124.1	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	123.8	BASE CASE
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.059	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.059	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	121.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FNSL	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	121.3	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	119.7	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	119.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	118.3	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	117.7	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.074	116.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	116.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	115.9	GEN520997 1-MORLND2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	115.6	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	115.3	VIOLA 7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.1	SPP-SWPS-04	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	114.0	MINGO - RED WILLOW 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	113.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.9	G11-17T 345.00 - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	113.7	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.4	AXTELL - POST ROCK 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.4	MINGO - SETAB 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	113.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.8	CIRCLE - MULLERGREN 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	112.7	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	112.7	SPP-SWPS-02	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	112.7	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	112.5	BENTON - WICHITA 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.5	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.4	GEN514805 1-SOONER UNIT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	112.3	SPP-SWPS-01	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	112.2	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	112.1	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	111.7	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	111.3	DEWEY - TALOGA 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	111.1	HOLCOMB - SETAB 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	111.0	FLATRDG3 - HARPER 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.9	SPP-MKEC-08	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.7	GEN514806 1-SOONER UNIT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.5	HARPER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.5	SPP-MKEC-05	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.5	SPP-MKEC-03A	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.063	110.5	DEWEY - IODINE 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.4	GRAND ISLAND - SWEETWATER 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.3	CLEARWATER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.3	SPP-MKEC-03B	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	110.3	FARGO JCT - WOODWARD 69KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.9	G11-17T 345.00 - MULGREN7 345.00 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.9	AXTELL - PAULINE 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.8	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.8	MULGREN7 345.00 (MULLERGREN1) 345/230/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.8	BENTON - ROSE HILL 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.7	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.6	WRTOD400	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	109.6	GEN520998 1-MORLND3	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	107.6	NC1_GEN-NEBRASKA CITY 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.6	EASTDC - WELSH 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.6	LYDIA - VALLIANT 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.6	GEN531208 1-FLTRDG-WG1 0.6000	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.6	SPP-AEPW-01	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.5	IODINE - MOORELAND 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN560267 1-G10-15-1 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN539785 1-ENSGW 1 0.5750	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN539762 1-SSWIND 1 34.500	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN560268 1-G10-15-2 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN515365 1-CENT 21 34.500	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN542957 1-IATAN UNIT #1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.4	GEN531459 2-S2 GENERATOR	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.3	GEN527163 1-MUSTANG GEN #3 22 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.3	GEN539767 1-GRAY COUNTY WIND FARM	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.1	GEN560696 1-G11-008-4 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.1	GEN645001 1-FORT CALHOUN 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.1	GEN527882 1-CUNNINGHAM GEN #2 20 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.1	GEN527902 1-HOBBS PLANT #2 (CT)	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	105.1	DOVER - TWIN LAKES 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.0	GEN527901 1-HOBBS PLANT #1 (CT)	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.0	GEN659111 2-LELAND OLDS UNIT2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	105.0	MATHWSN7 345.00 - WOODRING 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	105.0	GEN515393 1-OGEWIND2G	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.9	DOVER - DOVER SW 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.9	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.9	GEN562023 1-G11_020_3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.9	GEN562026 1-G11_019_3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.9	GEN645011 1-NEBRASKA CITY 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.9	GEN542962 2-IATAN UNIT #2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.8	GEN526331 1-JONES GEN #1 22 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.8	GEN659103 1-ANTELOPE VALLEY UNIT1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.8	GEN659107 2-ANTELOPE VALLEY UNIT2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.7	GEN526334 1-JONES_4 116.500	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.7	WOODWARD - WOODWARD EHV 138KV CKT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	104.6	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.060	104.6	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.6	GEN539670 4-JUDSON LARGE GENERATOR	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.6	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.6	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.5	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.5	GEN526332 1-JONES GEN #2 21 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	104.5	SPP-SWPS-05	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.5	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.5	GEN560695 1-G11-008-3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	104.4	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.4	GEN542902 1-GPW_G1 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.4	GEN562065 1-G11_044_3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.3	GEN645012 2-NEBRASKA CITY 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.3	GEN560694 1-G11-008-2 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	104.3	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.2	GEN560514 1-G04_014 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.1	GEN640009 1-COOPER NUCLEAR STATION	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.0	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1	
FDNS	09ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.087	104.0	DBL-TGA-MATT	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	104.0	GEN560714 1-G10_061_3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.9	GEN539807 1-G05-12 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.8	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.8	GEN527903 1-HOBBS PLANT #3 (ST)	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.8	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.7	GEN523971 1-HARRINGTON GEN #1 24 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.7	GEN523972 1-HARRINGTON GEN #2 24 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.7	GEN523973 1-HARRINGTON GEN #3 24 KV	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.6	GEN560238 1-G10-09 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	103.5	CLINTON JUNCTION - ELK CITY 138KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.3	GEN560659 1-G07-38 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.2	GEN562035 1-G11_016_3 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.2	GEN560429 1-G08-29 0.6400	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.2	GEN560432 1-G08-124 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.2	GEN560693 1-G11-008-1 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	103.1	GEN560549 1-G06-06 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	103.0	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.061	103.0	WOODWARD - WOODWARD 69KV CKT 1	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.8	GEN560329 1-G10-45 0.6900	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.8	GEN531503 1-CIMRRN 1 34.500	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	102.3	BASE CASE	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.059	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.059	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	101.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	101.6	GEN523117 1-BUFF_DUNES210.6900
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	101.6	GEN562032 1-G11_017_3 0.6900
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	101.6	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	101.6	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	101.6	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	101.2	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	101.2	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	101.2	RENFWOW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	101.1	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	100.8	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	100.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	3	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	100.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.056	100.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	100.3	DEWEY - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	100.0	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	99.9	MOORELAND - TALOGA 138KV CKT 1
FDNS	3	2	14G	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.036	232.5	DBL-WICH-THI
FDNS	09ALL	2	14G	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.037	121.1	DBL-WICH-THI
FDNS	9	2	14G	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.037	115.1	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_049	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.036	126.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	3	2	14G	G11_049	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1	318.7	0.037	105.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FNSL-Blown up	3	2	14G	G11_049		Non-converged Contingency	0	0.241	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G11_049		Non-converged Contingency	0	0.241	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G11_049		Non-converged Contingency	0	0.196	-	DBL-WICH-THI
FDNS	00NR	3	14SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.039	143.4	DBL-WICH-THI
FDNS	00NR	3	19SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.040	136.1	DBL-WICH-THI
FDNS	07NR	3	14G	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.041	116.7	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	106.0	DBL-WICH-THI
FDNS	00NR	3	19SP	G11_049	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.052	100.5	DBL-WICH-THI
FDNS	00NR	3	19WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.107	137.7	DBL-TGA-MATT
FDNS	00NR	3	14SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.107	133.6	DBL-TGA-MATT
FDNS	00NR	3	14WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.106	132.3	DBL-TGA-MATT
FDNS	00NR	3	24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	128.6	DBL-TGA-MATT
FDNS	00NR	3	19SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.079	121.7	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	120.6	DBL-G1151-TG
FDNS	00NR	3	24SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	112.3	DBL-WWRD-G11
FDNS	00NR	3	19WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.079	110.8	DBL-WICH-THI
FDNS	00NR	3	14SP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.077	109.6	DBL-WICH-THI
FDNS	00NR	3	14WP	G11_049	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.077	105.6	DBL-WICH-THI
FDNS	07NR	3	14G	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.041	127.3	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	122.3	DBL-WICH-THI
FDNS	00G11_050	0	19SP	G11_050	TO->FROM	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.059	103.6	ANADARKO - GEORGIA 138KV CKT 1
FDNS	00G11_050	0	24SP	G11_050	TO->FROM	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.059	100.6	ANADARKO - GEORGIA 138KV CKT 1
FDNS	00G11_050	0	19SP	G11_050	FROM->TO	DUNCAN - TOSCO 69KV CKT 1	39	0.059	107.1	ANADARKO - GEORGIA 138KV CKT 1
FDNS	00G11_050	0	24SP	G11_050	FROM->TO	DUNCAN - TOSCO 69KV CKT 1	39	0.059	104.0	ANADARKO - GEORGIA 138KV CKT 1
FDNS	00G11_050	0	19SP	G11_050	FROM->TO	DUNCAN - TOSCO 69KV CKT 1	39	0.059	101.6	FLETCHER - GEORGIA 138KV CKT 1
FDNS	00G11_050	0	19SP	G11_050	FROM->TO	DUNCAN - TOSCO 69KV CKT 1	39	0.058	101.4	EMPIRE - FLETCHER 138KV CKT 1
FDNS	00G11_050	0	14SP	G11_050	FROM->TO	DUNCAN - TOSCO 69KV CKT 1	39	0.059	99.9	ANADARKO - GEORGIA 138KV CKT 1
FDNS	06ALL	0	14G	G11_050	FROM->TO	LAWEASOKLUNI	425	0.093	140.9	BASE CASE
FDNS	00G11_050	0	24SP	G11_050	TO->FROM	OMPA-MARLOW - RUSH SPRINGS TAP 138KV CKT 1	106	0.136	110.7	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
FDNS	00G11_050	0	19SP	G11_050	TO->FROM	OMPA-MARLOW - RUSH SPRINGS TAP 138KV CKT 1	106	0.136	106.0	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
FDNS	06ALL	0	14G	G11_050	FROM->TO	TUCXFR345230	300	0.051	102.8	BASE CASE
FDNS	01NR	0	14G	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.034	173.4	DBL-WICH-THI
FDNS	00NR	0	14SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.033	149.6	DBL-WICH-THI
FDNS	00NR	0	19SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.033	142.8	DBL-WICH-THI
FDNS	00NR	0	24SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.032	111.4	DBL-WICH-THI
FDNS	01NR	0	14G	G11_051	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1	153	0.050	104.3	DBL-TGA-MATT
FDNS	00NR	0	19SP	G11_051	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.046	107.8	DBL-WICH-THI
FDNS	00NR	0	14SP	G11_051	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.046	104.3	DBL-WICH-THI
FDNS	01NR	0	14G	G11_051	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.129	128.3	DBL-TGA-MATT
FDNS	01NR	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.129	197.2	DBL-TGA-MATT
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	140.0	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00NR	0	19WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.130	139.8	DBL-TGA-MATT
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	136.7	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	135.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	135.0	DEWEY - IODINE 138KV CKT 1
FDNS	00NR	0	14SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.130	134.3	DBL-TGA-MATT

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB		TC%LOADING		CONTINGENCY
							(MVA)	TDF	(% MVA)		
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.111	131.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	00NR	0	24SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.132	130.9	DBL-TGA-MATT	
FDNS	01NR	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.068	130.6	DBL-WICH-THI	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	129.0	GEN520998 1-MORLND3	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	128.6	THISTLE7 345.00 - WICHITA 345KV CKT 2	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	126.5	BASE CASE	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	126.4	WOODWARD - WOODWARD 69KV CKT 1	
FDNS	00NR	0	19SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.068	126.2	DBL-WICH-THI	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	125.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	124.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	123.7	ELK CITY 230KV - SWEETWATER 230KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	123.7	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	
FDNS	00NR	0	24SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.132	122.8	DBL-G1151-TG	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	122.6	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	121.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	121.5	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	120.8	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	120.5	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	120.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	119.5	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	118.8	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1	
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	118.5	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	118.4	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	117.8	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	117.5	GEN520997 1-MORLND2	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	117.2	VIOLA 7 345.00 - WICHITA 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	117.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	116.6	MINGO - RED WILLOW 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	116.2	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	116.1	MINGO - SETAB 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	116.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	116.0	AXTELL - POST ROCK 345KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	115.9	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	115.5	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	115.3	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.111	115.3	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	115.2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	115.2	DEWEY - TALOGA 138KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	115.0	GEN520998 1-MORLND3	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	114.8	GEN515787 1-OKLA WIND ENERGY CENTER	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	114.7	BENTON - WICHITA 345KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	114.6	BASE CASE	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	114.5	GEN514805 1-SOONER UNIT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	114.4	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1	
FDNS	00NR	0	19WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.068	114.3	DBL-WICH-THI	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.055	114.3	DEWEY - IODINE 138KV CKT 1	
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	114.1	IODINE - WOODWARD EHV 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	114.0	GEN520922 1-SLEEPING BEAR	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	113.8	DEWEY - TALOGA 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	113.8	MULLERGREN - SPEARVILLE 230KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.8	HOLCOMB - SETAB 345KV CKT 1	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	113.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2	
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	113.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	113.7	CIRCLE - MULLERGREN 230KV CKT 1	
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.111	113.7	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	113.5	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.2	FLATRDG3 - HARPER 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.1	G11-17T 345.00 - SPEARVILLE 345KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.8	GEN514806 1-SOONER UNIT 2	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.8	HARPER - MILAN TAP 138KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.6	FARGO JCT - WOODWARD 69KV CKT 1	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.6	GRAND ISLAND - SWEETWATER 345KV CKT 1	
FDNS	00NR	0	14SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.067	112.6	DBL-WICH-THI	
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.5	CLEARWATER - MILAN TAP 138KV CKT 1	
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.4	DEWEY - IODINE 138KV CKT 1	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	112.3	FT SUPPLY - IODINE 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.3	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.2	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.1	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.0	AXTELL - PAULINE 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	112.0	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	06ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	111.9	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	111.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	111.2	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	111.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	110.7	IODINE - MOORELAND 138KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	110.5	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	110.2	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.051	110.0	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.9	NC1_GEN-NEBRASKA CITY 1
FDNS	00NR	0	14WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.067	108.5	DBL-WICH-THI
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	108.1	GEN515389 1-TLGAWND1 34.500
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	108.0	GEN560221 1-G07-62-1 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	108.0	GEN560222 1-G07-62-2 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	108.0	GEN560223 1-G07-62-3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	108.0	GEN560224 1-G07-62-4 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	107.9	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.9	GEN562017 1-G11_022_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.9	GEN560522 1-G05-12-2 0.6900
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	107.8	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	107.8	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.8	GEN560121 1-G08-47 0.5750
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	GEN562020 1-G11_021_3 0.6900
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	107.7	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	GEN527161 1-MUSTANG GEN #1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	GEN527162 1-MUSTANG GEN #2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	GEN515365 1-CENT 21 34.500
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	LYDIA - VALLIANT 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.7	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.5	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.5	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.5	GEN539785 1-ENSGW 1 0.5750
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.5	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.4	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.4	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.3	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.3	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.2	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.2	GEN560696 1-G11-008-4 0.6900
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	107.2	GEN520997 1-MORLND2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	107.2	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	107.1	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN527902 1-HOBBS PLANT #2 (CT)
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN515393 1-OGEWND2G
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.1	GEN562026 1-G11_019_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.0	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.0	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.0	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.9	GEN526331 1-JONES GEN #1 22 KV
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	106.9	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.8	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.8	GEN526334 1-JONES_4 116.500
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.8	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.8	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	106.8	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.7	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	106.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	106.7	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.7	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.6	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.6	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	106.5	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.5	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.5	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.5	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.5	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.3	GEN560514 1-G04_014 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.2	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.2	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	106.0	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.9	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.9	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.9	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.8	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.8	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.8	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.7	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN560429 1-G08-29 0.6400
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.2	GEN560693 1-G11-008-1 0.6900
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	105.1	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	GEN560549 1-G06-06 0.6900
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	105.0	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	105.0	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	104.8	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.8	GEN531503 1-CIMRRN 1 34.500
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	104.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	104.6	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	104.4	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.2	BASE CASE
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	104.1	GEN514805 1-SOONER UNIT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	104.0	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	103.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.8	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.8	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	103.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	103.7	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	103.7	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.7	GEN523117 1-BUFF_DUNES210.6900
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	103.6	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.4	GEN562032 1-G11_017_3 0.6900
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	103.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	103.4	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.4	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	103.3	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	103.3	ROMAN NOSE - SOUTHARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.2	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	103.1	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	103.1	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	102.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.7	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	102.7	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	102.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	102.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	102.6	MINGO - RED WILLOW 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.5	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	102.4	MATHWSN7 345.00 - NORTHWEST 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	102.4	GEN521120 1-BUFBEAR2
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	102.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	102.4	GEN514806 1-SOONER UNIT 2
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	102.4	BUCKNER7 345.00 - SPEARVILLE 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	102.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	102.3	DEWEY - SOUTHARD 138KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	102.3	MOORELAND - TALOGA 138KV CKT 1
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	102.1	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	101.9	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	101.9	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	101.9	MOREWOOD SW - RED HILLS WIND 138KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	101.8	BENTON - WICHITA 345KV CKT 1
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	101.7	GRACEMONT - MINCO 345KV CKT 1
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	101.7	GEN520998 1-MORLND3
FDNS	01ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	101.7	CARTER JCT - WOODWARD 69KV CKT 1
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	101.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	101.2	GEN531447 1-HOLCOMB GENERATOR
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	101.2	GEN520998 1-MORLND3
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	101.1	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	100.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	01G11_051	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	100.9	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	100.9	WOODWARD DISTRICT EHV (WWDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	100.7	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	3	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	100.4	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	1	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.058	100.2	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	100.1	DOVER SW - OKEENE 138KV CKT 1
FDNS	01NR	0	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.062	99.9	DBL-BVR-WWRD
FDNS	01NR	0	14G	G11_051	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.042	119.7	DBL-TGA-MATT
FDNS	01NR	0	14G	G11_051	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.034	183.9	DBL-WICH-THI
FDNS	00NR	0	24SP	G11_051	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.032	127.7	DBL-WICH-THI
FDNS	00NR	0	19WP	G11_051	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	101.2	DBL-TGA-MATT
FNSL-Blown up	3	0	14G	G11_051		Non-converged Contingency	0	0.468	-	DBL-TGA-MATT
FNSL-Blown up	3	0	14G	G11_051		Non-converged Contingency	0	0.161	-	DBL-WICH-THI
FNSL-Blown up	00NR	0	14WP	G11_051		Non-converged Contingency	0	0.555	-	DBL-TGA-MATT
FNSL-Blown up	01ALL	0	14G	G11_051		Non-converged Contingency	0	0.474	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	0	14G	G11_051		Non-converged Contingency	0	0.468	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	0	14G	G11_051		Non-converged Contingency	0	0.160	-	DBL-WICH-THI
FDNS	01NR	0	14G	G11_051	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1	153	0.050	107.7	DBL-TGA-MATT
FDNS	06ALL	0	14G	G11_051	FROM->TO	TUCXFR345230	300	0.036	102.8	BASE CASE
FDNS	3	2	14G	G11_051	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1	318.7	0.031	140.0	DBL-WICH-THI
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	149.5	G11_051T 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	146.6	DBL-WICH-THI
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	137.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	134.3	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	133.2	GEN520997 1-MORLND2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.053	132.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	127.0	GEN520998 1-MORLND3
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	125.1	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	124.1	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	123.8	BASE CASE
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	122.7	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	121.4	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FNSL	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	121.3	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	119.7	RENFROW7 345.00 - VIOLA 7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	119.7	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	118.3	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	117.7	RENFROW4 138.00 - SAND RDG 138138.00 138KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	116.7	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	116.6	WOODWARD (WOODWRD2) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	115.9	GEN520997 1-MORLND2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	115.6	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	115.3	VIOLA 7 345.00 - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.050	114.8	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	114.1	SPP-SWPS-04
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	114.0	WOODRING (WOODRNG2) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	114.0	MINGO - RED WILLOW 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	113.9	Hitchland Interchange - POTTER COUNTY INTERCHANGE 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.9	G11-17T 345.00 - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.043	113.7	SAND RDG 138138.00 - WAKITA 138 138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.4	AXTELL - POST ROCK 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.4	MINGO - SETAB 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	113.2	G11-17T 345.00 - SPEARVILLE 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.8	CIRCLE - MULLERGREN 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	112.7	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	112.7	SPP-SWPS-02
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	112.7	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	112.5	BENTON - WICHITA 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.5	GEN515787 1-OKLA WIND ENERGY CENTER
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.4	GEN514805 1-SOONER UNIT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.3	SPP-SWPS-01
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	112.2	IODINE - WOODWARD EHV 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	112.1	OKLAUNION - TUCO INTERCHANGE 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	111.7	GEN520922 1-SLEEPING BEAR
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	111.3	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	111.3	DEWEY - TALOGA 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	111.1	HOLCOMB - SETAB 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	111.0	FLATRDG3 - HARPER 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	110.9	SPP-MKEC-08
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.7	GEN514806 1-SOONER UNIT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.5	HARPER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.5	SPP-MKEC-05
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.5	SPP-MKEC-03A
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.054	110.5	DEWEY - IODINE 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.4	GRAND ISLAND - SWEETWATER 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.3	CLEARWATER - MILAN TAP 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.3	SPP-MKEC-03B
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	110.3	FARGO JCT - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	110.0	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.9	G11-17T 345.00 - MULGREN7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.9	AXTELL - PAULINE 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.8	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.8	MULGREN7 345.00 (MULLERGREN1) 345/230/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	109.8	BENTON - ROSE HILL 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	109.7	HITCHLAND INTERCHANGE - MOORE COUNTY INTERCHANGE 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.6	WRTOD400
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	109.6	GEN520998 1-MORLND3
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	107.6	NC1_GEN-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.6	EASTDC - WELSH 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.6	LYDIA - VALLIANT 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.6	GEN531208 1-FLTRDG-WG1 0.6000
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.6	SPP-AEPW-01
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	105.5	IODINE - MOORELAND 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN560267 1-G10-15-1 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN539785 1-ENSGW 1 0.5750
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN539762 1-SSWIND 1 34.500
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN560268 1-G10-15-2 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN515365 1-CENT 21 34.500
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN542957 1-IATAN UNIT #1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.4	GEN531459 2-S2 GENERATOR
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.3	GEN527163 1-MUSTANG GEN #3 22 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.3	GEN539767 1-GRAY COUNTY WIND FARM
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	GEN560696 1-G11-008-4 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	GEN645001 1-FORT CALHOUN 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	GEN527882 1-CUNNINGHAM GEN #2 20 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	GEN527902 1-HOBBS PLANT #2 (CT)



SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.1	DOVER - TWIN LAKES 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.0	GEN527901 1-HOBBS PLANT #1 (CT)
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.0	GEN659111 2-LELAND OLDS UNIT2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.048	105.0	MATHWSN7 345.00 - WOODRING 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	105.0	GEN515393 1-OGEWND2G
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	DOVER - DOVER SW 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	GEN562023 1-G11_020_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	GEN562026 1-G11_019_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	GEN645011 1-NEBRASKA CITY 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.9	GEN542962 2-IATAN UNIT #2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.8	GEN526331 1-JONES GEN #1 22 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.8	GEN659103 1-ANTELOPE VALLEY UNIT1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.8	GEN659107 2-ANTELOPE VALLEY UNIT2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.7	GEN526334 1-JONES_4 116.500
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	104.7	WOODWARD - WOODWARD EHV 138KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	104.6	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	104.6	THISTLE7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.6	GEN539670 4-JUDSON LARGE GENERATOR
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.6	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.6	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.5	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.5	GEN526332 1-JONES GEN #2 21 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	104.5	SPP-SWPS-05
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.5	CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.5	GEN560695 1-G11-008-3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	104.4	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.4	GEN542902 1-GPW_G1 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.4	GEN562062 1-G11_043_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.4	GEN562065 1-G11_044_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.3	GEN645012 2-NEBRASKA CITY 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.3	GEN560694 1-G11-008-2 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.3	CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.2	GEN560514 1-G04_014 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.1	GEN640009 1-COOPER NUCLEAR STATION
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.0	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1
FDNS	09ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.109	104.0	DBL-TGA-MATT
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	104.0	GEN560714 1-G10_061_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.9	GEN539807 1-G05-12 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.8	GEN640011 2-GERALD GENTLEMAN STATION UNIT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.8	GEN527903 1-HOBBS PLANT #3 (ST)
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.8	GEN640010 1-GERALD GENTLEMAN STATION UNIT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.7	GEN523971 1-HARRINGTON GEN #1 24 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.7	GEN523972 1-HARRINGTON GEN #2 24 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.7	GEN523973 1-HARRINGTON GEN #3 24 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.6	GEN560238 1-G10-09 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.5	CLINTON JUNCTION - ELK CITY 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.3	GEN560659 1-G07-38 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.2	GEN562035 1-G11_016_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.2	GEN560429 1-G08-29 0.6400
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.2	GEN560432 1-G08-124 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.2	GEN560693 1-G11-008-1 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	103.1	GEN560549 1-G06-06 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	103.0	BYRON_138 138.00 - SANDY_CN_138138.00 138KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.052	103.0	WOODWARD - WOODWARD 69KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.8	GEN560329 1-G10-45 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.8	GEN531503 1-CIMRRN 1 34.500
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	102.7	THISTLE7 345.00 - WICHITA 345KV CKT 2
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	102.3	BASE CASE
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.057	102.1	MATHWSN7 345.00 - TATONGA7 345.00 345KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	101.8	BYRON_138 138.00 - C_CITY_138 138.00 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	101.6	GEN523117 1-BUFF_DUNES210.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	101.6	GEN562032 1-G11_017_3 0.6900
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	101.6	EL RENO - ROMAN NOSE 138KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	101.6	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	101.6	ELK CITY 230KV - SWEETWATER 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	101.2	ROMAN NOSE - SOUTHARD 138KV CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.044	101.2	C_CITY_138 138.00 - KNOBHILL 138KV CKT 1
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	101.2	RENFROW7 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	101.1	GEN659118 1-LARAMIE RIVER UNIT1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.049	100.8	BEAVER CO 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	100.8	GEN525561 1-TOLK GEN #1 24 KV
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.046	100.7	GEN525562 1-TOLK GEN #2 24 KV
FDNS	3	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	100.6	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	100.4	BEAVER CO 345.00 - BUCKNER7 345.00 345KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.045	100.3	DEWEY - SOUTHARD 138KV CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.042	100.0	WOODWARD DISTRICT EHV (WWDEHV) 345/138/13.8KV TRANSFORMER CKT 1
FDNS	03ALL	2	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.047	99.9	MOORELAND - TALOGA 138KV CKT 1
FNSL-Blown up	3	2	14G	G11_051		Non-converged Contingency	0	0.468	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G11_051		Non-converged Contingency	0	0.467	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G11_051		Non-converged Contingency	0	0.158	-	DBL-WICH-THI
FDNS	01NR	3	14G	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.033	168.2	DBL-WICH-THI
FDNS	00NR	3	14SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.032	143.4	DBL-WICH-THI
FDNS	00NR	3	19SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.033	136.1	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_051	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1	110	0.031	106.0	DBL-WICH-THI
FDNS	01NR	3	14G	G11_051	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1	153	0.050	103.5	DBL-TGA-MATT
FDNS	00NR	3	19SP	G11_051	TO->FROM	FLATRDG3 - THISTLE4 138.00 138KV CKT 1	286	0.044	100.5	DBL-WICH-THI
FDNS	01NR	3	14G	G11_051	FROM->TO	FPL SWITCH - MOORELAND 138KV CKT 1	287	0.129	127.4	DBL-TGA-MATT
FDNS	01NR	3	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.129	195.6	DBL-TGA-MATT
FDNS	00NR	3	19WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.130	137.7	DBL-TGA-MATT
FDNS	00NR	3	14SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.130	133.6	DBL-TGA-MATT
FDNS	00NR	3	14WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.129	132.3	DBL-TGA-MATT
FDNS	00NR	3	24SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.132	128.6	DBL-TGA-MATT
FDNS	01NR	3	14G	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.067	127.6	DBL-WICH-THI
FDNS	00NR	3	19SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.068	121.7	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.132	120.6	DBL-G1151-TG
FDNS	00NR	3	19WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.068	110.8	DBL-WICH-THI
FDNS	00NR	3	14SP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	153	0.067	109.6	DBL-WICH-THI
FDNS	00NR	3	14WP	G11_051	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1	185	0.067	105.6	DBL-WICH-THI
FDNS	01NR	3	14G	G11_051	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1	124	0.042	118.7	DBL-TGA-MATT
FDNS	01NR	3	14G	G11_051	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.033	178.7	DBL-WICH-THI
FDNS	00NR	3	24SP	G11_051	FROM->TO	HARPER - MILAN TAP 138KV CKT 1	110	0.031	122.3	DBL-WICH-THI
FDNS	01NR	3	14G	G11_051	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1	153	0.050	107.0	DBL-TGA-MATT
FDNS	06ALL	0	14G	G11_054	FROM->TO	LAWEASOKLUNI	425	0.055	140.9	BASE CASE
FDNS	06ALL	0	14G	G11_054	FROM->TO	TUCXFR345230	300	0.044	102.8	BASE CASE
FDNS	00NR	0	19SP	G11_055	TO->FROM	991 TAP - SUB 984 69KV CKT 1	65	0.050	110.3	S976-FRE-D-E
FDNS	00NR	0	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	103.4	S977NOBKR
FDNS	00G11_055	0	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.180	99.9	SUB 963 - SUB 977 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	107.0	S977NOBKR
FDNS	00NR	0	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	103.4	S977NOBKR
FDNS	00G11_055	0	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.180	102.7	SUB 963 - SUB 977 69KV CKT 1
FDNS	00G11_055	0	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.180	101.2	NEB CITY U SUB 903 - SUB 977 69KV CKT 1
FNSL-Blown up	3	0	14G	G11_055		Non-converged Contingency	0	0.049	-	DBL-THIS-CLR
FNSL-Blown up	3	0	14G	G11_055		Non-converged Contingency	0	0.034	-	DBL-TGA-MATT
FNSL-Blown up	01ALL	0	14G	G11_055		Non-converged Contingency	0	0.040	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	0	14G	G11_055		Non-converged Contingency	0	0.048	-	DBL-IRON-CLR
FNSL-Blown up	03ALL	0	14G	G11_055		Non-converged Contingency	0	0.048	-	DBL-THIS-CLR
FNSL-Blown up	03ALL	0	14G	G11_055		Non-converged Contingency	0	0.034	-	DBL-TGA-MATT
FDNS	00NR	0	19SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.050	126.7	S976-FRE-D-E
FDNS	00NR	0	24SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.048	100.2	S976-FRE-D-E
FDNS	09ALL	0	14G	G11_055	TO->FROM	SUB 967 - SUB 968 69KV CKT 1	47	1.000	102.0	SUB 969 - SUB 974 69KV CKT 1
FDNS	09ALL	0	14G	G11_055	TO->FROM	SUB 968 - SUB 969 69KV CKT 1	47	1.000	110.8	SUB 969 - SUB 974 69KV CKT 1
FDNS	09NR	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	111.9	S968LINBUS
FDNS	09ALL	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	111.7	SUB 968 - SUB 969 69KV CKT 1
FDNS	00NR	0	24SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.5	S968LINBUS
FDNS	00NR	0	19SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.5	S968LINBUS
FDNS	00NR	0	14SP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	110.4	S968LINBUS
FDNS	00NR	0	14WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.5	S968LINBUS
FDNS	00NR	0	19WP	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	109.4	S968LINBUS
FDNS	09ALL	0	14G	G11_055	FROM->TO	SUB 969 - SUB 974 69KV CKT 1	47	1.000	102.7	SUB 967 - SUB 968 69KV CKT 1
FDNS	06ALL	0	14G	G11_055	FROM->TO	TUCXFR345230	300	0.031	102.8	BASE CASE
FDNS	00G11_055	2	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.180	101.4	S977NOBKR
FNSL-Blown up	3	2	14G	G11_055		Non-converged Contingency	0	0.050	-	DBL-THIS-CLR
FNSL-Blown up	3	2	14G	G11_055		Non-converged Contingency	0	0.035	-	DBL-TGA-MATT
FNSL-Blown up	03ALL	2	14G	G11_055		Non-converged Contingency	0	0.049	-	DBL-IRON-CLR

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FNSL-Blown up	03ALL	2	14G	G11_055		Non-converged Contingency	0	0.049	-	DBL-THIS-CLR
FNSL-Blown up	03ALL	2	14G	G11_055		Non-converged Contingency	0	0.034	-	DBL-TGA-MATT
FDNS	00NR	3	19SP	G11_055	TO->FROM	991 TAP - SUB 984 69KV CKT 1	65	0.050	110.2	S976-FRE-D-E
FDNS	00NR	3	24SP	G11_055	TO->FROM	HYDROCARBON TAP - SUB 974 69KV CKT 1	57	0.187	103.4	S977NOBKR
FDNS	00NR	3	24SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.187	107.0	S977NOBKR
FDNS	00NR	3	19SP	G11_055	TO->FROM	NEB CITY U SYR SUB - SUB 970 69KV CKT 1	47	0.186	103.4	S977NOBKR
FDNS	00NR	3	19SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.050	126.7	S976-FRE-D-E
FDNS	00NR	3	24SP	G11_055	FROM->TO	SUB 902 - SUB 984 69KV CKT 1	65	0.048	100.2	S976-FRE-D-E
FDNS	00G11_056	0	24SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	0	0	24SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	00G11_056	0	24SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00G11_056	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	0	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00G11_056	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.7	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	0	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.054	108.7	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	00G11_056	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.046	100.9	CROOKED CREEK - NORTH PLATTE 230KV CKT 1
FDNS	0	0	19SP	G11_056	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.046	100.9	CROOKED CREEK - NORTH PLATTE 230KV CKT 1
	00G11_056	0	14WP	G11_056		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.042	40.6	BASE CASE
	0	0	14WP	G11_056		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.042	40.6	BASE CASE
	00G11_056	0	14SP	G11_056		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.041	33.7	BASE CASE
	0	0	14SP	G11_056		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.041	33.7	BASE CASE
	00G11_056	0	14WP	G11_056		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.042	41.9	BASE CASE
	0	0	14WP	G11_056		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.042	41.9	BASE CASE
	00G11_056	0	14SP	G11_056		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.041	34.5	BASE CASE
	0	0	14SP	G11_056		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.041	34.5	BASE CASE
FDNS	00G11_056A	0	24SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.032	108.8	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	0	0	24SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.032	108.8	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	00G11_056A	0	24SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.032	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.032	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00G11_056A	0	19SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.031	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	0	0	19SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.031	108.8	CROOKED CREEK (CR.CREEK T1) 230/115/13.8KV TRANSFORMER CKT 1
FDNS	00G11_056A	0	19SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.031	108.7	BROKEN BOW - CROOKED CREEK 115KV CKT 1
FDNS	0	0	19SP	G11_056A	TO->FROM	MAXWELL - NORTH PLATTE 115KV CKT 1	160	0.031	108.7	BROKEN BOW - CROOKED CREEK 115KV CKT 1
	00G11_056A	0	14WP	G11_056A		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.032	40.6	BASE CASE
	0	0	14WP	G11_056A		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.032	40.6	BASE CASE
	00G11_056A	0	14SP	G11_056A		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.032	33.7	BASE CASE
	0	0	14SP	G11_056A		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.032	33.7	BASE CASE
	00G11_056A	0	14WP	G11_056A		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.032	41.9	BASE CASE
	0	0	14WP	G11_056A		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.032	41.9	BASE CASE
	00G11_056A	0	14SP	G11_056A		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.032	34.5	BASE CASE
	0	0	14SP	G11_056A		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.032	34.5	BASE CASE
	00G11_056B	0	14WP	G11_056B		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.031	40.6	BASE CASE
	0	0	14WP	G11_056B		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.031	40.6	BASE CASE
	00G11_056B	0	14SP	G11_056B		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.031	33.7	BASE CASE
	0	0	14SP	G11_056B		STEGALL - STEGALL TRANSFORMER 230KV CKT 1	480	0.031	33.7	BASE CASE
	00G11_056B	0	14WP	G11_056B		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.031	41.9	BASE CASE
	0	0	14WP	G11_056B		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.031	41.9	BASE CASE
	00G11_056B	0	14SP	G11_056B		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.031	34.5	BASE CASE
	0	0	14SP	G11_056B		STEGALL TY 345/230KV TRANSFORMER CKT 1	480	0.031	34.5	BASE CASE
FDNS	00G11_057	0	24SP	G11_057	TO->FROM	ARKANSAS CITY - PARIS 69KV CKT 1	72	0.054	115.0	CRESWELL - OAK 69KV CKT 1
FDNS	00G11_057	0	19SP	G11_057	TO->FROM	ARKANSAS CITY - PARIS 69KV CKT 1	72	0.054	111.1	CRESWELL - OAK 69KV CKT 1
FDNS	0	0	24SP	G11_057	TO->FROM	ARKANSAS CITY - PARIS 69KV CKT 1	72	0.054	105.5	CRESWELL - OAK 69KV CKT 1
FDNS	00G11_057	0	14SP	G11_057	TO->FROM	ARKANSAS CITY - PARIS 69KV CKT 1	72	0.054	101.9	CRESWELL - OAK 69KV CKT 1
FDNS	0	0	19SP	G11_057	TO->FROM	ARKANSAS CITY - PARIS 69KV CKT 1	72	0.054	101.1	CRESWELL - OAK 69KV CKT 1
FDNS	00G11_057	0	24SP	G11_057	TO->FROM	CITY OF WINFIELD - RAINBOW 69KV CKT 1	43	0.061	118.1	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	00G11_057	0	19SP	G11_057	TO->FROM	CITY OF WINFIELD - RAINBOW 69KV CKT 1	43	0.061	114.4	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	0	0	24SP	G11_057	TO->FROM	CITY OF WINFIELD - RAINBOW 69KV CKT 1	43	0.061	101.2	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	00G11_057	0	14SP	G11_057	TO->FROM	CITY OF WINFIELD - RAINBOW 69KV CKT 1	43	0.061	100.1	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL - OAK 69KV CKT 1	108	0.067	107.5	CRESWELL - PARIS 69KV CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	CRESWELL - OAK 69KV CKT 1	108	0.067	104.2	CRESWELL - PARIS 69KV CKT 1
FDNS	0	0	24SP	G11_057	FROM->TO	CRESWELL - OAK 69KV CKT 1	108	0.067	100.1	CRESWELL - PARIS 69KV CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL - PARIS 69KV CKT 1	100	0.054	101.8	CRESWELL - OAK 69KV CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	120.4	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	116.7	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	116.0	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	112.9	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	14SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.133	110.7	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	14SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.133	108.4	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEB (MVA)	TDF	TC%LOADING (% MVA)	CONTINGENCY
FDNS	0	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	105.9	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	102.1	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	0	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	101.0	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	120.3	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	116.7	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	115.9	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	112.8	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	14SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.133	110.5	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	00G11_057	0	14SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.133	108.4	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	105.8	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	0	0	24SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	102.0	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	0	0	19SP	G11_057	FROM->TO	CRESWELL (CRESWL2X) 138/69/13.2KV TRANSFORMER CKT 1	110	0.134	100.9	CRESWELL (CRESWL1X) 138/69/13.2KV TRANSFORMER CKT 1
FDNS	06ALL	0	14G	G11_057	FROM->TO	LAWEASOKLUNI	425	0.031	140.9	BASE CASE
FDNS	00G11_057	0	24SP	G11_057	FROM->TO	OAK - RAINBOW 69KV CKT 1	43	0.061	122.4	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	00G11_057	0	19SP	G11_057	FROM->TO	OAK - RAINBOW 69KV CKT 1	43	0.061	119.0	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	0	0	24SP	G11_057	FROM->TO	OAK - RAINBOW 69KV CKT 1	43	0.061	105.6	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	00G11_057	0	14SP	G11_057	FROM->TO	OAK - RAINBOW 69KV CKT 1	43	0.061	104.7	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	0	0	19SP	G11_057	FROM->TO	OAK - RAINBOW 69KV CKT 1	43	0.061	101.7	OAK - STROTHER FIELD (CITY OF WINFIELD) 69KV CKT 1
FDNS	06ALL	0	14G	G11_057	FROM->TO	TUCXFR345230	300	0.036	102.8	BASE CASE

## **I: Power Flow Analysis (Category “C” Contingencies)**

Available on Request

# **J: Dynamic Stability Analysis Report**

Available upon request