



Definitive Interconnection System Impact Study for Generation Interconnection Requests (DISIS-2010-002-1)

July 2011

Generation Interconnection



Revision History

Date or Version Number	Author	Change Description	Comments
1/31/2011	Southwest Power Pool	N/A	Report Issued
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Executive Summary

Generation Interconnection customers have requested a Definitive Interconnection System Impact Study (DISIS) under the Generation Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Impact Cluster Study. This Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling approximately 2,233.2 MW of new generation which would be located within the transmission systems of Mid-Kansas Electric Power LLC (MKEC), Missouri Public Service (MIPU), Nebraska Public Power District (NPPD), Midwest Energy Inc. (MIDW), Oklahoma Gas and Electric (OKGE), Omaha Public Power District (OPPD), Southwestern Public Service (SPS), Sunflower Electric Power Corporation (SUNC), Westar Energy (WERE) and Western Farmers Electric Cooperative (WFEC). The various generation interconnection requests have differing proposed in-service dates¹. The generation interconnection requests included in this 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-2010-002 study as well as higher queued projects withdrawing.

Power flow analysis has indicated that for the powerflow cases studied, 2,233.2 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.

The total estimated minimum cost for interconnecting the DISIS-2010-002 interconnection customers is \$257,000,000. These costs are shown in Appendix E and F. Interconnection Service to DISIS-2010-002 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 systems that were identified as 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 (ER) Interconnection Request. Certain Interconnection Requests were studied for Network Resource Interconnection Service (NR). Those constraints are 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.

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

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

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Introduction

Pursuant to the Southwest Power Pool (SPP) Open Access Transmission Tariff (OATT), SPP has conducted this Definitive Interconnection System Impact Study (DISIS) for certain generation interconnection requests in the SPP Generation Interconnection Queue. These interconnection requests have been clustered together for the following Impact Study. The customers will be referred to in this study as the DISIS-2010-002 Interconnection Customers. This Impact Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 2,233.2 MW of new generation which would be located within the transmission systems of Mid-Kansas Electric Power LLC (MKEC), Missouri Public Service (MIPU), Nebraska Public Power District (NPPD), Midwest Energy Inc. (MIDW), Oklahoma Gas and Electric (OKGE), Omaha Public Power District (OPPD), Southwestern Public Service (SPS), Sunflower Electric Power Corporation (SUNC), Westar Energy (WERE) and Western Farmers Electric Cooperative (WFEC). The various generation interconnection requests have differing proposed in-service dates². The generation interconnection requests included in this 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-2010-002 study as well as 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.

Model Development

Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Definitive Interconnection System Impact Study request no later than September 30, 2010 and were subsequently accepted by Southwest Power Pool under the terms of the Generator Interconnection Procedures (GIP) that became effective March 30, 2010.

Affected System Interconnection Requests - Also included in this Definitive Impact Study are two Affected System Studies, both of the requests are on the Lea County Electric Cooperative system in Lea County, New Mexico. The Affected System Studies have been given the designation ASGI-2010-020 (Tatum – Crossroads 69kV) and ASGI-2010-021 (Saunders – Anderson 69kV) respectively.

The interconnection requests that are included in this study are listed in Appendix A.

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

Previous Queued Projects

The previous queued projects included in this study are listed in Appendix B. In addition to the Base Case Upgrades, the previous queued projects 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.

Development of Base Cases

Powerflow - The 2010 series Transmission Service Request (TSR) Models 2011 spring and 2014 summer and winter, and 2016 summer and winter scenario 0 peak cases were used for this study. After the cases were developed, each of the control areas' resources were then re-dispatched using current dispatch orders.

Stability – The 2010 series SPP Model Development Working Group (MDWG) Models 2011 winter and 2011 summer were used 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 been approved 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-2010-002 Customers have not been assigned cost for the below listed projects. The DISIS-2010-002 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 customers.

- Hitchland 345/230/115kV upgrades to be built by SPS for 2010/2011 in-service³.
 - Hitchland – Moore County 230kV line
 - Hitchland – Perryton 230kV line
 - Hitchland – Texas County 115kV line
 - Hitchland – Hansford County 115kV line
 - Hitchland – Sherman County Tap 115kV line
- Valliant – Hugo – Sunnyside 345kV – assigned to Aggregate Study AG3-2006 Customers
- Wichita – Reno County – Summit 345kV to be built by WERE⁴.
- Rose Hill – Sooner 345kV to be built by WERE/OKGE.
- Knob Hill – Steele City 115kV to be built by NPPD/WERE.
- Balanced Portfolio Projects⁵:
 - Gracemont 345/138/13.2kV Autotransformer
 - Woodward– Tuco 345kV line
 - Iatan– Nashua 345kV line
 - Muskogee– Seminole 345kV line
 - Post Rock– Axtell 345kV line
 - Spearville– Post Rock 345kV line

³ Approved 230kV upgrades are based on SPP 2007 STEP. Upgrades may need to be re-evaluated in the system impact study.

⁴ Approved based on an order of the Kansas Corporation Commission issued in Docket no. 07-WSEE-715-MIS

⁵ Notice to Construct (NTC) issued June, 2009

- Tap Stillwell – Swissvale 345kV line at West Gardner
- Priority Projects⁶:
 - Hitchland - Woodward double circuit 345kV
 - Woodward – Medicine Lodge double circuit 345kV
 - Spearville – Comanche (Clark) double circuit 345kV
 - Comanche (Clark) – Medicine Lodge double circuit 345kV
 - Medicine Lodge – Wichita double circuit 345kV
 - Medicine Lodge 345/138kV autotransformer

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-2010-002 study and are assumed to be in service. The DISIS-2010-002 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-2010-002 Customer Generation Facilities in service dates may need to be delayed until the completion of the following upgrades.

- Finney – Holcomb 345kV ckt #2 line assigned to GEN-2006-044 interconnection customer. This customer is currently in suspension⁷.
- Central Plains – Setab 115kV transmission line assigned to GEN-2007-013 interconnection customer.
- Spearville 345/115kV autotransformer #2 assigned to 1st Cluster Interconnection Customers
- Grassland 230/115kV autotransformer #2 assigned to 1st Cluster Interconnection Customers (100% to GEN-2008-016)
- Judson Large – North Judson Large – Spearville Ckt #2 assigned to DISIS-2009-001-1 Interconnection Customers (100% to GEN-2008-079)
- Hitchland – Wheeler (Border) double circuit 345kV assigned to DISIS-2010-001 Interconnection Customers
- Madison County 230/115kV autotransformer #1 assigned to DISIS-2010-001 Interconnection Customer
- Norfolk – Madison County Tap 115kV Ckt #1 assigned to DISIS-2010-001 Interconnection Customers

⁶ Notice to Construct (NTC) issued June, 2010. NTC for double circuit lines indicated that NTC may be revised at a later time to be built at a higher voltage.

⁷ Based on Facility Study Posting November 2008

- Washita – Gracemont 138kV Ckt #2 assigned to DISIS-2010-001 Interconnection Customers
- Post Rock 345/230kV autotransformer #2 assigned to DISIS-2010-001 Interconnection Customers
- Washita – Weatherford 138kV Ckt #1 assigned to DISIS-2010-001 Interconnection Customers
- GEN-2008-079 Tap – Spearville 115kV Ckt #1 assigned to DISIS-2010-001 Interconnection Customers

Potential Upgrades Not in the Base Case

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

Regional Groupings

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

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

Powerflow - For each group, the various wind generating plants were modeled at 80% nameplate of maximum generation. The wind generating plants in the other areas were modeled at 20% nameplate of maximum generation. This process created ten different scenarios with each group being studied at 80% nameplate rating. 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. Each interconnection request was also modeled separately at 100% nameplate for certain analyses.

Peaking units were not dispatched in the 2010 spring model. To study peaking units' impacts, the 2014 summer peak model was chosen and peaking units were modeled at 100% of the nameplate rating and wind generating facilities were modeled at 10% of the nameplate rating. Each interconnection request was also modeled separately at 100% nameplate for certain analyses.

Identification of Network Constraints

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

Determination of Cost Allocated Network Upgrades

Cost Allocated Network Upgrades of wind generation interconnection requests were determined using the 2011 spring model. Cost Allocated Network Upgrades of peaking units was determined using the 2016 summer peak model. Once a determination of the required Network Upgrades was made, a powerflow model of the 2011 spring case was developed with all cost allocated Network Upgrades in-service. A MUST FCITC analysis was performed to determine the Power Transfer Distribution Factors (PTDF), 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 Z1 of the SPP Tariff for any Network Upgrades including any tax gross-up or any other tax-related payments associated with the Network Upgrades, and not refunded to the Interconnection Customer.

Interconnection Facilities

The requirement to interconnect the 2,233.2 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 \$257,000,000. Interconnection Facilities specific to each generation interconnection request are listed in Appendix E.

A list of constraints with greater than or equal to a 20% OTDF that were identified and used for mitigation are listed in Appendix G. Other Network Constraints in the MKEC, MIPU, NPPD, MIDW, OKGE, OPPD, SPS, SUNC, WERE and WFEC transmission systems that were identified 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.

A preliminary one-line drawing for each generation interconnection request are listed in Appendix D. Figure 1 depicts the major transmission line Network Upgrades needed to support the interconnection of the generation amounts requested in this study.

Powerflow

Powerflow Analysis Methodology

The Southwest Power Pool (SPP) Criteria states that:

“The transmission system of the SPP region shall be planned and constructed so that the contingencies as set forth in the Criteria will meet the applicable *NERC Reliability Standards* for transmission planning. All MDWG power flow models shall be tested to verify compliance with the System Performance Standards from NERC Table 1 – Category A.”

The ACCC function of PSS/E was used to simulate single contingencies in portions or all of the modeled control areas of Mid-Kansas Electric Power LLC (MKEC), Missouri Public Service (MIPU), Nebraska Public Power District (NPPD), Midwest Energy Inc. (MIDW), Oklahoma Gas and Electric (OKGE), Omaha Public Power District (OPPD), Southwestern Public Service (SPS), Sunflower Electric Power Corporation (SUNC), Westar Energy (WERE) and Western Farmers Electric Cooperative (WFEC) and other control areas were applied and the resulting scenarios analyzed. This satisfies the “more probable” contingency testing criteria mandated by NERC and the SPP criteria.

Powerflow Analysis

A powerflow analysis was conducted for each Interconnection Customer’s facility using modified versions of the 2011 (spring, summer, and winter) peak and the 2016 (summer and winter) 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. The available seasonal models used were through the 2016 Winter Peak. Certain requests that requested Network Resource Interconnection

Service (NRIS) had an additional analysis conducted for sinking the energy in the interconnecting Transmission Owner's balancing authority.

This analysis was conducted assuming that previous queued requests in the immediate area of these interconnect requests were in-service. The analysis of the each Customer's project indicates that additional criteria violations will occur on the MKEC, MIPU, NPPD, MIDW, OKGE, OPPD, SPS, SUNC, WERE and WFEC transmission systems under steady state and contingency conditions in the peak seasons.

Cluster Group 1 (Woodward Area)

The Woodward group had 320 MW of interconnection requests in addition to the 3,344.2 MW of previously queued generation in the area. The GEN-2010-043 dropped its NRIS interconnection service request for this analysis. Stability Analysis indicated that the Beaver County – Gray County 345kV line may be necessary for interconnection.

Cluster Group 2 (Hitchland Area)

The Hitchland group had 300 MW of interconnection requests in addition to the 3,361.9 MW of previously queued generation in the area. Possible voltage collapse was observed for the outage of Finney-Stevens 345kV line. As a result, the tapped station will need to include terminals to tie both Hitchland-Woodward 345kV lines into the substation. Also, a 345kV line from Beaver County – Gray County was modeled and was used for Group 3 as well.

Cluster Group 3 (Spearville Area)

The Spearville group had 748.5 MW of interconnection requests in addition to the 2,897.2 MW of previously queued generation in the area. Voltage collapse was observed for outage of the double circuit 345kV lines at points when generation was dispatched 80% nameplate. Stability Analysis indicated instability as well. A 345kV line from the Beaver County - Gray County tap point was also necessary to alleviate these constraints. Local area constraints in the area of GEN-2010-049 were also observed including the St. John (MKEC) – St. John (MIDW) 115kV line, Huntsville- St John 115kV and an additional Medicine Lodge autotransformer.

Cluster Group 4 (Mingo/NW Kansas Group)

The Mingo/NW Kansas group had 0 MW of interconnection requests in addition to the 924.2 MW of previously queued generation in the area. No new constraints were found in this area.

Cluster Group 5 (Amarillo Area)

The Amarillo group had 0 MW of interconnection requests in addition to the 2,218.1 MW of previously queued generation in the area. No new constraints were found in this area.

Cluster Group 6 (South Panhandle/New Mexico)

The South Panhandle/New Mexico group had 142.6 MW of interconnection requests in addition to the 2,227 MW of previously queued generation in the area. The entire section from Lovington – Reed – McDonald – Tatum – ASGI-2010-020 will need to be rebuilt due to overloads caused by the ASGI-2010-020 affected system interconnection request.

Cluster Group 7 (Southwestern Oklahoma)

The Southwestern Oklahoma group had 125 MW of interconnection requests in addition to the 2,075.8 MW of previously queued generation in the area. The Clinton Junction – Elk City 138kV line will need to be rebuilt due to overloads caused by the GEN-2010-012 interconnection request.

Cluster Group 8 (South Central Kansas/North Oklahoma)

The South Central Kansas/North Oklahoma group had 0 MW of interconnection requests in addition to the 3,351.9 MW of previously queued generation in the area. No new constraints were found in this area.

Cluster Group 9 (Northeast Nebraska)

The Northeast Nebraska group had 200 MW of interconnection requests in addition to the 798.5 MW of previously queued generation in the area. Examination by the Transmission Owner has determined that line clearances will need to be raised to accommodate the interconnection of the Group 9 generator.

Cluster Group 10 (North Nebraska)

The North Nebraska group had 0 MW of interconnection requests in addition to the 281.2 MW of previously queued generation in the area. No new constraints were found in this area.

Cluster Group 11 (North Kansas)

The North Kansas group had 70 MW of interconnection requests in addition to the 1,297.9 MW of previously queued generation in the area. Overloads on the Clifton – Green Leaf 115kV line were observed. This overload will be mitigated by the addition of the Steele City – Knob Hill in the Expansion Plan.

Cluster Group 12 (Northwest Arkansas)

The Northwest Arkansas group had 0 MW of interconnection requests in addition to the 0 MW of previously queued generation in the area. No new constraints were found in this area.

Cluster Group 13 (Northwest Missouri)

The North Missouri group had 87.1 MW of interconnection requests in addition to the 2,436.5 MW of previously queued generation in the area. The GEN-2010-047 – Harbine 115kV line will need to be rebuilt due to overloads caused by the GEN-2010-047 interconnection request.

Cluster Group 14 (South Central Oklahoma)

The South Central Oklahoma group had 300 MW of interconnection requests in addition to the 950MW of previously queued generation in the area. The Northwest 345/138/13.8kV transformer will need to be rerated or replaced due to the overload caused by GEN-2010-040.

Cluster Group 15 (Southwest Nebraska)

The Southwest Nebraska group had 0 MW of interconnection requests in addition to the 89.7 MW of previously queued generation in the area. No new constraints were found in this area.

Stability Analysis

A stability analysis was conducted for each Interconnection Customer's facility using modified versions of the 2011 summer and 2011 winter peak models. The stability analysis was conducted with all upgrades in service that were identified in the powerflow 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. The entire stability study for each group can be found in the Appendices.

Cluster Group 1 (Woodward Area)

The Group 1 stability study was conducted by SPP Staff. The addition of the GEN-2010-043 plant increased overloads and low voltage conditions on the 138kV system between Woodward and Northwest. As such, some prior queued wind generators may experience oscillations for outage of the Northwest-Tatonga 345kV line if certain contingent upgrades are not constructed. Low Voltage Ride Through (LVRT) was not analyzed in Group 1 due to the interconnection request being a gas request as opposed to a wind request.

Cluster Group 2 (Hitchland Area)

The Group 2 stability study was conducted by Excel Engineering (Excel). With the power factor requirements and all network upgrades in service, all interconnection request in Group 2 will meet FERC Order #661A low voltage ride through (LVRT) requirements. Additionally, an error was present in the initial study that indicate no capacitors were required for the GEN-2010-001 request. This has since been revised.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-001	300	Suzlon S88 2.1MW	Hitchland 345kV	0.950	0.999	145

Cluster Group 3 (Spearville Area)

The Group 3 stability study was conducted by Excel Engineering (Excel). The analysis for Group 3 showed that a reactive power deficiency was present at Finney 345kV substation and Comanche 345kV substation. The GEN-2010-052 and GEN-2010-053 interconnection requests will need to provide 95% lagging power factor at both Finney 345kV and Comanche 345kV. In order to provide the additional Mvar requirements, additional capacitor banks will be required. These reactive deficiencies also caused voltage stability issues for the Spearville area. An additional 345kV line from Gray County 345kV to a tap on the Hitchland-Woodward 345kV line is necessary. Without this line, a possible outage of the double Comanche-Medicine Lodge 345kV line may cause voltage collapse in the Spearville area. With the power factor requirements and all network

upgrades in service, all interconnection request in Group 3 will meet FERC Order #661A low voltage ride through (LVRT) requirements.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-045	197.8	Siemens SWT 2.3MW	Tap Holcomb – Spearville 345kV	0.971	1.0	TBD
GEN-2010-049	49.6	GE 1.6MW	Pratt 115kV	1.0	0.95	TBD
GEN-2010-052	301.3	Siemens SWT 2.3MW	Finney 345kV	0.95	0.995	TBD
GEN-2010-053	199.8	Vestas V90 1.8MW	Comanche 345kV	0.95	1.0	85

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 Panhandle Area)

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 study.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-012	65	Clipper C93 2.5MW	Brantley 138kV	1.0	1.0	TBD

Cluster Group 8 (South Central Kansas Area)

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

Cluster Group 9 (Northeast Nebraska Area)

The Group 9 stability analysis was not performed again for this study.

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-051	200	GE 1.6MW	Tap Twin Church – Hoskins 230kV	0.970	0.997	TBD

Cluster Group 10 (North Nebraska Area)

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

Cluster Group 11 (North Kansas Area)

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

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-048	70	Nordex 2.5MW	Tap Beach Station – Redline 115kV	0.957	0.957	TBD

Cluster Group 12 (Northwest Arkansas Area)

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

Cluster Group 13 (Northwest Missouri Area)

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

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-036	4.6	GENROU	6 th Street 115kV	N/A	N/A	0
GEN-2010-041	10.5	GE 1.5MW	S 1399 161kV	0.965	0.965	0
GEN-2010-047	72	GE 1.6MW	Tap Beatrice – Harbine 115kV	0.980	0.980	TBD

Cluster Group 14 (South Central Oklahoma)

The Group 14 stability analysis was not performed again for this study

Power Factor Requirements:

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement at POI		Estimated Capacitor Requirement (Mvar)
				Lagging (supplying)	Leading (absorbing)	
GEN-2010-040	300	Suzlon 2.1MW	Cimarron 345kV	0.95	0.95	TBD

Cluster Group 15 (Southwest Nebraska Area)

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

Conclusion

The minimum cost of interconnecting all of the interconnection requests included in the Feasibility Cluster Study is estimated at \$257,000,000 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 I 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 System Impact Study Agreement and provides the required data along with demonstration of Site Control and the appropriate deposit. At the time of the System Impact Cluster Study, a better determination of the interconnection facilities may be available.

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

Appendix

A: Generation Interconnection Requests Considered for Impact Study

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date
GEN-2010-001	300	ER	OKGE	HITCHLAND-WOODWARD 345KV	TAP HITCHLAND-WOODWARD 345KV	01/01/2012
GEN-2010-012	65	ER	WFEC	BRANTLEY 138kV	BRANTLEY 138kV	03/31/2012
GEN-2010-036	4.6	ER	WERE	6 th STREET 115kV	6 th STREET 115kV	08/01/2012
GEN-2010-040	300	NR	OKGE	CIMARRON 345kV	CIMARRON 345kV	11/30/2011
GEN-2010-041	10.5	ER	OPPD	S 1399 161kV	S 1399 161kV	12/31/2011
GEN-2010-043	320	ER	WFEC	MOORELAND 138kV	MOORELAND 138kV	05/01/2017
GEN-2010-045	197.8	ER/NR	SUNC	TAP HOLCOMB – SPEARVILLE 345kV	TAP HOLCOMB – SPEARVILLE 345kV	12/31/2012
GEN-2010-046	56	ER	SPS	TUCO 230kV	TUCO 230kV	05/01/2013
GEN-2010-047	72	ER/NR	NPPD	TAP BEATRICE – HARBINE 115kV	TAP BEATRICE – HARBINE 115kV	12/01/2012
GEN-2010-048	70	ER/NR	MIDW	TAP BEACH STATION – REDLINE 115kV	TAP BEACH STATION – REDLINE 115kV	12/31/2011
GEN-2010-049	49.6	NR	MKEC	PRATT 115kV	PRATT 115kV	09/01/2012
GEN-2010-051	200	ER	NPPD	TAP TWIN CHURCH – HOSKINS 230kV	TAP TWIN CHURCH – HOSKINS 230kV	12/15/2012
GEN-2010-052	301.3	ER	SPS	FINNEY 345kV	FINNEY 345kV	12/15/2013
GEN-2010-053	199.8	ER/NR	SUNC	COMANCHE 345kV	COMANCHE 345kV	12/31/2014
ASGI-2010-020	50	ER	SPS	TAP (LE) TATUM – (LE) CROSSROADS 69kV	TAP (LE) TATUM – (LE) CROSSROADS 69kV	
ASGI-2010-021	36.6	ER	SPS	TAP (LE) SAUNDERS TAP – (LE) ANDERSON 69kV	TAP (LE) SAUNDERS TAP – (LE) ANDERSON 69kV	
GROUPED TOTAL	2,233.2					

* Planned Facility

^ Proposed Facility

*** Electrically Remote Interconnection Requests

B: Prior Queued Interconnection Requests

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2001-014	96	WFEC	Fort Supply 138kV	On-Line
GEN-2001-026	74	WFEC	Washita 138kV	On-Line
GEN-2001-033	180	SPS	San Juan Mesa Tap 230kV	On-Line
GEN-2001-036	80	SPS	Caprock Tap 115kV	On-Line
GEN-2001-037	100	OKGE	Windfarm Switching 138kV	On-Line
GEN-2001-039A	105	MKEC	Tap Greensburg - Judson-Large 115kV	On Schedule for 2011
GEN-2001-039M	100	SUNC	Central Plains Tap 115kV	On-Line
GEN-2002-004	200	WERE	Latham 345kV	On-Line at 150MW
GEN-2002-005	120	WFEC	Red Hills Tap 138kV	On-Line
GEN-2002-008	240	SPS	*Hitchland 345kV	On-Line at 120MW
GEN-2002-009	80	SPS	Hansford County 115kV	On-Line
GEN-2002-022	240	SPS	Bushland 230kV	On-Line at 160MW
GEN-2002-025A	150	MKEC	Spearville 230kV	On-Line at 100.5MW
GEN-2003-005	100	WFEC	Anadarko - Paradise 138kV	On Line
GEN-2003-006A	200	MKEC	Elm Creek 230kV	On-Line
GEN-2003-013**	198	SPS	*Hitchland - Finney 345kV	On Schedule for 2012
GEN-2003-019	250	MIDW	Smoky Hills Tap 230kV	On-Line
GEN-2003-020	160	SPS	Martin 115kV	On-Line at 80MW
GEN-2003-022	120	AEPW	Washita 138kV	On-Line
GEN-2004-014	154.5	MKEC	Spearville 230kV	On Schedule for 2010
GEN-2004-020	27	AEPW	Washita 138kV	On-Line
GEN-2005-005	18	OKGE	Windfarm Tap 138kV	IA Pending
GEN-2005-008	120	OKGE	Woodward 138kV	On-Line
GEN-2005-012	250	SUNC	Spearville 345kV	On Suspension
GEN-2005-013	201	WERE	Tap Latham - Neosho	On Schedule for 2012
GEN-2005-017	340	SPS	Tap *Hitchland - Potter County 345kV	On Suspension
GEN-2006-002	101	AEPW	Grapevine - Elk City 230kV	On-Line
GEN-2006-006	205.5	SUNC	Spearville 230kV	IA Pending
GEN-2006-014	300	MIPU	Tap Maryville -- Clarinda and tie Midway (WFARMS) 161kV	On Suspension
GEN-2006-017	300	MIPU	Tap Maryville -- Clarinda and tie Midway (WFARMS) 161kV	On Suspension
GEN-2006-018	170	SPS	Tuco 230kV	On Schedule for 2011
GEN-2006-020S	18.9	SPS	DWS Frisco Tap	/On Schedule 12/31/2011
GEN-2006-020N	42	NPPD	Bloomfield 115kV	On-Line
GEN-2006-021	101	MKEC	Flat Ridge Tap 138kV	On-Line
GEN-2006-022	150	MKEC	Ninnescah Tap 115kV	On Suspension
GEN-2006-024S	19.8	WFEC	South Buffalo Tap 69kV	On-Line
GEN-2006-026	502	SPS	Hobbs 230kV	On-Line
GEN-2006-031	75	MIDW	Knoll 115kV	On-Line
GEN-2006-032	200	MIDW	South Hays 230kV	On Suspension
GEN-2006-034	81	SUNC	Tap Kanarado - Sharon Springs 115kV	On Suspension
GEN-2006-035	225	AEPW	Tap Grapevine - Elk City 230kV	On Schedule for 2010
GEN-2006-037N1	75	NPPD	Broken Bow 115kV	On Suspension
GEN-2006-038N019	80	NPPD	Petersburg 115kV	On Line
GEN-2006-038	750	WFEC	Hugo 345kV	On Suspension
GEN-2006-039	400	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV	On Suspension

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2006-040	108	SUNC	Mingo 115kV	On Schedule for 2010
GEN-2006-043	99	AEPW	Grapevine - Elk City 230kV	On Line
GEN-2006-044	370	SPS	*Hitchland 345kV	On Schedule for 12/2011
GEN-2006-044N	40.5	NPPD	Tap Neligh – Petersburg 115kV	On Schedule for 12/2011
GEN-2006-044N02	100.5	NPPD	GEN-2008-086N02 230kV	Under Study (DISIS-2010-001)
GEN-2006-045	240	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV	On Suspension
GEN-2006-046	131	OKGE	Dewey 138kV	On Line
GEN-2006-047	240	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV	On Schedule for 2013
GEN-2006-049	400	SPS	*Hitchland - Finney 345kV	On Schedule for 2014
GEN-2007-002	160	SPS	Grapevine 115kV	On Suspension
GEN-2007-006	160	OKGE	Roman Nose 138kV	On Suspension
GEN-2007-011	135	SUNC	Syracuse 115kV	On Schedule
GEN-2007-011N08	81	NPPD	Bloomfield 115kV	On-Line
GEN-2007-011N09	75	NPPD	Bloomfield 115kV	IA Pending
GEN-2007-013	99	SUNC	Selkirk 115kV	On Suspension
GEN-2007-015	135	WERE	Tap Humboldt – Kelly 161kV	On Suspension
GEN-2007-017	100.5	MIPU	Tap Maryville – Clarinda and tie Midway (WFARMS) 161kV	On Suspension
GEN-2007-021	201	OKGE	*Tatonga 345kV	On Schedule for 2014
GEN-2007-025	300	WERE	Tap Woodring – Wichita 345kV	On Suspension
GEN-2007-032	150	WFEC	Tap Clinton Junction – Clinton 138kV	On Schedule for 2013
GEN-2007-038	200	SUNC	Spearville 345kV	On Schedule for 2016
GEN-2007-040	200.1	SUNC	Tap Holcomb – Spearville 345kV	On Schedule for 2014
GEN-2007-043	200	OKGE	Tap Lawton Eastside – Cimarron 345kV	On-Line (100MW)
GEN-2007-044	300	OKGE	*Tatonga 345kV	On Schedule for 2014
GEN-2007-046	199.5	SPS	Tap & Tie Texas County – Hitchland & DWS Frisco Tap – Hitchland 115kV	On Schedule for 2014
GEN-2007-048	400	SPS	Tap Amarillo South – Swisher 230kV	On Schedule for 2014
GEN-2007-050	170	OKGE	*Woodward 138kV	On-Line
GEN-2007-051	200	WFEC	Mooreland 138kV	On Schedule for 2014
GEN-2007-052	150	WFEC	Anadarko 138kV	On-Line
GEN-2007-053	110	MIPU	Tap Maryville – Clarinda and tie Midway (WFARMS) 161kV	On Schedule for 2013
GEN-2007-057	34.5	SPS	Moore County East 115kV	On Schedule for 2014
GEN-2007-062**	765	OKGE	*Woodward 345kV	On Schedule for 2014
GEN-2008-003	101	OKGE	*Woodward EHV 138kV	On-Line
GEN-2008-008	60	SPS	Graham 115kV	On Schedule for 2014
GEN-2008-009	60	SPS	San Juan Mesa Tap 230kV	On Schedule for 2014
GEN-2008-013	300	OKGE	Tap Woodring – Wichita 345kV	On Schedule for 2013
GEN-2008-014	150	SPS	Tap Tuco – Oklaunion 345kV	On Schedule for 2014
GEN-2008-016	248	SPS	Grassland 230kV	IA Pending
GEN-2008-017	300	SUNC	Setab 345kV	on Schedule for 2014
GEN-2008-018	405	SPS	Finney 345kV	IA Pending
GEN-2008-019**	300	OKGE	*Tatonga 345kV	On Schedule for 2015
GEN-2008-021	42	WERE	Wolf Creek 345kV	IA Pending
GEN-2008-022	300	SPS	Tap Eddy – Tolk 345kV	IA Pending
GEN-2008-023	150	AEPW	Hobart Junction 138kV	On Schedule for 2012
GEN-2008-025	101.2	SUNC	Ruleton 115kV	On Schedule for 2015
GEN-2008-029	250.5	OKGE	Woodward EHV 138kV	On Schedule for 2014
GEN-2008-037	101	WFEC	Tap Washita – Blue Canyon 138kV	On Schedule for 2011
GEN-2008-044	197.8	OKGE	Tatonga 345kV	On Schedule for 2011
GEN-2008-046	200	OKGE	Sunnyside 345kV	On Schedule for 2012
GEN-2008-047	300	SPS	Tap Hitchland - Woodward 345kV	IA Pending
GEN-2008-051	322	SPS	Potter 345kV	On Schedule for 2012

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2008-071	76.8	OKGE	Newkirk 138kV	IA Pending
GEN-2008-079	100.5	MKEC	Tap Judson Large – Cudahy 115kV	On Schedule for 2011
GEN-2008-086N02	200	NPPD	Tap Ft. Randall – Columbus 230kV	On Schedule for 2013
GEN-2008-088	50.6	SPS	Vega 69kV	IA Pending
GEN-2008-092	201	MIDW	Knoll 115kV	IA Pending
GEN-2008-098	100.8	WERE	Tap Wolf Creek – LaCygne 345kV	IA Pending
GEN-2008-110	299.2	SPS	Hitchland 345kV	IA Pending
GEN-2008-1190	60	OPPD	Tap Humboldt – Kelly 161kV	On-Line
GEN-2008-123N	89.7	NPPD	Tap Guide - Pauline 115kV	IA Pending
GEN-2008-124	200.1	SUNC	Spearville 230kV	IA Pending
GEN-2008-127	200.1	WERE	Tap Sooner – Rose Hill 345kV	IA Pending
GEN-2008-129	80	MIPU	Pleasant Hill 161kV	On-Line
GEN-2009-008	199.5	SUNC	South Hays 230kV	IA Pending
GEN-2009-011	50	MKEC	Tap Plainville – Phillipsburg 115kV	On Schedule for 2014
GEN-2009-016	141	AEPW	Falcon Road 138kV	On Schedule for 2012
GEN-2009-017**	60	SPS	Tap Pembroke – Stiles 138kV	Under Study (DISIS-2009-001)
GEN-2009-020	48.6	MIDW	Tap Bazine – Nekoma 69kV	IA Pending
GEN-2009-025	60	OKGE	Tap Deer Creek – Sinclair 69kV	IA Pending
GEN-2009-030	100.8	WFEC	Weatherford 138kV	IA Pending
GEN-2009-040	73.8	WERE	Tap Smittyville - Knob Hill 115kV	On Schedule for 2012
GEN-2009-060	84	WFEC	Gotebo 69kV	IA Pending
GEN-2009-067S	20	SPS	7 Rivers 69kV	IA Pending
GEN-2010-003	100.8	WERE	GEN-2008-098 345kV	IA Pending
GEN-2010-005	300	WERE	GEN-2007-025 345kV	IA Pending
GEN-2010-006	205	SPS	Jones 230kV	IA Pending
GEN-2010-007	73.8	SPS	Tap Pringle - Riverview 115kV	IA Pending
GEN-2010-008	64.4	WFEC	Fargo 69kV	IA Pending
GEN-2010-009	165.6	SUNC	Gray County 345kV	IA Pending
GEN-2010-010	100.5	NPPD	Emerick 69kV	IA Pending
GEN-2010-011	29.7	OKGE	GEN-2008-044 345kV	On Schedule for 2011
GEN-2010-014	360	SPS	Hitchland 345kV	IA Pending
GEN-2010-015	200.1	SUNC	Spearville 345kV	IA Pending
GEN-2010-016	199.8	SUNC	Tap Spearville - Knoll 345kV	IA Pending
Broken Bow	8.3	NPPD	Genoa 115kV	On-Line
Ord	10.8	NPPD	Bloomfield 115kV	On-Line
Stuart	2.1	NPPD	Petersburg 115kV	On-Line
Ainsworth	75	NPPD	Ainsworth Wind Tap 115kV	On-Line
Rosebud Wind Project	30	NPPD	St. Francis 115kV	On-Line
Broken Bow	80	NPPD	Broken Bow 115kV	On-Line
Wolf Creek	1170	WERE	Wolf Creek 345kV	On-Line
Genoa	4	NPPD	Genoa 115kV	On-Line
ASGI-2010-001	400	AECI	Tap Cooper – Fairport 345kV	AECI queue Affected Study
ASGI-2010-002	201	AECI	Lathrop 161kV	AECI queue Affected Study
ASGI-2010-003	300	AECI	Maryville 161kV	AECI queue Affected Study
ASGI-2010-004	50	AECI	Tap Queen City – Lancaster 69kV	AECI queue Affected Study
ASGI-2010-005	99	AECI	Lathrop 161kV	AECI queue Affected Study
ASGI-2010-006	150	AECI	Tap Fairfax – Fairfax Tap 138kV	AECI queue Affected Study
ASGI-2010-007	150	AECI	Tap Fairfax – Fairfax Tap 138kV	AECI queue Affected Study
ASGI-2010-008	100	AECI	Maryville 161kV	AECI queue Affected Study
ASGI-2010-009	201	AECI	Osborn 161kV	AECI queue Affected Study
ASGI-2010-010	42	SPS	Lovington 115kV	AECI queue Affected Study

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
ASGI-2010-011	48	SPS	Texas County 69kV	AECI queue Affected Study
Llanoest	80	SPS	Llano Wind Farm Tap 115kV	On-Line
SPSDISTR	90	SPS	Dumas_19ST 115kV	On-Line
			Etter 115kV	On-Line
			Sherman 115kV	On-Line
			Spearman 115kV	On-Line
			Texas County 115kV	On-Line
BLUCAN2	153	WFEC	Washita 138kV (GEN-2003-004)	On-Line
			Washita 138kV (GEN-2004-023)	On-Line
			Washita 138kV (GEN-2005-003)	On-Line
Montezuma	110	MKEC	Haggard 115kV	On-Line
GROUPED TOTAL	25,693			

** Interconnection on Caprock Electric tested for impacts on SPP

* Planned Facility

^ Proposed Facility

C: Study Groupings

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2001-014	96	WFEC	Fort Supply 138kV
	GEN-2001-037	100	OKGE	Windfarm Switching 138kV
	GEN-2002-005	120	WFEC	Red Hills Tap 138kV
	GEN-2005-005	18	OKGE	Windfarm Tap 138kV
	GEN-2005-008	120	OKGE	Woodward 138kV
	GEN-2006-024S	19.8	WFEC	South Buffalo Tap 69kV
	GEN-2006-046	131	OKGE	Dewey 138kV
	GEN-2007-006	160	OKGE	Roman Nose 138kV
	GEN-2007-021	201	OKGE	*Tatonga 345kV
	GEN-2007-044	300	OKGE	*Tatonga 345kV
	GEN-2007-050	170	OKGE	*Woodward 138kV
	GEN-2007-051	200	WFEC	Mooreland 138kV
	GEN-2007-062	765	OKGE	*Woodward 345kV
	GEN-2008-003	101	OKGE	*Woodward EHV 138kV
	GEN-2008-019	300	OKGE	*Tatonga 345kV
	GEN-2008-029	250.5	OKGE	WOODWARD EHV 138kV
	GEN-2008-044	197.8	OKGE	Tatonga 345kV
	GEN-2010-008	64.4	WFEC	Fargo 69kV
GEN-2010-011	29.7	OKGE	GEN-2008-044 345kV	
PRIOR QUEUED SUBTOTAL		3,344.2		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Woodward	GEN-2010-043	320	WFEC	Mooreland 138kV
WOODWARD SUBTOTAL		320		
AREA SUBTOTAL		3,664.2		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	SPS Distribution	90	SPS	Various
	ASGI-2010-011	48	SPS	Texas County 69kV
	GEN-2002-008	240	SPS	*Hitchland 345kV
	GEN-2002-009	80	SPS	Hansford County 115kV
	GEN-2003-013	198	SPS	*Tap Hitchland - Finney 345kV
	GEN-2003-020	160	SPS	Martin 115kV
	GEN-2005-017	340	SPS	*Tap Hitchland - Potter County 345kV
	GEN-2006-020S	18.9	SPS	DWS Frisco Tap
	GEN-2006-044	370	SPS	*Hitchland 345kV
	GEN-2006-049	400	SPS	*Tap Hitchland - Finney 345kV
	GEN-2007-046	199.5	SPS	Tap & Tie Texas County – Hitchland & DWS Frisco Tap – Hitchland 115kV
	GEN-2007-057	34.5	SPS	Moore County East 115kV
	GEN-2008-047	300	SPS	TAP HITCHLAND - WOODWARD 345kV
	GEN-2008-110	299.2	SPS	Hitchland 345kV
	GEN-2010-007	73.8	SPS	Tap Pringle – Riverview 115kV
GEN-2010-014	360	SPS	Hitchland 345kV	
PRIOR QUEUED SUBTOTAL		3,211.9		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Hitchland	GEN-2010-001	300	SPS	GEN-2008-047 345kV
HITCHLAND SUBTOTAL		300		
AREA SUBTOTAL		3,511.9		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Montezuma	110	MKEC	Haggard 115kV
	GEN-2001-039A	105	MKEC	Tap Greensburg - Judson-Large 115kV
	GEN-2002-025A	150	MKEC	Spearville 230kV
	GEN-2004-014	154.5	MKEC	Spearville 230kV
	GEN-2005-012	250	SUNC	Spearville 345kV
	GEN-2006-006	205.5	SUNC	Spearville 230kV
	GEN-2006-021	101	MKEC	Flat Ridge Tap 138kV
	GEN-2006-022	150	MKEC	Ninnescah Tap 115kV
	GEN-2007-038	200	SUNC	Spearville 345kV
	GEN-2007-040	200.1	SUNC	Tap Holcomb – Spearville 345kV
	GEN-2008-018	405	SPS	Finney 345kV
	GEN-2008-079	100.5	MKEC	Tap Judson Large – Cudahy 115kV
	GEN-2008-124	200.1	SUNC	Spearville 230kV
	GEN-2010-009	165.6	SUNC	Gray County 345kV
GEN-2010-015	200.1	SUNC	Spearville 345kV	
GEN-2010-016	199.8	SUNC	Tap Spearville – Knoll 345kV	
PRIOR QUEUED SUBTOTAL		2,897.2		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Spearville	GEN-2010-045	197.8	SUNC	Tap Holcomb – Spearville 345kV
	GEN-2010-049	49.6	MKEC	Pratt 115kV
	GEN-2010-052	301.3	SPS	Finney 345kV
	GEN-2010-053	199.8	SUNC	Comanche 345kV
SPEARVILLE SUBTOTAL		748.5		
AREA SUBTOTAL		3,760.7		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2001-039M	100	SUNC	Central Plains Tap 115kV
	GEN-2006-034	81	SUNC	Tap Kanarado - Sharon Springs 115kV
	GEN-2006-040	108	SUNC	Mingo 115kV
	GEN-2007-011	135	SUNC	Syracuse 115kV
	GEN-2007-013	99	SUNC	Selkirk 115kV
	GEN-2008-017	300	SUNC	Setab 345kV
	GEN-2008-025	101.2	SUNC	Ruleton 115kV
PRIOR QUEUED SUBTOTAL		924.2		
MINGO/NW KANSAS SUBTOTAL		924.2		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Llano Estacado	80	SPS	Llano Estacado Tap 115kV
	GEN-2002-022	240	SPS	Bushland 230kV
	GEN-2006-039	400	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV
	GEN-2006-045	240	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV
	GEN-2006-047	240	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV
	GEN-2007-002	160	SPS	Grapevine 115kV
	GEN-2007-048	400	SPS	Tap Amarillo South – Swisher 230kV
	GEN-2008-051	322	SPS	Potter 345kV
GEN-2008-088	50.6	SPS	Vega 69kV	
PRIOR QUEUED SUBTOTAL		2,132.6		
AMARILLO SUBTOTAL		2,132.6		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	ASGI-2010-010	42	SPS	Lovington 115kV
	GEN-2001-033	180	SPS	San Juan Mesa Tap 230kV
	GEN-2001-036	80	SPS	Caprock Tap 115kV
	GEN-2006-018	170	SPS	Tuco 230kV
	GEN-2006-026	502	SPS	Hobbs 230kV
	GEN-2008-008	60	SPS	Graham 115kV
	GEN-2008-009	60	SPS	San Juan Mesa Tap 230kV
	GEN-2008-014	150	SPS	Tap Tuco – Oklaunion 345kV
	GEN-2008-016	248	SPS	Grassland 230kV
	GEN-2008-022	300	SPS	Tap Eddy – Tolk 345kV
	GEN-2009-017	60	SPS	Tap Pembroke – Stiles 138kV
	GEN-2009-067S	20	SPS	7 Rivers 69kV
GEN-2010-006	205	SPS	Jones 230kV	
PRIOR QUEUED SUBTOTAL		2,077		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
S Panhandle	ASGI-2010-020	50	SPS	Tap (LE) Tatum – (LE) Crossroads 69kV
	ASGI-2010-021	36.6	SPS	Tap (LE) Saunders Tap – (LE) Anderson 69kV
	GEN-2010-046	56	SPS	Tuco 230kV
SOUTH PANHANDLE/NM SUBTOTAL		142.6		
AREA SUBTOTAL		2,219.6		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2001-026	74	WFEC	Washita 138kV
	GEN-2003-004	101	WFEC	Washita 138kV
	GEN-2003-005	100	WFEC	Anadarko - Paradise 138kV
	GEN-2003-022	120	AEPW	Washita 138kV
	GEN-2004-020	27	AEPW	Washita 138kV
	GEN-2004-023	21	WFEC	Washita 138kV
	GEN-2005-003	31	WFEC	Washita 138kV
	GEN-2006-002	101	AEPW	Grapevine - Elk City 230kV
	GEN-2006-035	225	AEPW	Grapevine - Elk City 230kV
	GEN-2006-043	99	AEPW	Grapevine - Elk City 230kV
	GEN-2007-032	150	WFEC	Tap Clinton Junction – Clinton 138kV
	GEN-2007-043	200	OKGE	Tap Lawton Eastside – Cimarron 345kV
	GEN-2007-052	150	WFEC	Anadarko 138kV
	GEN-2008-023	150	AEPW	Hobart Junction 138kV
	GEN-2008-037	101	WFEC	Tap Washita – Blue Canyon 138kV
	GEN-2009-016	141	AEPW	Falcon Road 138kV
	GEN-2009-030	100.8	WFEC	Weatherford 138kV
GEN-2009-060	84	WFEC	Gotebo 69kV	
PRIOR QUEUED SUBTOTAL		1,975.8		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
SW Oklahoma	GEN-2010-012	65	WFEC	Brantley 138kV
SW OKLAHOMA SUBTOTAL		65		
AREA SUBTOTAL		2,040.8		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Wolf Creek	1170	WERE	Wolf Creek 345kV
	ASGI-2010-006	150	AECI	Tap Fairfax – Fairfax Tap 138kV
	ASGI-2010-007	150	AECI	Tap Fairfax – Fairfax Tap 138kV
	GEN-2002-004	200	WERE	Latham 345kV
	GEN-2005-013	201	WERE	Tap Latham - Neosho
	GEN-2007-025	300	WERE	Tap Woodring – Wichita 345kV
	GEN-2008-013	300	OKGE	Tap Woodring – Wichita 345kV
	GEN-2008-021	42	WERE	Wolf Creek 25kV
	GEN-2008-071	76.8	OKGE	Newkirk 138kV
	GEN-2008-098	100.8	WERE	Tap Wolf Creek – LaCygne 345kV
	GEN-2008-127	200.1	WERE	Tap Sooner – Rose Hill 345kV
	GEN-2009-025	60	OKGE	Tap Deer Creek – Sinclair 69kV
	GEN-2010-003	100.8	WERE	GEN-2008-098 345kV
	GEN-2010-005	300	WERE	GEN-2007-025 345kV
PRIOR QUEUED SUBTOTAL		3,351.5		
NORTH OKLAHOMA SUBTOTAL		3,351.5		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Genoa	4	NPPD	Genoa 115kV
	GEN-2006-020N	42	NPPD	Bloomfield 115kV
	GEN-2006-038N019	80	NPPD	Petersburg 115kV
	GEN-2006-044N	40.5	NPPD	Tap Neligh – Petersburg 115kV
	GEN-2006-044N02	100.5	NPPD	GEN-2008-086N02 230kV
	GEN-2007-011N08	81	NPPD	Bloomfield 115kV
	GEN-2007-011N09	75	NPPD	Bloomfield 115kV
	GEN-2008-086N02	200	NPPD	Tap Ft. Randall – Columbus 230kV
	GEN-2010-010	100.5	NPPD	Emerick 69kV
PRIOR QUEUED SUBTOTAL		723.5		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
NE Nebraska	GEN-2010-051	200	NPPD	Tap Twin Church – Hoskins 230kV
NE NEBRASKA SUBTOTAL		200		
AREA SUBTOTAL		923.5		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Broken Bow	8.3	NPPD	Genoa 115kV
	Ord	10.8	NPPD	Bloomfield 115kV
	Stuart	2.1	NPPD	Petersburg 115kV
	Ainsworth	75	NPPD	Ainsworth Wind Tap 115kV
	Rosebud Wind Project	30	NPPD	St. Francis 115kV
	Broken Bow	80	NPPD	Broken Bow 115kV
	GEN-2006-037N1	75	NPPD	Broken Bow 115kV
PRIOR QUEUED SUBTOTAL		281.2		
NORTH NEBRASKA SUBTOTAL		281.2		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2003-006A-E	100	MKEC	Elm Creek 230kV
	GEN-2003-006A-W	100	MKEC	Elm Creek 230kV
	GEN-2003-019	250	MIDW	Smoky Hills Tap 230kV
	GEN-2006-031	75	MIDW	Knoll 115kV
	GEN-2006-032	200	MIDW	South Hays 230kV
	GEN-2008-092	201	MIDW	Knoll 115kV
	GEN-2009-008	199.5	SUNC	South Hays 230kV
	GEN-2009-011	50	MKEC	Tap Plainville – Phillipsburg 115kV
	GEN-2009-020	48.6	MIDW	Tap Bazine – Nekoma 69kV
GEN-2009-040	73.8	WERE	Tap Smittyville – Knob Hill 115kV	
PRIOR QUEUED SUBTOTAL		1,297.9		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
North Kansas	GEN-2010-048	70	MIDW	Tap Beach Station – Redline 115kV
NORTH KANSAS SUBTOTAL		70		
AREA SUBTOTAL		1,367.9		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	ASGI-2010-001	400	AECI	Tap Cooper – Fairport 345kV
	ASGI-2010-002	201	AECI	Lathrop 161kV
	ASGI-2010-003	300	AECI	Maryville 161kV
	ASGI-2010-004	50	AECI	Tap Queen City – Lancaster 69kV
	ASGI-2010-005	99	AECI	Lathrop 161kV
	ASGI-2010-008	100	AECI	Maryville 161kV
	ASGI-2010-009	201	AECI	Osborn 161kV
	GEN-2006-014	300	MIPU	Tap Maryville – Clarinda 161kV & Tie to Midway 161kV
	GEN-2006-017	300	MIPU	Tap Maryville – Clarinda 161kV & Tie to Midway 161kV
	GEN-2007-015	135	WERE	Tap Humboldt – Kelly 161kV
	GEN-2007-017	100.5	MIPU	Tap Maryville – Clarinda 161kV & Tie to Midway 161kV
	GEN-2007-053	110	MIPU	Tap Maryville – Clarinda 161kV & Tie to Midway 161kV
	GEN-2008-119O	60	OPPD	Tap Humboldt – Kelly 161kV
GEN-2008-129	80	MIPU	Pleasant Hill 161kV	
PRIOR QUEUED SUBTOTAL		2,436.5		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
NW Missouri	GEN-2010-036	4.6	WERE	6 th Street 115kV
	GEN-2010-041	10.5	OPPD	S 1399 161kV
	GEN-2010-047	72	NPPD	Tap Beatrice – Harbine 115kV
NORTHWEST MISSOURI SUBTOTAL		87.1		
AREA SUBTOTAL		2,523.6		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2006-038	750	WFEC	Hugo 345kV
	GEN-2008-046	200	OKGE	Sunnyside 345kV
PRIOR QUEUED SUBTOTAL		950		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
SOUTH CENTRAL OKLAHOMA	GEN-2010-040	300	OKGE	Cimarron 345kV
SOUTH CENTRAL OKLAHOMA SUBTOTAL		300		
AREA SUBTOTAL		1256.4		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2008-123N	89.7	NPPD	Tap Guide – Pauline 115kV
PRIOR QUEUED SUBTOTAL		89.7		
SOUTHWEST NEBRASKA		89.7		
***CLUSTERED TOTAL (w/o PRIOR QUEUED)		2,233.2		
***CLUSTERED TOTAL (w/PRIOR QUEUED)		30,159.6		

* Planned Facility

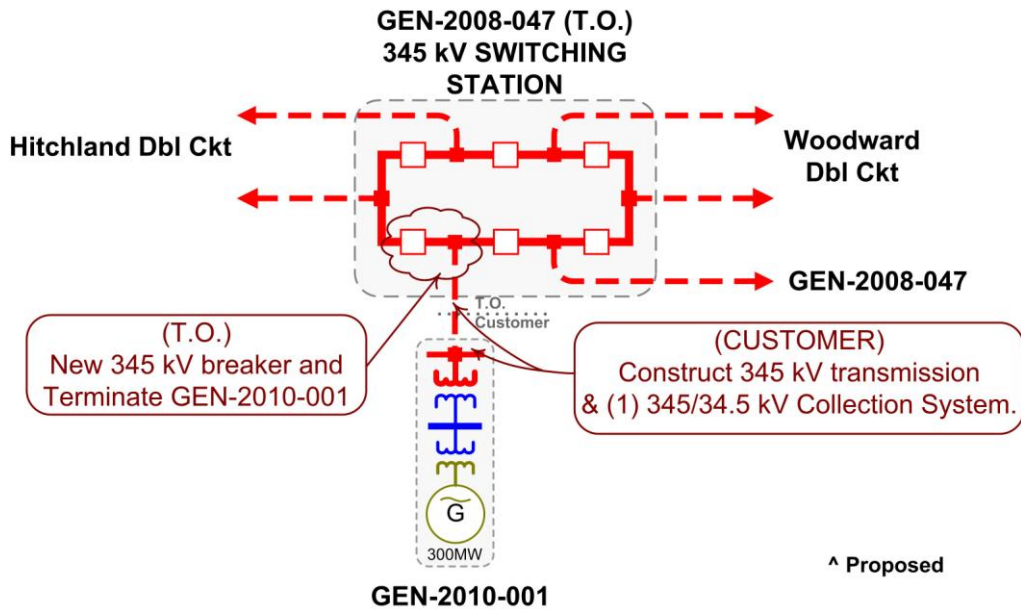
^ Proposed Facility

** Alternate requests - counted as one request for study purpose

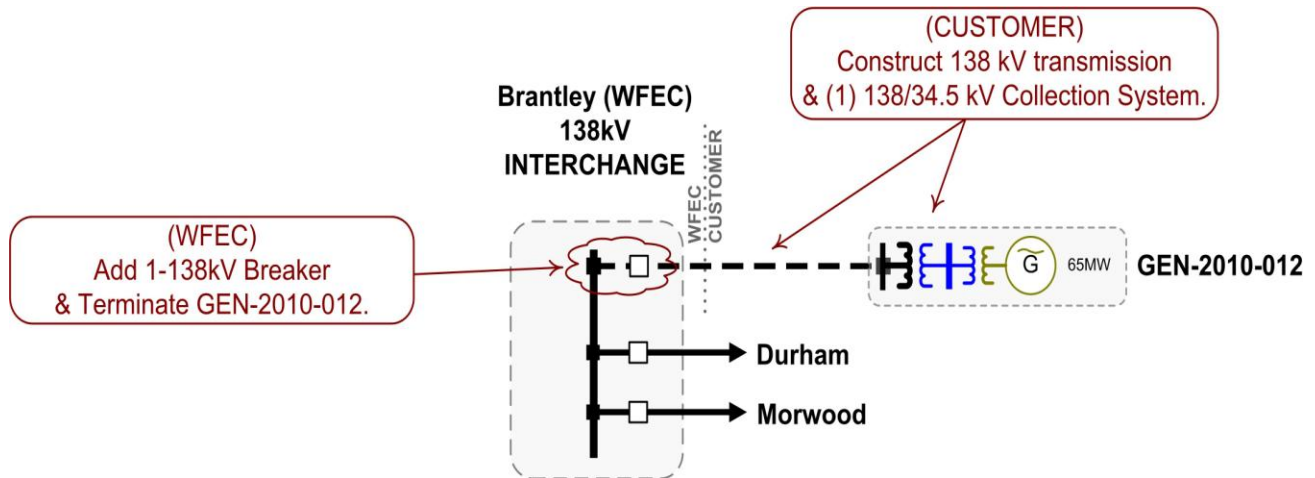
*** Electrically Remote Interconnection Requests

D: Proposed Point of Interconnection One line Diagrams

GEN-2010-001



GEN-2010-012



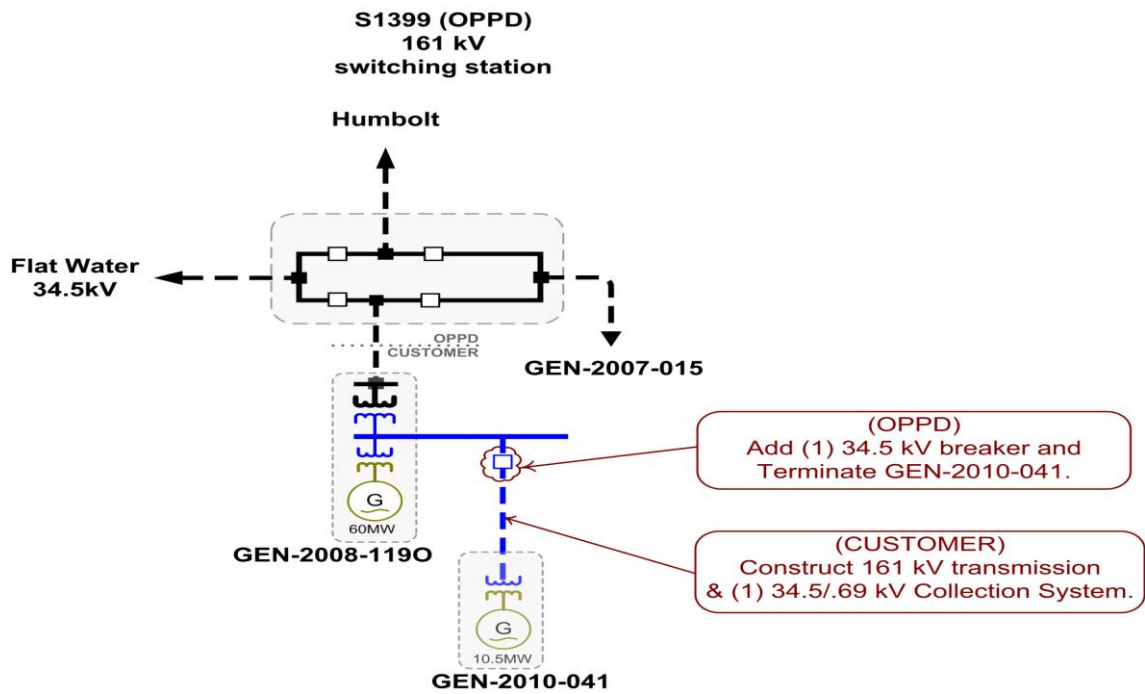
GEN-2010-036

Refer to Facility Study for GEN-2010-036

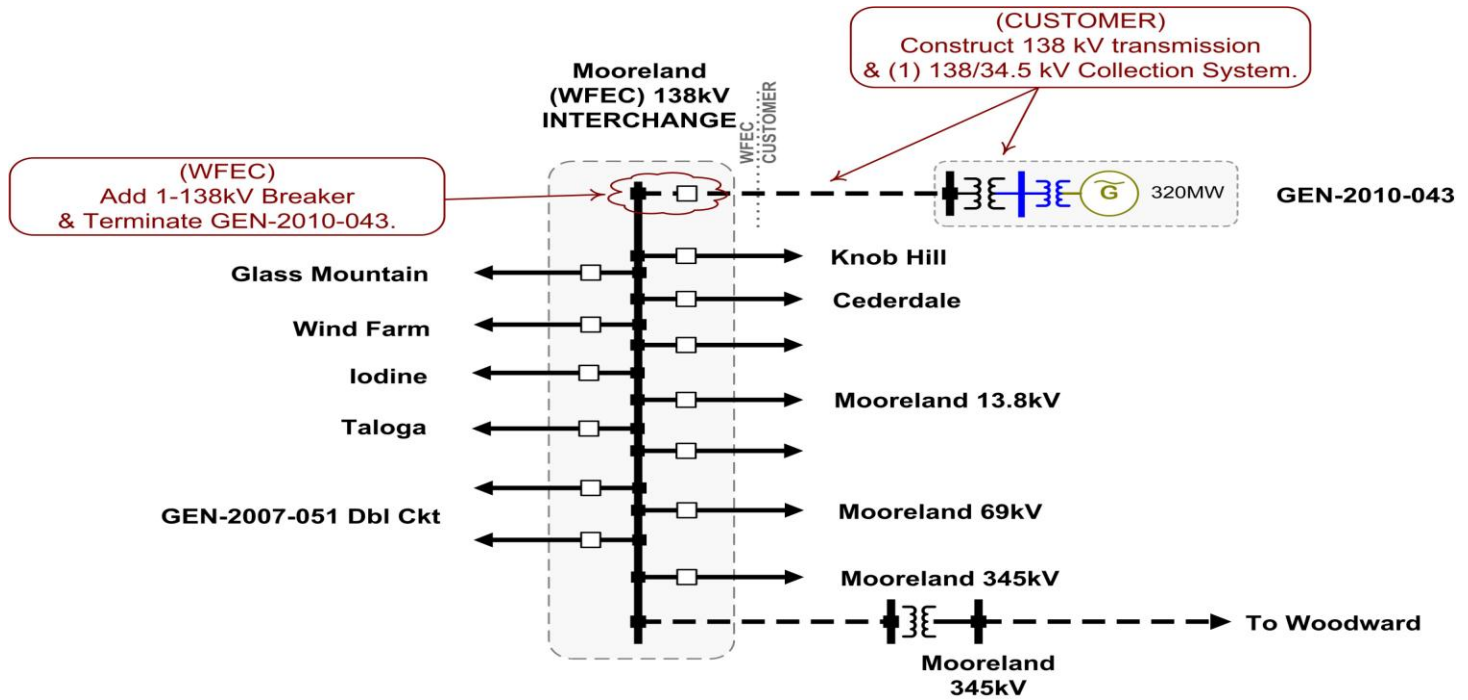
GEN-2010-040

Refer to Facility Study for GEN-2010-040

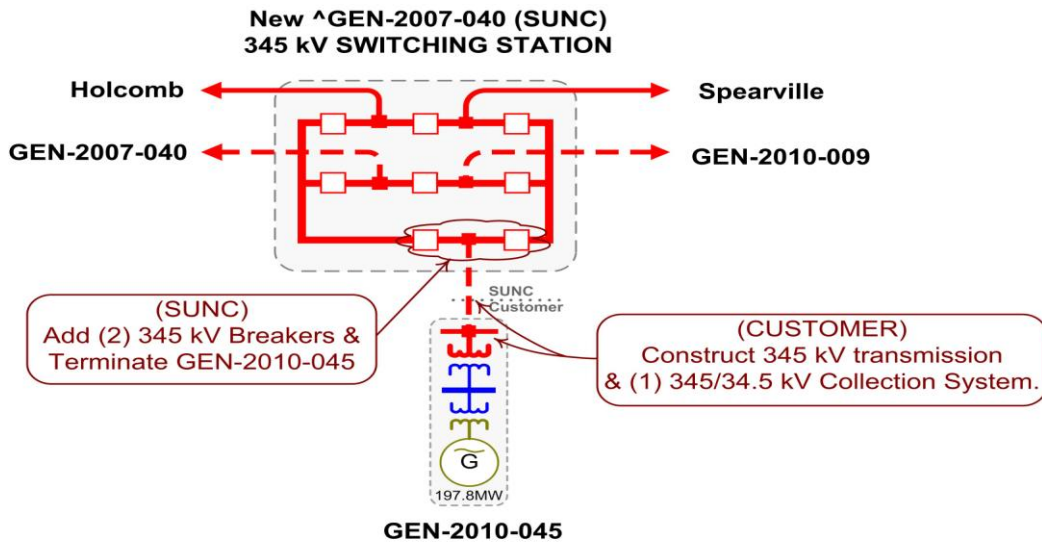
GEN-2010-041



GEN-2010-043



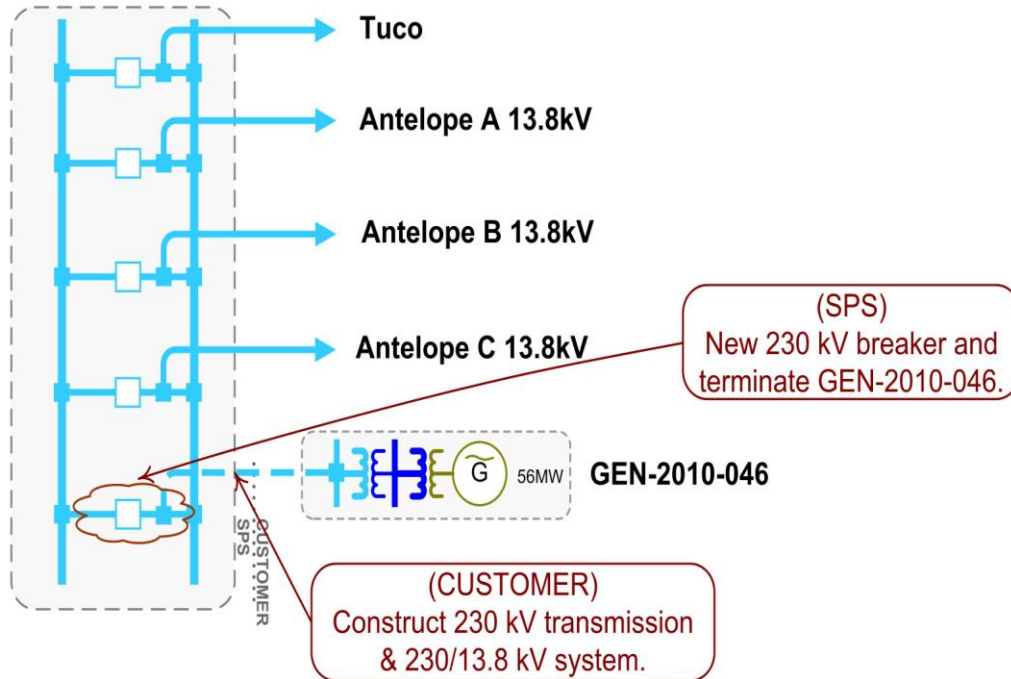
GEN-2010-045



* Planned ^ Proposed

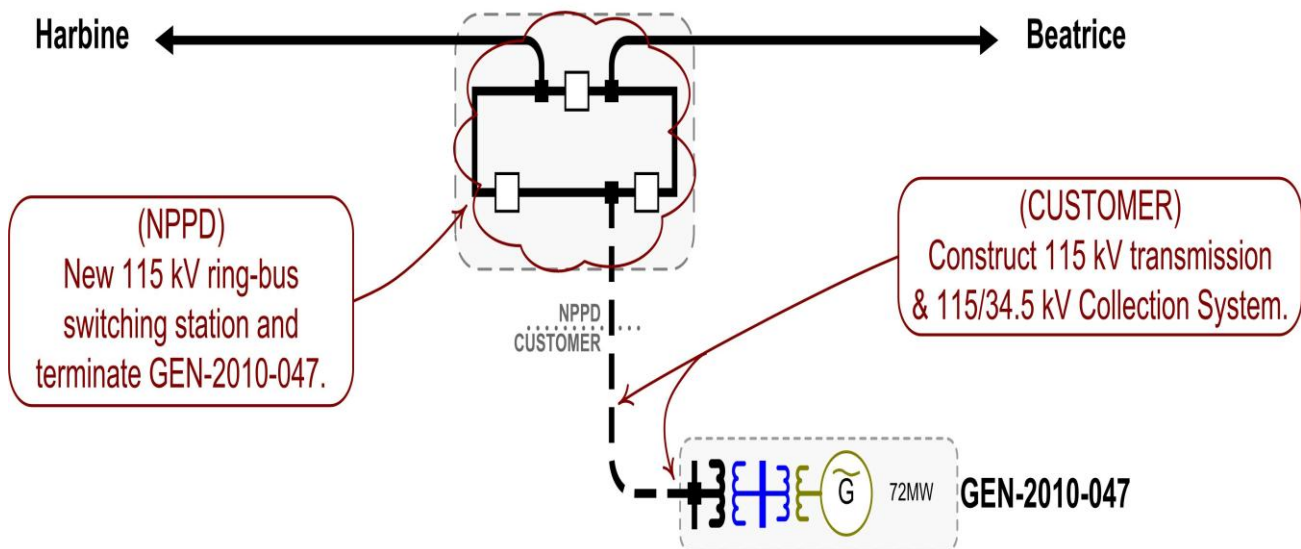
GEN-2010-046

**Antelope (SPS)
230 kV switching
station**

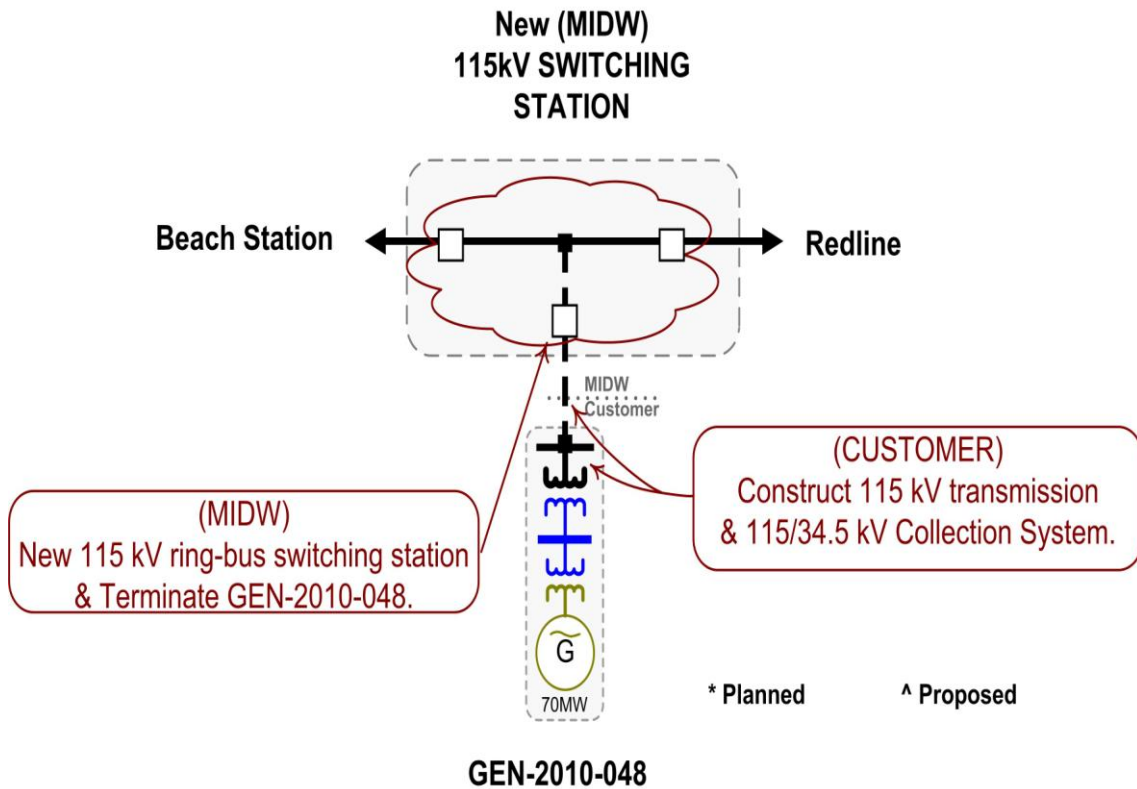


GEN-2010-047

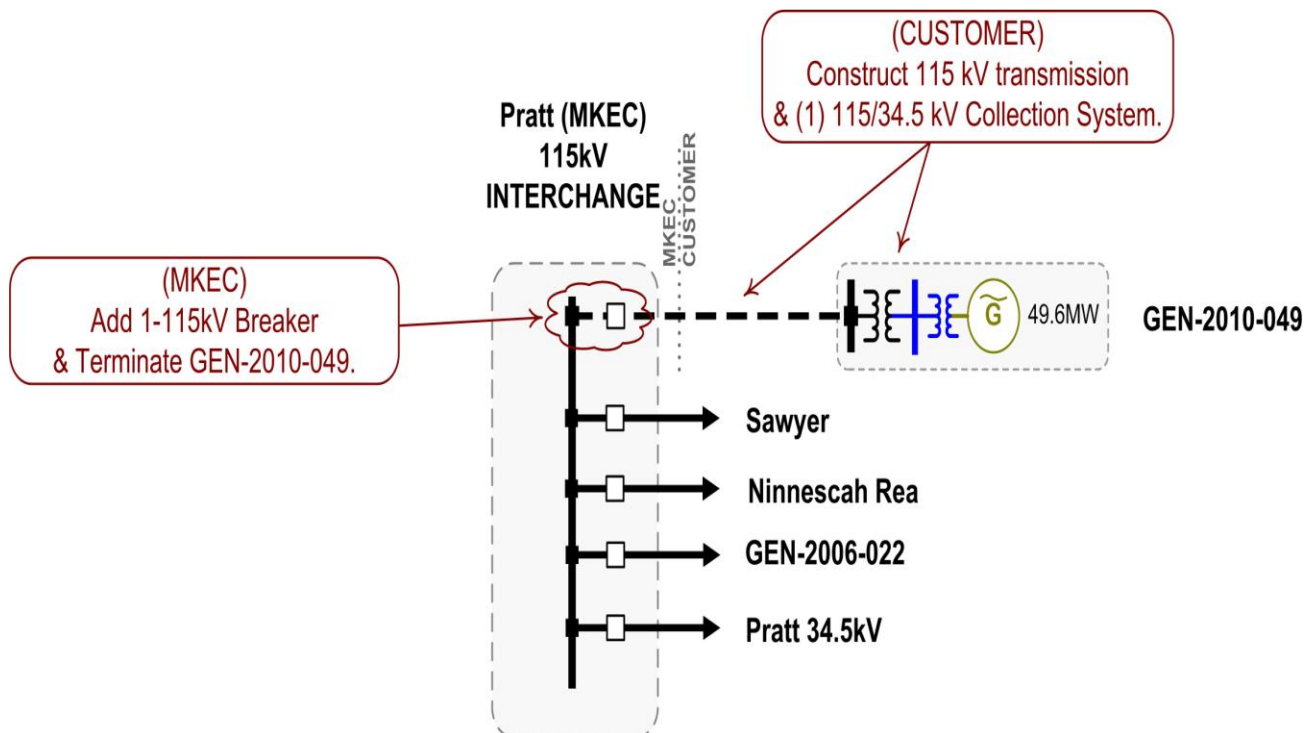
**New (NPPD)
115 kV
switching station**



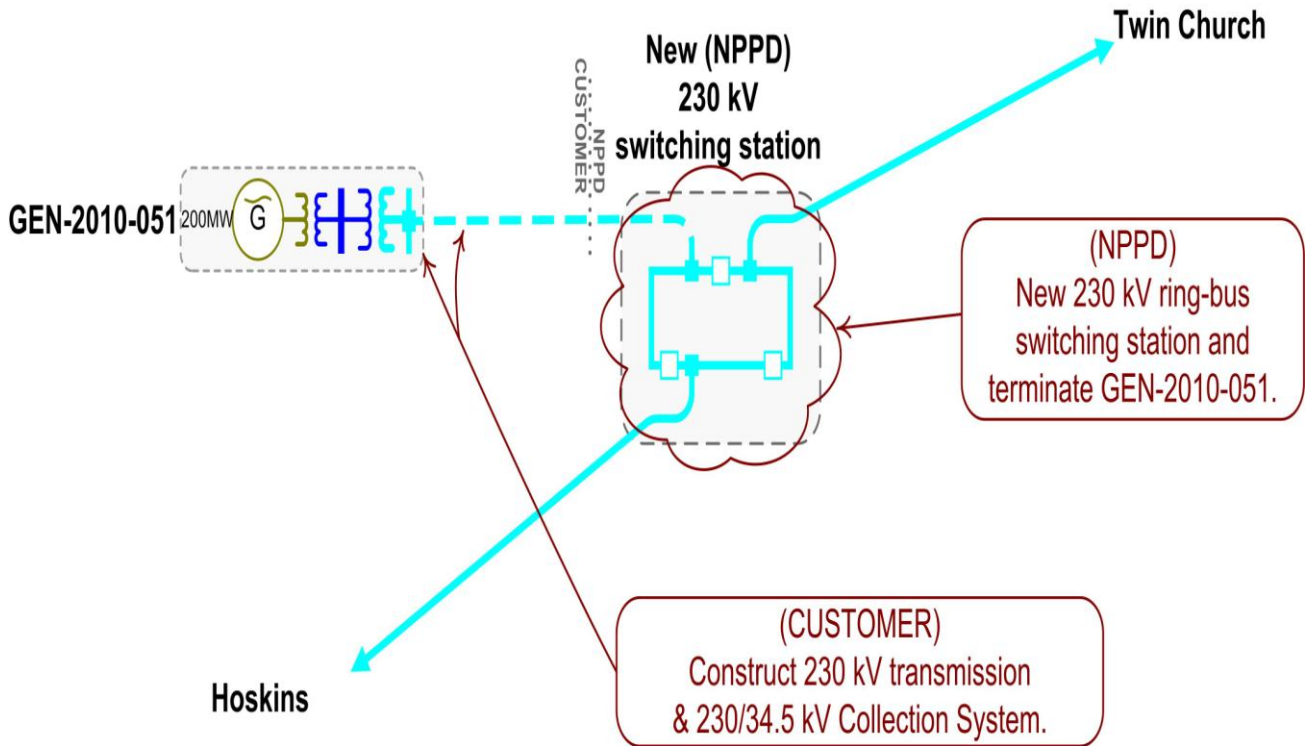
GEN-2010-048



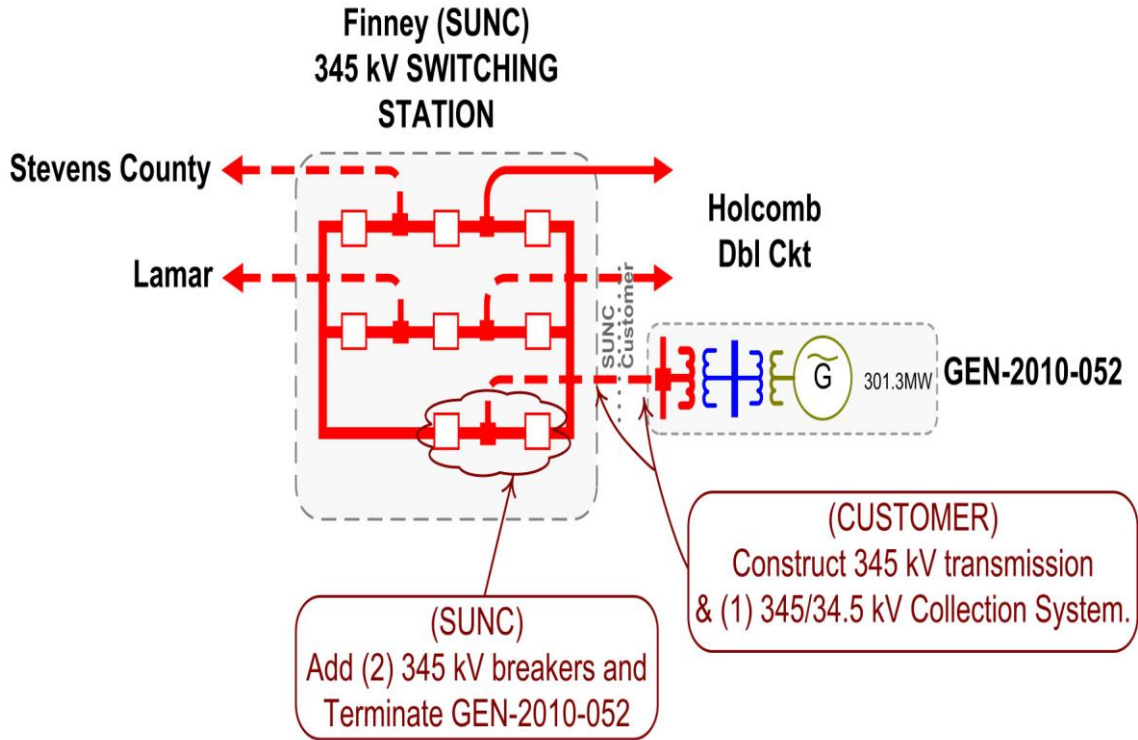
GEN-2010-049



GEN-2010-051



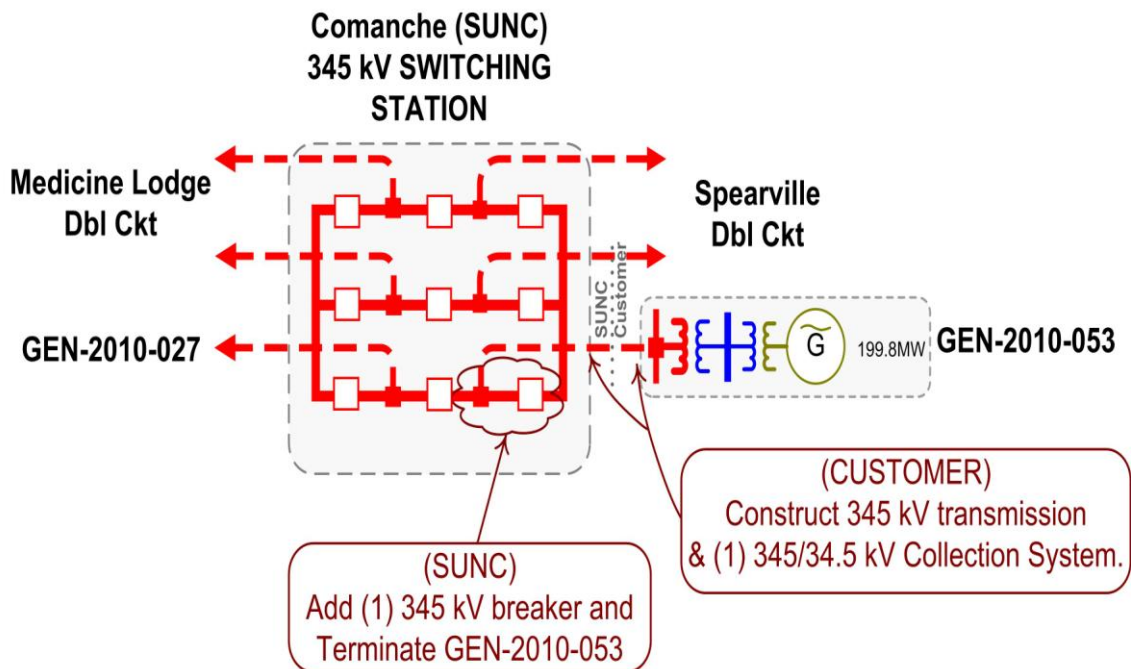
GEN-2010-052



* Planned

^ Proposed

GEN-2010-053

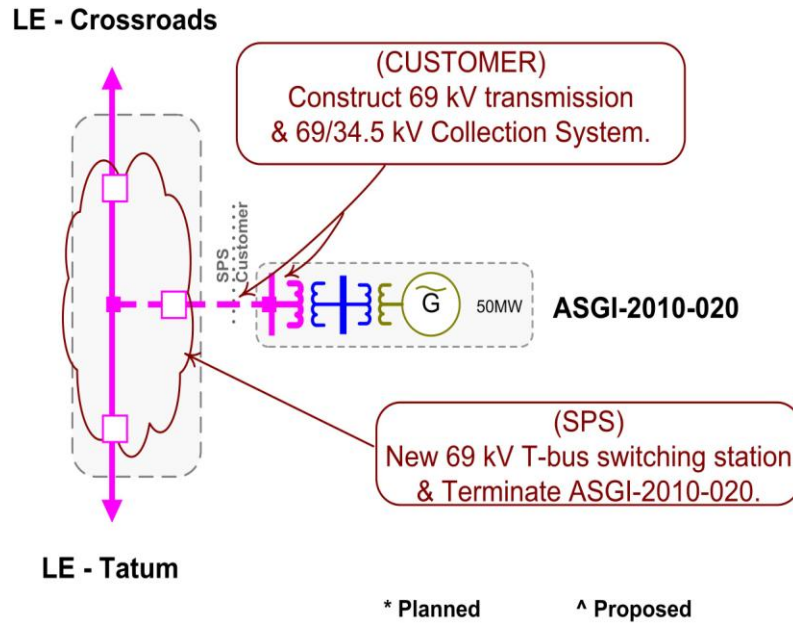


* Planned

^ Proposed

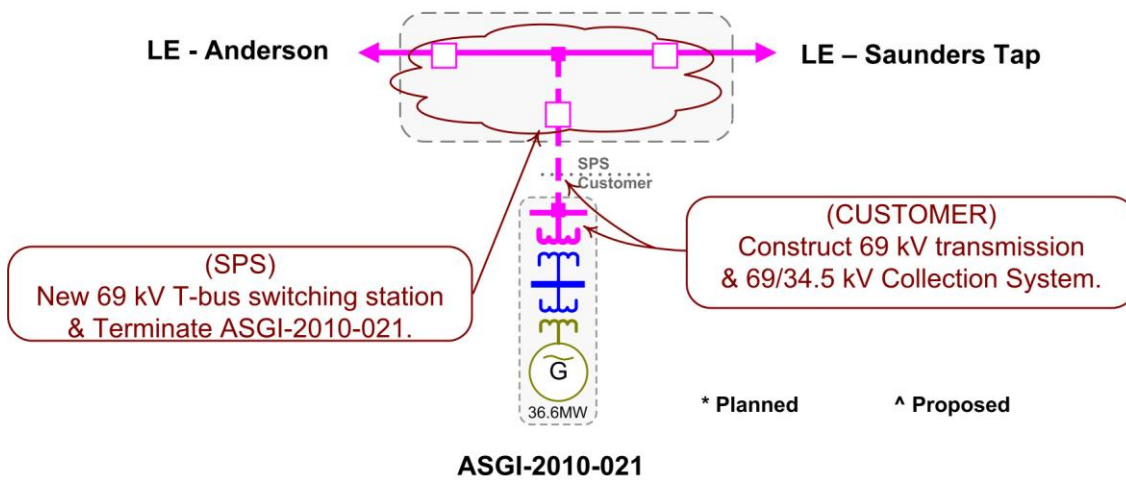
ASGI-2010-020

**New (SPS)
69 kV SWITCHING STATION**



ASGI-2010-021

**New (SPS)
69 kV SWITCHING STATION**



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

E. Cost Allocation Per Request

(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
ASGI 2010-020			
ASGI 2010 - Tatum 69kV LCEC Costs	Current Study	\$0.00	\$0.00
ASGI 2010-020 Interconnection Costs See Online Diagram.	Current Study	\$0.00	\$0.00
McDonald - Reed 69kV LCEC Costs	Current Study	\$0.00	\$0.00
Reed - Lovington 69kV LCEC Costs	Current Study	\$0.00	\$0.00
Tatum -McDonald 69kV LCEC Costs	Current Study	\$0.00	\$0.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
GEN-2008-047 Tap - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Hitchland - GEN-2008-047 Tap 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
	Current Study Total	\$0.00	
ASGI 2010-021			
ASGI 2010-021 Interconnection Costs See Online Diagram.	Current Study	\$0.00	\$0.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
GEN-2008-047 Tap - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Hitchland - GEN-2008-047 Tap 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
	Current Study Total		\$0.00

GEN 2010-001

Beaver County - Gray County 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$50,485,399.73	\$170,200,000.00
GEN 2010-001 Interconnection Costs See Online Diagram.	Current Study	\$3,566,677.00	\$3,566,677.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Finney Switching Station - Holcomb 345KV CKT 2 Per GEN-2006-044 Facility Study	Previously Allocated		\$6,299,839.00
GEN-2008-047 Tap - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Hitchland - Border 345 kV Dbl CKT Build approximately 105 miles of 345kV and SVC at Hitchland.	Previously Allocated		\$224,831,940.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
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		\$11,250,000.00
	Current Study Total	\$54,052,076.73	

GEN 2010-012

Clinton Junction - Elk City 138kV Rebuild 24 miles of 138kV from Clinton Junction - Elk City	Current Study	\$20,300,007.00	\$20,300,007.00
GEN 2010-012 Interconnection Costs See Online Diagram.	Current Study	\$3,500,000.00	\$3,500,000.00
Gracemont Transformer 345/138/13.8KV CKT 1 Priority Project: Gracemont Transformer 345/138/13.8KV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$8,000,000.00
Washita - Gracemont 138kV CKT 2 Build approximately 11 miles of 138kV.	Previously Allocated		\$5,621,986.00
Washita - Weatherford 138kV CKT 1 Build approximately 50 miles of 138kV.	Previously Allocated		\$22,435,002.00
	Current Study Total	\$23,800,007.00	

GEN 2010-036

GEN 2010-036 Interconnection Costs See Online Diagram.	Current Study	\$204,600.00	\$204,600.00
	Current Study Total	\$204,600.00	

GEN 2010-040

GEN 2010-040 Interconnection Costs See Online Diagram.	Current Study	\$8,046,756.00	\$8,046,756.00
	Current Study Total	\$8,046,756.00	

GEN 2010-041

GEN 2010-041 Interconnection Costs See Online Diagram.	Current Study	\$0.00	\$0.00
	Current Study Total	\$0.00	

GEN 2010-043

Beaver County - Gray County 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$22,919,627.67	\$170,200,000.00
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Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN 2010-043 Interconnection Costs See Online Diagram.	Current Study	\$5,000,000.00	\$5,000,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Fargo Junction - Woodward 69 kV CKT 1 Rebuild approximately 2 miles of 69kV.	Previously Allocated		\$750,000.00
Gracemont Transformer 345/138/13.8KV CKT 1 Priority Project: Gracemont Transformer 345/138/13.8KV CKT 1 (Total Project E&C Cost Shown)	Previously Allocated		\$8,000,000.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
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		\$11,250,000.00
	Current Study Total	\$27,919,627.67	

GEN 2010-045

Beaver County - Gray County 345KV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$45,306,375.36	\$170,200,000.00
GEN 2010-045 Interconnection Costs See Online Diagram.	Current Study	\$5,000,000.00	\$5,000,000.00
St. John - St. John 115kV CKT 1 Rebuild 115kV tie between St. John - St. John	Current Study	\$84,587.91	\$500,000.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Post Rock 345/230/13.8KV Autotransformer CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
PostRock - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Spearville - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
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		\$11,250,000.00
	Current Study Total	\$50,390,963.27	

GEN 2010-046

GEN 2010-046 Interconnection Costs See Online Diagram.	Current Study	\$0.00	\$0.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
GEN-2008-047 Tap - Woodward 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Hitchland - GEN-2008-047 Tap 345kV Dbl CKT Priority Project: Hitchland - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$247,005,793.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
	Current Study Total	\$0.00	

GEN 2010-047

GEN 2010-047 - Harbine 115kV Rebuild approximately 6 miles of 115kV from Harbine - GEN 2010-047 Tap	Current Study	\$3,200,000.00	\$3,200,000.00
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Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN 2010-047 Interconnection Costs See Online Diagram.	Current Study	\$4,000,000.00	\$4,000,000.00
	Current Study Total	\$7,200,000.00	
GEN 2010-048			
GEN 2010-048 Interconnection Costs See Online Diagram.	Current Study	\$2,144,524.00	\$2,144,524.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Spearville - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
	Current Study Total	\$2,144,524.00	
GEN 2010-049			
Beaver County - Gray County 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$2,285,538.18	\$170,200,000.00
GEN 2010-049 Interconnection Costs See Online Diagram.	Current Study	\$2,750,000.00	\$2,750,000.00
Huntsville - St. John 115kV Replace line traps	Current Study	\$156,605.50	\$200,000.00
Medicine Lodge 345/115kV transformer Install new 345/115kV transformer at Medicine Lodge	Current Study	\$10,000,000.00	\$10,000,000.00
St. John - St. John 115kV CKT 1 Rebuild 115kV tie between St. John - St. John	Current Study	\$323,693.39	\$500,000.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
PostRock - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Pratt - Sawyer 115KV CKT 1 Per 2007-AG3-AFS9	Previously Allocated		\$1,612,500.00
Spearville - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345KV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Spearville 345/115/13.8kV Transformer CKT 1 New 345/115kV Spearville Transformer (Partial Cost allocation)	Previously Allocated		\$3,745,000.00
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		\$11,250,000.00
	Current Study Total	\$15,515,837.07	

GEN 2010-051

GEN 2010-051 Interconnection Costs See Online Diagram.	Current Study	\$6,700,000.00	\$6,700,000.00
Twin Church - Dixon County 230kV Increase clearances on Twin Church - Dixon County 230kV	Current Study	\$100,000.00	\$100,000.00
Albion - Petersbug 115kV CKT 1	Previously Allocated		\$900,000.00
	Current Study Total	\$6,800,000.00	

GEN 2010-052

Beaver County - Gray County 345kV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$29,190,642.83	\$170,200,000.00
GEN 2010-052 Interconnection Costs See Online Diagram.	Current Study	\$6,766,756.00	\$6,766,756.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345KV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Border - Woodward 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge - Woodward 345KV Dbl CKT Priority Project: Med Lodge - Woodward Dbl 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$194,972,759.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Post Rock 345/230/13.8KV Autotransformer CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
PostRock - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Spearville - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
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		\$11,250,000.00
	Current Study Total	\$35,957,398.83	

GEN 2010-053

Beaver County - Gray County 345KV Build approximately 90 miles of 345kV from Beaver County - Gray County	Current Study	\$20,012,416.23	\$170,200,000.00
GEN 2010-053 Interconnection Costs See Online Diagram.	Current Study	\$5,000,000.00	\$5,000,000.00
Huntsville - St. John 115kV Replace line traps	Current Study	\$43,394.50	\$200,000.00
St.John - St. John 115kV CKT 1 Rebuild 115kV tie between St. John - St. John	Current Study	\$91,718.70	\$500,000.00
Axtell - PostRock 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
Border - Tuco Interchange 345KV CKT 1 Balanced Portfolio: Tuco - Woodward 345kV (Total Project E&C Cost Shown)	Previously Allocated		\$148,727,500.00
Medicine Lodge - Wichita 345KV Dbl CKT Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Medicine Lodge 345/138KV Transformer CKT 1 Priority Project: Spearville - Comanche - Med Lodge - Wichita Dbl 345kV CKT (Total Project E&C Cost Shown.)	Previously Allocated		\$356,300,000.00
Post Rock 345/230/13.8KV Autotransformer CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
PostRock - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Spearville - GEN-2010-016 Tap 345KV CKT 1 Balanced Portfolio: Spearville - PostRock - Axtell 345kV CKT (Total Project E&C Cost Shown)	Previously Allocated		\$112,700,000.00
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		\$11,250,000.00
	Current Study Total	\$25,147,529.43	
TOTAL CURRENT STUDY COSTS:		\$257,179,320.00	

F: Cost Allocation per Proposed Study Network Upgrade

Appendix F. Cost Allocation by Upgrade

ASGI 2010-020 Interconnection Costs \$0.00

See Online Diagram.

ASGI 2010-020 \$0.00

Total Allocated Costs \$0.00

ASGI 2010-021 Interconnection Costs \$0.00

See Online Diagram.

ASGI 2010-021 \$0.00

Total Allocated Costs \$0.00

ASGI 2010 - Tatum 69kV \$0.00

LCEC Costs

ASGI 2010-020 \$0.00

Total Allocated Costs \$0.00

Beaver County - Gray County 345kV \$170,200,000.00

Build approximately 90 miles of 345kV from Beaver County - Gray County

GEN 2010-001 \$50,485,399.73

GEN 2010-043 \$22,919,627.67

GEN 2010-045 \$45,306,375.36

GEN 2010-049 \$2,285,538.18

GEN 2010-052 \$29,190,642.83

GEN 2010-053 \$20,012,416.23

Total Allocated Costs \$170,200,000.00

Clinton Junction - Elk City 138kV \$20,300,007.00

Rebuild 24 miles of 138kV from Clinton Junction - Elk City

GEN 2010-012 \$20,300,007.00

Total Allocated Costs \$20,300,007.00

GEN 2010-001 Interconnection Costs \$3,566,677.00

See Online Diagram.

GEN 2010-001 \$3,566,677.00

Total Allocated Costs \$3,566,677.00

GEN 2010-012 Interconnection Costs \$3,500,000.00

See Online Diagram.

GEN 2010-012 \$3,500,000.00

	Total Allocated Costs	\$3,500,000.00
GEN 2010-036 Interconnection Costs		\$204,600.00
See Online Diagram.		
	GEN 2010-036	\$204,600.00
	Total Allocated Costs	\$204,600.00
GEN 2010-040 Interconnection Costs		\$8,046,756.00
See Online Diagram.		
	GEN 2010-040	\$8,046,756.00
	Total Allocated Costs	\$8,046,756.00
GEN 2010-041 Interconnection Costs		\$0.00
See Online Diagram.		
	GEN 2010-041	\$0.00
	Total Allocated Costs	\$0.00
GEN 2010-043 Interconnection Costs		\$5,000,000.00
See Online Diagram.		
	GEN 2010-043	\$5,000,000.00
	Total Allocated Costs	\$5,000,000.00
GEN 2010-045 Interconnection Costs		\$5,000,000.00
See Online Diagram.		
	GEN 2010-045	\$5,000,000.00
	Total Allocated Costs	\$5,000,000.00
GEN 2010-046 Interconnection Costs		\$0.00
See Online Diagram.		
	GEN 2010-046	\$0.00
	Total Allocated Costs	\$0.00
GEN 2010-047 - Harbine 115kV		\$3,200,000.00
Rebuild approximately 6 miles of 115kV from Harbine - GEN 2010-047 Tap		
	GEN 2010-047	\$3,200,000.00
	Total Allocated Costs	\$3,200,000.00
GEN 2010-047 Interconnection Costs		\$4,000,000.00
See Online Diagram.		
	GEN 2010-047	\$4,000,000.00
	Total Allocated Costs	\$4,000,000.00

GEN 2010-048 Interconnection Costs **\$2,144,524.00**

See Oonline Diagram.

GEN 2010-048 \$2,144,524.00

Total Allocated Costs **\$2,144,524.00**

GEN 2010-049 Interconnection Costs **\$2,750,000.00**

See Oonline Diagram.

GEN 2010-049 \$2,750,000.00

Total Allocated Costs **\$2,750,000.00**

GEN 2010-051 Interconnection Costs **\$6,700,000.00**

See Oonline Diagram.

GEN 2010-051 \$6,700,000.00

Total Allocated Costs **\$6,700,000.00**

GEN 2010-052 Interconnection Costs **\$6,766,756.00**

See Oonline Diagram.

GEN 2010-052 \$6,766,756.00

Total Allocated Costs **\$6,766,756.00**

GEN 2010-053 Interconnection Costs **\$5,000,000.00**

See Oonline Diagram.

GEN 2010-053 \$5,000,000.00

Total Allocated Costs **\$5,000,000.00**

Huntsville - St. John 115kV **\$200,000.00**

Replace line traps

GEN 2010-049 \$156,605.50

GEN 2010-053 \$43,394.50

Total Allocated Costs **\$200,000.00**

McDonald - Reed 69kV **\$0.00**

LCEC Costs

ASGI 2010-020 \$0.00

Total Allocated Costs **\$0.00**

Medicine Lodge 345/115kV transformer **\$10,000,000.00**

Install new 345/115kV transformer at Medicine Lodge

GEN 2010-049 \$10,000,000.00

Total Allocated Costs **\$10,000,000.00**

Reed - Lovington 69kV**\$0.00**

LCEC Costs

ASGI 2010-020 \$0.00

Total Allocated Costs \$0.00

St. John - St. John 115kV CKT 1**\$500,000.00**

Rebuild 115kV tie between St. John - St. John

GEN 2010-045 \$84,587.91

GEN 2010-049 \$323,693.39

GEN 2010-053 \$91,718.70

Total Allocated Costs \$500,000.00

Tatum - McDonald 69kV**\$0.00**

LCEC Costs

ASGI 2010-020 \$0.00

Total Allocated Costs \$0.00

Twin Church - Dixon County 230kV**\$100,000.00**

Increase clearances on Twin Church - Dixon County 230kV

GEN 2010-051 \$100,000.00

Total Allocated Costs \$100,000.00

G: Powerflow Analysis (Constraints for Mitigation)

Appendix G

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23532	104.4085	'CARNEGIE - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23532	103.6164	'CARNEGIE - SOUTHWESTERN STATION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27382	124.7632	'CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27382	123.7932	'CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20951	117.2845	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20951	107.4948	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.22065	100.4642	'ELK CITY - ELK CITY 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947	100.6053	'GEN560655 1-G07-32 12.000'
FNSL	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947	101.7241	'GEN336153 1-WATERFORD UNIT#3'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03829	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09176	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05146	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03548	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0864	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.048	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03694	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0886	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04965	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04017	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09483	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05363	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03044	9999	'ATC_B2_8E2_G'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21058	100	'EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21344	122.0031	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21344	115.937	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21199	109.5585	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20951	106.1887	'G08-14T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20977	100	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.2214	102.6183	'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.22065	103.0861	'ELK CITY (ELKCTY-4) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21247	113.0845	'DBL-MEDLO-WI'
FDNS	11G	G10_001	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.2597	106.7988	'DBL-MEDLO-WI'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21985	134.7713	'DBL-MEDLO-WI'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20917	103.0038	'DBL-HIT-G084'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20917	113.1635	'DBL-G0847-WO'
FDNS	11G	G10_001	TO->FROM	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	1052	0.31572	115.3744	'DBL-G0847-WO'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21475	110.4508	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.30332	106.4003	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20847	100.7258	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947	102.3119	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947	100.9956	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	124.7057	'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21317	116.6842	'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	151.711	'BASE CASE'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21376	121.4099	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21376	112.9322	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21396	161.0248	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21376	119.2967	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21376	110.9225	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21396	158.534	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	107.9234	'GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21317	100.0616	'GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	145.6258	'GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	120.3064	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21317	111.8854	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	159.6261	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	106.4938	'GEN539677 3-A. M. MULLERGREEN GENERATOR'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	144.5225	'GEN539677 3-A. M. MULLERGREEN GENERATOR'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	107.6955	'GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	145.3398	'GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	101.0637	'GEN560342 1-G10-49 0.6900'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	138.6519	'GEN560342 1-G10-49 0.6900'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21317	106.1195	'GEN560502 1-G01_039A 0.6000'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	143.8924	'GEN560502 1-G01_039A 0.6000'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	112.602	'GEN560558 1-G06-022 0.6900'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	TO->FROM	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	88	0.21357	123.3	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21357	114.7	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21377	163.1	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21357	123.3	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21357	114.7	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'
FNSL-CHECK-TC-Iteration Limit E11G	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21377	163.1	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1052	0.0433	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	1052	0.0634	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	1052	0.07454	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	1052	0.07758	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1052	0.11222	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1052	0.32096	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1052	0.148	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1052	0.08668	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_036		Non Converged Contingency	1052	0.04799	70.13087	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1052	0.23433	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	1052	0.0634	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	1052	0.07454	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	1052	0.07758	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1052	0.11222	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1052	0.32096	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1052	0.148	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1052	0.08668	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_036		Non Converged Contingency	1052	0.04799	58.15699	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1328	0.3951	39.76305	'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1328	0.17822	39.76305	'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1328	0.09011	39.76305	'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_036		Non Converged Contingency	1328	0.034	39.76305	'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	717	0.11532	47.35357	'MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	717	0.05838	47.35357	'MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	717	0.1626	47.35357	'MINGO - RED WILLOW 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FNSL-Blown up	11G	G10_048		Non Converged Contingency	717	0.10267	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	717	0.04086	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	717	0.05118	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	717	0.0512	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	717	0.03666	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	717	0.06149	47.35357	'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1792	0.12538	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1792	0.16656	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1792	0.1123	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1792	0.05864	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1792	0.0892	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	1792	0.084	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	1792	0.08401	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	1792	0.06455	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	1792	0.11695	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 1'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1792	0.12538	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1792	0.16656	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1792	0.1123	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1792	0.05864	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1792	0.0892	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	1792	0.084	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	1792	0.08401	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	1792	0.06455	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	1792	0.11695	38.43386	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	319	0.05818	100.3272	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	319	0.04832	100.3272	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	319	0.05215	100.3272	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	319	0.08492	100.3272	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	319	0.07044	100.3272	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54011	88.19373	'NINNESCS 115.00 - PRATT 115KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54011	85.71501	'NINNESCS 115.00 - ST JOHN 115KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	250	0.31674	50.92354	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37243	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04157	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06847	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07423	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28348	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23457	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.0903	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37243	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04157	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06847	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07423	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.5693	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28348	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23457	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.0903	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.25076	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.33313	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.2246	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.11728	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17639	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16739	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16802	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.1291	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23389	9999	'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.09518	9999	'DBL-HIT-G084'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.16377	9999	'DBL-HIT-G084'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.03301	9999	'DBL-HIT-G084'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16498	9999	'DBL-HIT-G084'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16519	9999	'DBL-HIT-G084'	
FNSL-iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.09518	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.16377	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03301	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.16498	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.16519	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.65164	9999	'DBL-G0847-WO'	
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03825	9999	'050 1'	
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09173	9999	'050 1'	
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05144	9999	'050 1'	
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03544	9999	'050 2'	
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08637	9999	'050 2'	
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04798	9999	'050 2'	
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0369	9999	'ATC_B2_8E2'	
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08858	9999	'ATC_B2_8E2'	
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04963	9999	'ATC_B2_8E2'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21346	119.0599	'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346	110.7133	'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21366	157.8085	'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21415	124.5902	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21415	115.9989	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21435	163.823	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21481	122.1338	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21481	113.6324	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21501	161.6987	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21415	127.0696	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21415	116.3648	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21435	166.5441	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	147.3429	'KINSLEY - PAWNEE-EDWARDS_JCT 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46822	123.4147	'ST JOHN - ST_JOHN 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	107.1312	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21392	144.6855	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21396	117.3191	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21416	156.0093	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21571	117.921	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21571	109.6234	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21591	156.6273	MULLERGRN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39033	125.8504	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39033	117.22	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.39053	164.8624	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39033	125.8749	'PRATT' - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39033	117.2432	'PRATT' - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.39053	164.8912	'PRATT' - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	137.064	'GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	135.6511	'G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	137.5924	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20803	155.6674	'MED-LDGS 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20803	193.8553	'MED-LDGS 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21584	102.3386	'MULLERGRN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21604	139.7078	'MULLERGRN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39359	119.9179	'SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39359	111.538	'SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.39379	158.6365	'SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21328	127.4278	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21328	118.7394	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	166.1013	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.26231	105.3724	'MULLERGRN (MULGRENE) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.26251	143.3141	'MULLERGRN (MULGRENE) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21571	117.6462	'SPP-MKEC-02'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21571	109.3587	'SPP-MKEC-02'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21591	156.3207	'SPP-MKEC-02'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21396	119.0412	'SPP-MKEC-08'	
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21396	110.6873	'SPP-MKEC-08'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21416	158.0384	'SPP-MKEC-08'	
FDNS	11G	G10_043	'TO->FROM'	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.23052	112.7189	'DBL-MEDLO-WI'	
FDNS	11G	G10_043	'TO->FROM'	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.28516	117.8107	'DBL-WOOD-MED'	
FDNS	11G	G10_001	'TO->FROM'	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.25882	111.2656	'DBL-MEDLO-WI'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.22002	112.1141	'DBL-MEDLO-WI'	
FDNS	11G	G10_001	'TO->FROM'	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.30099	115.9542	'DBL-WOOD-MED'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	2598	0.03159	19.49271	'LAKEOVER - MCADAMS 500KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	2598	0.03866	19.49271	'LAKEOVER - MCADAMS 500KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	2598	0.03336	19.49271	'LAKEOVER - MCADAMS 500KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.04231	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.05056	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04703	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13928	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.1394	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.04701	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03371	9999	'NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03135	9999	'NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03831	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09179	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.0515	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0355	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08643	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04804	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03696	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08863	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04969	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04018	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09486	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05366	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03057	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.65183	9999	'DBL-G0847-WO'	
FDNS	11G	G10_012	'TO->FROM'	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.2739	108.6519	'CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'	
FDNS	11G	G10_012	'TO->FROM'	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.2739	107.6878	'CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'	
FDNS	11G	G10_012	'TO->FROM'	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20962	101.3539	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_012	'TO->FROM'	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21351	105.5787	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	'TO->FROM'	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21351	100	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21993	119.7045	'DBL-MEDLO-WI'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.04166	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.04966	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04662	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.0331	9999	'NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03108	9999	'NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03819	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09165	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05136	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03538	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0863	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04791	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03684	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0885	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04955	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04006	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09472	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05352	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03033	9999	'ATC_B2_8E2_G'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.0865	9999	'DBL-SPRVL-CO'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.0865	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37313	9999	'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37313	9999	'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.25191	9999	'DBL-MEDLO-WI'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.08569	9999	'DBL-G0847-WO'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21322	103.0253	'BASE CASE'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	129.8232	'BASE CASE'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21407	136.5246	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21407	134.4349	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.2144	104.0856	'Hitchiand Interchange - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21465	140.3616	'Hitchiand Interchange - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.2144	100.7742	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21465	137.3332	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21376	134.5663	'KNOLL 230 - POSTROCK6	230.00 230KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2142	101.867	'KNOLL 230 - SMOKYHL6	230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446	138.4965	'KNOLL 230 - SMOKYHL6	230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21512	136.1372	'AXTELL - POSTROCK7	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2142	104.5072	'SMOKYHL6	230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446	141.3362	'SMOKYHL6	230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	125.4857	'KINSLEY - PAWNEE-EDWARDS_JCT	115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'SEWARD - ST_JOHN 115KV CKT 1'	79.7	0.46827	108.0565	'ST JOHN - ST_JOHN 115KV CKT 1'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21402	125.0187	'GRAY CO	345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21476	105.0599	'MED-LDGS	345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502	141.7113	'MED-LDGS	345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21476	105.0599	'MED-LDGS	345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502	141.7113	'MED-LDGS	345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22125	125.1541	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22125	116.5599	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.22151	162.5598	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21602	133.9069	'MULLERGREEN - PIONTP3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39034	107.9215	'MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39034	100.0625	'MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.3906	144.7144	'MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39034	100.0625	'PRATT - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39034	100.0845	'PRATT - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.3906	144.7417	'PRATT - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	119.1513	'GREENSBURG - SUN CITY	115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	117.8899	'G01_039AT	115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	119.6368	'MEDICINE LODGE - SUN CITY	115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20809	126.9876	'MED-LDGS	345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20809	160.6768	'MED-LDGS	345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21613	120.375	'MULLERGREEN - SPEARVILLE	230KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39363	100.6382	'SEWARD - ST JOHN	115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.39389	137.1364	'SEWARD - ST JOHN	115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21362	100.5641	'COMANCH5	345.00 - MED-LDG5	345.00 345KV CKT 1'
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21388	137.0865	'COMANCH5	345.00 - MED-LDG5	345.00 345KV CKT 1'
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21362	100.5641	'COMANCH5	345.00 - MED-LDG5	345.00 345KV CKT 2'
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21388	137.0865	'COMANCH5	345.00 - MED-LDG5	345.00 345KV CKT 2'
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21333	104.8094	'CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21359	141.3119	'CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28334	115.8771	'MEDICINE LODGE (MED-LDG4)	138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28334	107.6786	'MEDICINE LODGE (MED-LDG4)	138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.2836	153.0332	'MEDICINE LODGE (MED-LDG4)	138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.26259	124.3266	'MULLERGREEN (MULGRENE6)	230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21602	133.6637	'SPP-MKEC-02'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21427	134.414	'SPP-MKEC-08'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	133.8077	'GEN336821	1-GRAND GULF UNIT'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	124.8313	'GEN531447	1-HOLCOMB GENERATOR'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	133.8069	'GEN532651	1-JEFFREY ENERGY CENTER UNIT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	134.0829	'GEN532652	1-JEFFREY ENERGY CENTER UNIT 2'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	134.0056	'GEN532653	1-JEFFREY ENERGY CENTER UNIT 3'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21322	100.722	'GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	137.1737	'GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	122.4348	'GEN539677	3-A. M. MULLERGREEN GENERATOR'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	125.7057	'GEN560279	1-G08-18	0.6900'
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	117.315	'GEN560342	1-G10-49	0.6900'
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	124.0946	'GEN560502	1-G01_039A	0.6000'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.09096	9999	'DBL-SPRVL-CO'		
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.09096	9999	'DBL-COM-MEDL'		
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17953	9999	'DBL-MEDLO-WI'		
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28418	9999	'DBL-SPRVL-CO'		
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28418	9999	'DBL-COM-MEDL'		
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.22571	9999	'DBL-MEDLO-WI'		
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.28337	9999	'DBL-COM-MEDL'		
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.11186	9999	'DBL-MEDLO-WI'		
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.57002	9999	'DBL-COM-MEDL'		
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.33428	9999	'DBL-MEDLO-WI'		
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21322	100.2666	'BASE CASE'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	127.1933	'BASE CASE'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21407	133.8548	'NORTHWEST - TATONGA7	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21407	131.8342	'TATONGA7	345.00 - WWRDEHV7	345.00 345KV CKT 1'
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2144	100.8322	'Hitchland Interchange - STEVENSCO	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21466	137.3451	'Hitchland Interchange - STEVENSCO	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21466	134.593	'FINLEY SWITCHING STATION - STEVENSCO	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21377	131.9187	'KNOLL 230 - POSTROCK6	230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446	135.8235	'KNOLL 230 - SMOKYHL6	230.00 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21512	133.444	'AXTELL - POSTROCK7	345.00 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2142	101.9664	'SMOKYHL6	230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446	138.6729	'SMOKYHL6	230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	122.8656	'KINSLEY - PAWNEE-EDWARDS_JCT	115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'SEWARD - ST_JOHN 115KV CKT 1'	79.7	0.46827	101.8579	'ST JOHN - ST_JOHN 115KV CKT 1'		
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21402	122.4229	'GRAY CO	345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21477	102.5124	'MED-LDGS	345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502	139.0263	'MED-LDGS	345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21477	102.5124	'MED-LDGS	345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502	139.0263	'MED-LDGS	345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22126	122.4413	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22126	113.9634	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.22152	159.7195	'CIRCLE - MULLERGREEN	230KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21602	131.2466	'MULLERGREEN - PIONTP3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39034	103.3981	'MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.3906	139.9581	'MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39034	103.4246	'PRATT - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.3906	139.9883	'PRATT - SAWYER 3	115.00 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	116.351	'GREENSBURG - SUN CITY	115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	115.1043	'G01_039AT	115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.23249	116.8298	'MEDICINE LODGE - SUN CITY	115KV CKT 1'	
FDNS	11G	G10_049	'TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.2081	124.9199	'MED-LDGS	345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	'FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.2081	158.2886	'MED-LDGS	345.00 345/138KV TRANSFORMER CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONNAME
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21613	117.7288	'MULLERGREN - SPEARVILLE 230KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.39389	132.4002	'SEWARD - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21388	134.3752	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21388	134.3752	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21333	102.2590	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21359	138.6409	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'TO->FROM'	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28335	112.5777	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28335	104.5278	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.2836	149.5578	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.26259	121.1852	'MULLERGREN (MULGRENG) 230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21337	132.5536	'DBL-G0847-WO'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21602	131.0007	'SPP-MKEC-02'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21427	131.8482	'SPP-MKEC-08'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	122.2298	'GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	131.2161	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	131.4671	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	131.4001	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	134.5216	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	119.7996	'GEN539677 3-A. M. MULLERGREN GENERATOR'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	123.1012	'GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	117.2999	'GEN560342 1-G10-49 0.6900'
FDNS	11G	G10_049	'FROM->TO'	'ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	121.4891	'GEN560502 1-G01_039A 0.6000'
FNSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	128	0.03979	37.09063	'GRAPEVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37311	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04226	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06915	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07491	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28417	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23526	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.09099	9999	'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37311	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04226	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06915	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07491	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.56998	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28417	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23526	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.09099	9999	'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.25193	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.33429	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.22576	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.11844	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17956	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16916	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16918	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.13027	9999	'DBL-MEDLO-WI'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23506	9999	'DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13867	9999	'SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13878	9999	'SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.0464	9999	'SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03818	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09166	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05136	9999	'050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03537	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08653	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04791	9999	'050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03683	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0885	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04956	9999	'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04004	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09472	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05353	9999	'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03044	9999	'ATC_B2_8E2_G'
FDNS	11G	ASGI_2010_020	'FROM->TO'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	126.6333	'BASE CASE'
FDNS	11G	ASGI_2010_020	'TO->FROM'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	133.0464	'BASE CASE'
FDNS	11G	ASGI_2010_020	'FROM->TO'	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.8692	'BASE CASE'
FDNS	11G	ASGI_2010_020	'FROM->TO'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	111.3442	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11G	ASGI_2010_020	'TO->FROM'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	116.7135	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11G	ASGI_2010_020	'FROM->TO'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	111.0678	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11G	ASGI_2010_020	'TO->FROM'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	116.4504	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	1052	0.24599	28.19233	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	351	0.07258	48.17637	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.21774	9999	'SPP-SWPS-02A'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13889	9999	'SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	351	0.07265	48.09349	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.21795	9999	'SPP-SWPS-02A'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13902	9999	'SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	G10_046		Non Converged Contingency	1052	0.2913	28.167	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_046		Non Converged Contingency	351	0.05578	48.10297	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_046		Non Converged Contingency	0	0.16735	9999	'SPP-SWPS-02A'
FNSL-Iteration limit exceeded	11G	G10_046		Non Converged Contingency	0	0.10666	9999	'SPP-SWPS-03'
FDNS	11G	ASGI_2010_020	'TO->FROM'	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	102.7125	'BASE CASE'
FNSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	128	0.03978	35.18507	'GRAPEVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	351	0.07259	47.91838	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	351	0.07266	47.91838	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_046		Non Converged Contingency	0	0.09632	9999	'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03415	9999	'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.16491	9999	'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.16612	9999	'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.16633	9999	'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.04216	9999	'TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04688	9999	'TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.05041	9999	'TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.04378	9999	'SPP-SWPS-02A'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.21778	9999	'SPP-SWPS-02A'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.21797	9999	'SPP-SWPS-02A'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04881		9999 'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03923		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.009391		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05271		9999 'ATC_B2_8E2_G'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23433		106.8811 'CARNEGIE - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23433		106.0879 'CARNEGIE - SOUTHWESTERN STATION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27271		127.843 'CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27271		126.8592 'CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20847		117.5698 'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20847		107.7985 'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'	192	0.24171		100.4448 'CLINTON JUNCTION - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976		102.8508 'ELK CITY - ELK CITY 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.5107 'GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		101.0951 'GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.3832 'GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.4383 'GEN509403 1-PIRKEY GENERATION'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.6893 'GEN511952 1-WEATHERFORD WIND FARM TURBINES'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.32 'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		102.7994 'GEN560655 1-G07-32 12.000'
FNSL	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		103.8162 'GEN536153 1-WATERFORD UNIT#3'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	1052	0.10892		77.35468 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	1052	0.10898		77.35468 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	1052	0.05369		77.35468 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	1052	0.08718		77.35468 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.08846		9999 'DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.20182		9999 'DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.20203		9999 'DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.24237		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_053		Non Converged Contingency	0	0.06097		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.25693		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.09446		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.11745		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.11765		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.54094		9999 'DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03772		9999 '050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09112		9999 '050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05078		9999 '050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03494		9999 '050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0858		9999 '050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04737		9999 '050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03639		9999 'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08799		9999 'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.049		9999 'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03957		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09417		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05293		9999 'ATC_B2_8E2_G'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20965		101.4462 'DEWEY - SOUTHARD 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20965		101.9448 'EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20965		100.935 'ROMAN NOSE - SOUTHARD 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21209		121.5372 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21209		115.9117 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20842		100.0601 '2008-047T 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20842		100.0601 '2008-047T 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976		100.8046 'CARTER JCT - DILL JCT 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976		100.8066 'CARTER JCT - LAKE CREEK 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976		101.5105 'DILL JCT - ELK CITY 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20868		101.0916 '2008-047T 345.00 - Hitchland Interchange 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20868		101.0916 '2008-047T 345.00 - Hitchland Interchange 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20965		101.326 'AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.2092		100 'SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20965		102.965 'G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20847		106.564 'G08-14T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20922		100 'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20957		105.9749 'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20933		100.6549 'MED-LDGS 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20933		100.6549 'MED-LDGS 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	88	0.2204		108.3138 'CIRCLE - MULLERGREN 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976		105.4837 'ELK CITY (ELKCTY-4) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21164		114.2828 'DBL-MEDLO-WI'
FDNS	11G	G10_001	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.23846		102.0811 'DBL-MEDLO-WI'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	88	0.21918		135.4158 'DBL-MEDLO-WI'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21197		105.9383 'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		102.9309 'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.9836 'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		104.4139 'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.34 'GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		100.8573 'GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		101.3778 'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		101.129 'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		102.0979 'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		103.2255 'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		101.1638 'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861		101.2315 'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		117.9143 'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2126		110.1528 'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	143	0.2128		103.7316 'BASE CASE'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21332		115.7913 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21332		107.5745 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21332		113.4375 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21332		105.3411 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		102.5913 'GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2126		113.9162 'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		105.798 'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		100.5559 'GEN539677 3-A. M. MULLERGREN GENERATOR'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		102.3619 'GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126		100 'GEN560502 1-G01_039A 0.6000'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	103.3381	'GEN560522 1-G05-12 0.6900'	
FNSL-CHECK-TC-Iteration Limit	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2128		'119.9 'DBL-G0847-WO'	
FNSL-CHECK-TC-Iteration Limit	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2128		'111.5 'DBL-G0847-WO'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	717	0.10132		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	717	0.05242		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	717	0.15384		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	717	0.09697		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	717	0.037		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	717	0.05603		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	717	0.05604		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	717	0.0394		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	717	0.07244		41.39882 'MINGO - RED WILLOW 345KV CKT 1'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	319	0.04764		91.85542 'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	319	0.04377		91.85542 'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	319	0.0455		91.85542 'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	319	0.08056		91.85542 'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	319	0.06745		91.85542 'CIRCLE - MULLERGREEN 230KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54029		87.88059 'NINNES3 115.00 - PRATT 115KV CKT 1'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54029		85.44243 'NINNES3 115.00 - ST JOHN 115KV CKT 1'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.2692		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.04872		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.05312		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.21826		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.19166		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.06075		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.05917		9999 'DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.2692		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.04872		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.05312		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.52447		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.21826		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.19166		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.06075		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.05917		9999 'DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.24672		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.3316		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.22248		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.11583		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17752		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16885		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16888		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.13061		9999 'DBL-MEDLO-WI'	
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23767		9999 'DBL-MEDLO-WI'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03774		9999 '050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09114		9999 '050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05081		9999 '050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03496		9999 '050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08582		9999 '050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04739		9999 '050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03641		9999 'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08801		9999 'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04902		9999 'ATC_B2_8E2'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21284		112.0518 'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21284		104.0204 'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21346		116.3854 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346		108.167 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21412		113.7793 'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21412		105.6689 'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21346		118.7552 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346		110.4354 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46864		124.4887 'ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21413		120.2506 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21413		111.8624 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21413		120.2506 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21413		111.8624 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21338		111.4339 'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21338		103.4317 'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21512		111.5098 'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21512		103.5044 'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38963		119.3806 'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.38963		111.0432 'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38963		119.4087 'PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.38963		111.069 'PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21338		111.0566 'HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20716		148.8077 'MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20716		185.8685 'MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.39348		117.0759 'SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39348		108.8343 'SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2132		113.098 '2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2132		105.0128 '2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21283		113.3567 'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21283		105.2606 'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21283		113.3567 'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21283		105.2606 'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21351		103.6535 'POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21256		119.299 'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21256		110.965 'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	86	0.28214		131.5867 'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28214		122.7198 'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	143	0.28234		102.5914 'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'NINNES3 115.00 - PRATT 115KV CKT 1'	198	0.7152		101.3825 'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.26194		100.2214 'MULLERGREEN (MULGRE6N) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21512		111.604 'SPP-MKEC-02'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21512		103.5947 'SPP-MKEC-02'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46869		109.4345 'ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21416		100.3653 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTRNAME
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21416	100.3653	'MED-LDGS 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22025	118.9722	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22025	110.6489	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38862	103.7687	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38862	103.7935	'PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20721	122.6363	'MED-LDGS 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20721	155.6849	'MED-LDGS 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21259	100	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28218	110.1493	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28218	102.2061	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	108.1766	'DBL-SPRVL-CO'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	100.3094	'DBL-SPRVL-CO'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	111.9523	'DBL-COM-MEDL'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	103.9113	'DBL-COM-MEDL'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21906	136.4941	'DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21906	127.408	'DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	143	0.21932	104.9295	'DBL-MEDLO-WI'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03259	9999	'SPP-SWPS-03'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46869	103.2941	'ST JOHN - ST_JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22025	116.3768	'CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22025	108.1766	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28218	106.9139	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	105.5406	'DBL-SPRVL-CO'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	109.3087	'DBL-COM-MEDL'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	101.3813	'DBL-COM-MEDL'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21906	133.863	'DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21906	124.8908	'DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	143	0.21932	103.246	'DBL-MEDLO-WI'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	351	0.07121	57.77528	'ELK CITY 230KV - SWEETWT6 230.00 230KV CKT 1'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	351	0.07127	57.77528	'ELK CITY 230KV - SWEETWT6 230.00 230KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	128	0.03987	36.77936	'GRAPEVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	287	0.07121	63.60866	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	287	0.07127	63.60866	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.03669	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.04695	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.0446	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03261	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13626	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13638	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.04066	9999	'SPP-SWPS-03'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03764	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09104	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.0507	9999	'050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03487	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08572	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04729	9999	'050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03631	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08791	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04892	9999	'ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03949	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09408	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05284	9999	'ATC_B2_8E2_G'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38961	103.5429	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38961	103.5676	'PRATT - SAWYER 3 115.00 115KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03256	9999	'SPP-SWPS-03'	
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	125.362	'BASE CASE'	
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	132.1752	'BASE CASE'	
FDNS	11SP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.7205	'BASE CASE'	
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	109.8099	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.5383	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	109.5274	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.2712	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	133.718	'BASE CASE'	
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	138.1973	'BASE CASE'	
FDNS	11WP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	120.3416	'BASE CASE'	
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	103.4349	'LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1'	
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-LOVINGTON INTERCHANGE - LEA COUNTY REC-REED 69KV CKT 1'	41	1	104.3807	'LEA COUNTY REC-DENTON SUB - LEA COUNTY REC-REED 69KV CKT 1'	
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	112.3507	'LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.9796	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	112.0991	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.727	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	120.9013	'BASE CASE'	
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	128.332	'BASE CASE'	
FDNS	16SP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.1261	'BASE CASE'	
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	107.9673	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.4097	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	107.6789	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.1407	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	130.3833	'BASE CASE'	
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	135.3384	'BASE CASE'	
FDNS	16WP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.8069	'BASE CASE'	
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	100.7426	'LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1'	
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-LOVINGTON INTERCHANGE - LEA COUNTY REC-REED 69KV CKT 1'	41	1	101.6689	'LEA COUNTY REC-DENTON SUB - LEA COUNTY REC-REED 69KV CKT 1'	
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	110.7209	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.7908	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'	
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	110.4344	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.5147	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'	
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	0	0.03864	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	1793	0.03223	19.88545	'GEN300015 1-1SGPDEL 18.000'	
FNSL-Iteration limit exceeded	11WP	G10_045		Non Converged Contingency	0	0.03883	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	16SP	G10_045		Non Converged Contingency	0	0.03989	9999	'TRF-STEGALL'	
FNSL-Blown up	16WP	G10_045		Non Converged Contingency	0	0.03951	9999	'TRF-STEGALL'	
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	0	0.05216	9999	'ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	1793	0.03566	19.99307	'GEN300015 1-1SGPDEL 18.000'	
FNSL-Iteration limit exceeded	11WP	G10_048		Non Converged Contingency	0	0.0439	9999	'TRF-STEGALL'	
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.04524	9999	'TRF-STEGALL'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.03016		9999 'NEB01WAPAB3'
FNSL-Blown up	16WP	G10_048		Non Converged Contingency	0	0.04487		9999 'TRF-STEGALL'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.08736		9999 'ATC_B2_8E2'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.09349		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	1793	0.04391	20.29645	'GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038		9999 'IWA001WAPAB2'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038		9999 'ALTW-B111-SW'
FNSL-Iteration limit exceeded	11WP	G10_052		Non Converged Contingency	0	0.04682		9999 'TRF-STEGALL'
FNSL-Iteration limit exceeded	11WP	G10_052		Non Converged Contingency	0	0.03121		9999 'NEB01WAPAB3'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.04802		9999 'TRF-STEGALL'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.03201		9999 'NEB01WAPAB3'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.04762		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.03175		9999 'NEB01WAPAB3'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.04799		9999 'TRF-STEGALL'
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.04524		9999 'TRF-STEGALL'
FNSL-Blown up	16SP	G10_045		Non Converged Contingency	0	0.03987		9999 'TRF-STEGALL'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038		9999 'IWA001WAPAB2'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.03199		9999 'NEB01WAPAB3'
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.03016		9999 'NEB01WAPAB3'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038		9999 'ALTW-B111-SW'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	0	0.05216		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	0	0.03864		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.09346		9999 'ATC_B2_8E2_G'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	1793	0.03565	19.86837	'GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	1793	0.03223	19.86837	'GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	1793	0.04388	19.86837	'GEN300015 1-1SGPDEL 18.000'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.04763		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_048		Non Converged Contingency	0	0.04488		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_045		Non Converged Contingency	0	0.03951		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.03175		9999 'NEB01WAPAB3'

H: Powerflow Analysis (Constraints with greater than 3% TDF)

Appendix H

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03024		101.3752 BASE CASE
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		111.9647 BASE CASE
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622		112.8491 BASE CASE
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622		144.3779 BASE CASE
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	425	0.05827		122.5 BASE CASE
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04112		104.4085 CARNEGIE - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04114		104.4085 CARNEGIE - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23532		104.4085 CARNEGIE - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04112		103.6164 CARNEGIE - SOUTHWESTERN STATION 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04114		103.6164 CARNEGIE - SOUTHWESTERN STATION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.23532		103.6164 CARNEGIE - SOUTHWESTERN STATION 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04412		124.7632 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04415		124.7632 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27382		124.7632 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04412		123.782 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04415		123.782 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.27382		123.782 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.05412		117.2845 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.05413		117.2845 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20951		117.2845 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'	351	0.10804		103.7835 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'	351	0.10807		103.7835 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03026		125.6787 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623		121.7941 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623		154.7515 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10804		122.2215 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10807		122.2215 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10804		120.6677 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10807		120.6677 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.05412		107.4948 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.05413		107.4948 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20951		107.4948 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03026		119.9769 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623		117.9908 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623		150.3329 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10804		112.0055 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10807		112.0055 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10804		110.9198 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.10807		110.9198 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03608		115.605 CLINTON JUNCTION - ELK CITY 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0713		101.9974 ELK CITY - RHWINDA 138.00 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07136		101.9974 ELK CITY - RHWINDA 138.00 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0713		101.2421 ELK CITY - RHWINDA 138.00 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07136		101.2421 ELK CITY - RHWINDA 138.00 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03739		100.4642 ELK CITY - ELK CITY 69KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03742		100.4642 ELK CITY - ELK CITY 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.22065		100.4642 ELK CITY - ELK CITY 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		101.3067 CHILDRESS - HOLLIS TAP 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		101.3067 CHILDRESS - HOLLIS TAP 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		100.6303 CHILDRESS - HOLLIS TAP 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		100.6303 CHILDRESS - HOLLIS TAP 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07869		103.8188 CHILDRESS - LAKE PAULINE 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07875		103.8188 CHILDRESS - LAKE PAULINE 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07869		103.1061 CHILDRESS - LAKE PAULINE 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07875		103.1061 CHILDRESS - LAKE PAULINE 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		101.3922 HOLLIS TAP - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		101.3922 HOLLIS TAP - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		100.7044 HOLLIS TAP - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		100.7044 HOLLIS TAP - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		102.0233 SHAMROCK - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		102.0233 SHAMROCK - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		101.323 SHAMROCK - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		101.323 SHAMROCK - WELLINGTON 138KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614		102.9807 MCLEAN RURAL SUB - SHAMROCK 115KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762		102.9807 MCLEAN RURAL SUB - SHAMROCK 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622		140.2155 GEN560121 1-G08-47 0.5750'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		107.4164 GEN560133 1-G08-110 0.5750'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622		109.6002 GEN560133 1-G08-110 0.5750'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622		140.6111 GEN560133 1-G08-110 0.5750'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314		100.2443 GEN560193 1-G09-16 0.6900'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732		100.2443 GEN560193 1-G09-16 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		108.6835 GEN560225 1-G10-43 18.000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.2926 GEN560256 1-G10-14-1 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.2325 GEN560257 1-G10-14-2 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.2205 GEN560261 1-G10-01-1WTC 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.2205 GEN560287 1-G10-01-2WTC 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.1671 GEN560371 1-G07-46 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		109.2372 GEN560586 1-G06-44-3 0.6000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024		107.8866 GEN560598 1-G06-49 0.6000'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622		108.2228 GEN560598 1-G06-49 0.6000'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622		139.0247 GEN560598 1-G06-49 0.6000'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03607		100.6053 GEN560655 1-G07-32 12.000'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03609		100.6053 GEN560655 1-G07-32 12.000'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947		100.6053 GEN560655 1-G07-32 12.000'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314		100.0727 GEN640009 1-COOPER NUCLEAR STATION

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.0727	GEN640009 1-COOPER NUCLEAR STATION
FNSL	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03607	101.7241	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03609	101.7241	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20947	101.7241	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	287	0.03624	118.6118	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	118.5438	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	150.9637	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	104.9883	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	104.9883	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	104.2059	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	104.2059	GEN336153 1-WATERFORD UNIT#3
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03829	9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09176	9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05146	9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03548	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0864	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.048	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03694	9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0886	9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04965	9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04017	9999 ATC_B2_BE2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09483	9999 ATC_B2_BE2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05363	9999 ATC_B2_BE2_G'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03044	9999 ATC_B2_BE2_G'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	102.24	MCLEAN RURAL SUB - SHAMROCK 115KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	102.24	MCLEAN RURAL SUB - SHAMROCK 115KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0755	100.0933	LAKE PAULINE - RUSSELL 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07555	100.0933	LAKE PAULINE - RUSSELL 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03303	116.2608	WAUKOMIS - WAUKOMIS TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03303	116.4878	HENESSEY - WAUKOMIS 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03137	108.9289	CIMARRON - WOODRING 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03303	117.0349	DOVER SW - HENESSEY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03069	109.4862	CLEO CORNER - CLEO JCT 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03113	117.957	DEVIEY - SOUTHWARD 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03126	114.4615	ALVA - ALVA 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03097	118.4269	ALVA - KNOBHILL 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03292	125.1124	KNOBHILL - MOORELAND 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03708	100	EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03711	100	EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21058	100	EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03113	118.4699	EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03113	117.3816	ROMAN NOSE - SOUTHWARD 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04197	122.0031	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.042	122.0031	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21344	122.0031	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03201	122.0031	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03462	121.4169	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03798	121.4169	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03462	153.0625	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03798	153.0625	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04044	127.924	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHWARD 138KV CKT 1'	153	0.04044	120.5068	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.03183	112.3381	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03838	136.8753	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03838	172.1379	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07824	110.6317	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0783	110.6317	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03019	110.6317	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07824	109.767	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0783	109.767	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03019	109.767	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04197	115.937	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.042	115.937	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21344	115.937	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03462	114.1086	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03798	114.1086	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03462	144.0447	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03798	144.0447	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04044	120.4616	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHWARD 138KV CKT 1'	153	0.04044	111.6354	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.03183	105.2265	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03838	131.4742	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	95.6	0.03838	165.8879	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07824	107.9565	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0783	107.9565	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03019	107.9565	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07824	107.1336	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0783	107.1336	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03019	107.1336	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	108.4261	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08188	104.6185	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08193	104.6185	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08188	103.7518	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08193	103.7518	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_045	TO->FROM	DIGHTON TAP - MANNING TAP 115KV CKT 1'	98	0.04449	101.0885	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DIGHTON TAP - MANNING TAP 115KV CKT 1'	98	0.04441	101.0885	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03729	105.1213	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03729	135.5174	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07459	104.8031	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07504	104.8031	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07499	103.7762	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07504	103.7762	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03659	119.5002	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03659	152.0625	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04039	121.0079	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04039	153.7569	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03539	141.0422	G05-13T 345.00 - NEOSHO 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	116.0037	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	148.0211	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03133	120.5378	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0345	145.0164	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04138	145.0164	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0345	181.4404	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04138	181.4404	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07405	100.1168	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07411	100.1168	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03133	120.5378	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0345	145.0164	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04138	145.0164	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0345	181.4404	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04138	181.4404	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07405	100.1168	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07411	100.1168	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03562	108.4185	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03562	139.276	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2214	102.6183	CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03779	116.7254	CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03779	148.8573	CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	120.2392	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	152.8551	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	118.4614	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	150.8192	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	124.8414	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	158.1825	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03716	148.2184	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03716	185.297	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	123.564	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	156.884	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	109.3928	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	140.3839	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03387	109.2339	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03387	140.1871	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	122.1723	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	155.0866	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07307	115.7263	NINNESCO 115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07307	147.6894	NINNESCO 115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	120.6674	MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	139.6361	MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03562	108.0067	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03562	138.8006	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03043	115.7659	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03729	106.4226	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03729	137.0034	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07499	103.3489	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07504	103.3489	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07499	102.5604	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07504	102.5604	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03571	141.5588	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03571	141.5588	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	ASGI_2010_020	FROM->TO	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03739	103.0861	ELK CITY (ELKCTY-4) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03742	103.0861	ELK CITY (ELKCTY-4) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.22065	103.0861	ELK CITY (ELKCTY-4) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	102.0205	SHAMROCK (SHAMRCK2) 138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	102.0205	SHAMROCK (SHAMRCK2) 138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	101.3184	SHAMROCK (SHAMRCK2) 138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	101.3184	SHAMROCK (SHAMRCK2) 138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	102.9862	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	102.9862	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	102.248	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	102.248	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03292	125.1228	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03076	129.8647	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03019	129.8647	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03261	129.8647	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.05946	129.8647	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0744	101.3081	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07445	101.3081	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0744	100.5168	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07445	100.5168	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07502	100.1635		HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07508	100.1635		HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	101.0227		STATELINE INTERCHANGE (H TP80154301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	101.0227		STATELINE INTERCHANGE (H TP80154301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.4096		STATELINE INTERCHANGE (H TP80154301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.4096		STATELINE INTERCHANGE (H TP80154301) 230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03591	116.4329		ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03591	148.5058		ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03591	116.4387		ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03591	148.5124		ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03639	120.1525		WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03639	152.7809		WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03643	121.9499		WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03643	154.8492		WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	116.7198		HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	148.7559		HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	120.3668		MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	139.7883		MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03758	129.2777		DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03356	129.2777		DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03356	128.7673		DBL-COM-MEDL'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07303	100.1711		DBL-COM-MEDL'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07309	100.1711		DBL-COM-MEDL'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03997	113.0845		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04	113.0845		DBL-MEDLO-WT
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21247	113.0845		DBL-MEDLO-WT
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03482	118.2243		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03502	118.2243		DBL-MEDLO-WT
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03482	149.1188		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03502	149.1188		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0337	115.0252		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHWARD 138KV CKT 1'	153	0.0337	105.714		DBL-MEDLO-WT
FDNS	11G	G10_045	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.16367	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_053	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.17819	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_052	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.16582	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_048	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.09904	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_049	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.1203	106.7988		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.15782	106.7988		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.15785	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_012	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.10982	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.2597	106.7988		DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21985	134.7713		DBL-MEDLO-WT
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08455	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08392	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07542	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09729	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08956	105.2367		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03202	105.2367		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03203	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04226	105.2367		DBL-MEDLO-WT
FDNS	11G	G10_045	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05001	111.9257		DBL-MEDLO-WT
FDNS	11G	G10_053	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.06527	111.9257		DBL-MEDLO-WT
FDNS	11G	G10_052	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04479	111.9257		DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05787	111.9257		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03231	111.9257		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03232	111.9257		DBL-MEDLO-WT
FDNS	11G	G10_001	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04499	111.9257		DBL-MEDLO-WT
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05001	250.4551		DBL-MEDLO-WT
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06527	250.4551		DBL-MEDLO-WT
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04479	250.4551		DBL-MEDLO-WT
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05787	250.4551		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03231	250.4551		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03232	250.4551		DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04499	250.4551		DBL-MEDLO-WT
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05001	303.3396		DBL-MEDLO-WT
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06527	303.3396		DBL-MEDLO-WT
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04479	303.3396		DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05787	303.3396		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03231	303.3396		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03232	303.3396		DBL-MEDLO-WT
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04499	303.3396		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07696	107.8767		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07702	107.8767		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07696	107.0339		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07702	107.0339		DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.0397	103.0038		DBL-HIT-G084'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03973	103.0038		DBL-HIT-G084'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20917	103.0038		DBL-HIT-G084'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03044	103.7299		DBL-HIT-G084'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03212	103.7299		DBL-HIT-G084'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08609	116.0766		DBL-HIT-G084'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08616	116.0766		DBL-HIT-G084'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08609	114.6913		DBL-HIT-G084'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08616	114.6913		DBL-HIT-G084'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.0397	113.1635		DBL-G0847-WO

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03973	113.1635	DBL-G0847-WO'	
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20917	113.1635	DBL-G0847-WO'	
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03353	113.1635	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	TO->FROM	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'	351	0.08609	115.3777	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	TO->FROM	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'	351	0.08616	115.3777	DBL-G0847-WO'	
FDNS	11G	G10_001	TO->FROM	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'	351	0.06314	115.3777	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	FROM->TO	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	351	0.08609	105.1786	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	FROM->TO	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	351	0.08616	105.1786	DBL-G0847-WO'	
FDNS	11G	G10_001	FROM->TO	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'	351	0.06314	105.1786	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	TO->FROM	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	351	0.07821	106.9059	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	TO->FROM	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	351	0.07826	106.9059	DBL-G0847-WO'	
FDNS	11G	G10_001	TO->FROM	GRAPEVINE INTERCHANGE - NICHOLS STATION 230KV CKT 1'	351	0.05651	106.9059	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	TO->FROM	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	1052	0.19883	115.3744	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	TO->FROM	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	1052	0.19889	115.3744	DBL-G0847-WO'	
FDNS	11G	G10_012	TO->FROM	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	1052	0.07516	115.3744	DBL-G0847-WO'	
FDNS	11G	G10_001	TO->FROM	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	1052	0.31572	115.3744	DBL-G0847-WO'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0363	108.5607	DBL-G0847-WO'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0363	139.4979	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08609	135.678	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08616	135.678	DBL-G0847-WO'	
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06314	135.678	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08609	133.0888	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08616	133.0888	DBL-G0847-WO'	
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06314	133.0888	DBL-G0847-WO'	
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04172	110.4508	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.04174	110.4508	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21479	110.4508	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03007	110.4508	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03959	116.8089	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.04123	116.8089	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03959	147.3833	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04123	147.3833	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0393	114.8003	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHWARD 138KV CKT 1'	153	0.0393	105.6238	DBL-WOOD-MED	
FDNS	11G	G10_049	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.06917	106.4003	DBL-WOOD-MED	
FDNS	11G	G10_052	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.09959	106.4003	DBL-WOOD-MED	
FDNS	11G	G10_048	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.03083	106.4003	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.18582	106.4003	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.18586	106.4003	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.14287	106.4003	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.30332	106.4003	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.03311	107.709	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.03443	107.709	DBL-WOOD-MED	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03551	110.4432	DBL-WOOD-MED	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04399	110.4432	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07683	104.1061	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07688	104.1061	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07683	103.4125	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07688	103.4125	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03237	115.951	OG3TERMI1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03006	109.0516	OG3TERMA'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	103.3654	SPP-SWPS-T54'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07612	103.3654	SPP-SWPS-T54'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07614	102.621	SPP-SWPS-T54'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0762	102.621	SPP-SWPS-T54'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	117.9884	SPP-WERE-28'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	150.2735	SPP-WERE-28'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	119.105	SPP-WERE-30'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	151.5462	SPP-WERE-30'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	121.6823	SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	154.5209	SPP-WERE-32'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.7127	GEN300006 1-NEW MADRID UNIT 1'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.6292	GEN300006 1-NEW MADRID UNIT 1'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.6292	GEN300006 1-NEW MADRID UNIT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.7101	GEN300007 1-NEW MADRID UNIT 2'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.6247	GEN300007 1-NEW MADRID UNIT 2'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.6247	GEN300007 1-NEW MADRID UNIT 2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.7443	GEN334440 1-SABINE UNIT 4'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.7853	GEN334440 1-SABINE UNIT 4'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.7853	GEN334440 1-SABINE UNIT 4'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.0954	GEN334440 1-SABINE UNIT 4'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.0954	GEN334440 1-SABINE UNIT 4'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.3815	GEN334441 1-SABINE UNIT 5'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.3815	GEN334441 1-SABINE UNIT 5'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.6581	GEN335204 1-NELSON UNIT 4'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.6849	GEN335204 1-NELSON UNIT 4'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.6849	GEN335204 1-NELSON UNIT 4'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100	GEN335204 1-NELSON UNIT 4'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100	GEN335204 1-NELSON UNIT 4'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.9617	GEN335206 1-NELSON UNIT 6'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	101.0058	GEN335206 1-NELSON UNIT 6'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	101.0058	GEN335206 1-NELSON UNIT 6'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.3111	GEN335206 1-NELSON UNIT 6'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0732	100.3111	GEN335206 1-NELSON UNIT 6'	
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03607	100.7258	GEN335831 1-RIVERBEND UNIT#1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03369	120.5351	GEN525561	1-TOLK GEN #1 24 KV
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	108.639	GEN525561	1-TOLK GEN #1 24 KV
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	139.4969	GEN525561	1-TOLK GEN #1 24 KV
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	106.7583	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03369	115.6973	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03369	115.6973	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03369	115.6973	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	109.2676	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	140.2256	GEN525562	1-TOLK GEN #2 24 KV
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	109.407	GEN531447	1-HOLCOMB GENERATOR
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	108.1239	GEN531447	1-HOLCOMB GENERATOR
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	138.9196	GEN531447	1-HOLCOMB GENERATOR
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	117.6282	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	127.3111	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	161.092	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	102.9991	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	102.9991	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	102.2543	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	102.2543	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	107.5862	GEN539630	1-FLATRDG1 34.500'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	138.3521	GEN539630	1-FLATRDG1 34.500'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	114.6686	GEN542955	1-LACYGNE UNIT #1
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	117.8949	GEN542955	1-LACYGNE UNIT #1
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	150.2131	GEN542955	1-LACYGNE UNIT #1
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.5052	GEN542955	1-LACYGNE UNIT #1
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.5052	GEN542955	1-LACYGNE UNIT #1
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	117.5252	GEN542956	2-LACYGNE UNIT #2
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	149.7854	GEN542956	2-LACYGNE UNIT #2
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.3089	GEN542956	2-LACYGNE UNIT #2
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.3089	GEN542956	2-LACYGNE UNIT #2
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	116.1396	GEN542957	1-IATAN UNIT #1
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	148.1879	GEN542957	1-IATAN UNIT #1
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.1736	GEN542957	1-IATAN UNIT #1
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.1736	GEN542957	1-IATAN UNIT #1
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	116.7915	GEN542962	2-IATAN UNIT #2
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	148.9431	GEN542962	2-IATAN UNIT #2
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.639	GEN542962	2-IATAN UNIT #2
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07314	100.639	GEN542962	2-IATAN UNIT #2
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03024	106.4924	GEN560121	1-G08-47 0.5750'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	109.2557	GEN560121	1-G08-47 0.5750'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21377	124.7057	BASE CASE	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21377	116.6842	BASE CASE	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21337	151.711	BASE CASE	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05818	100.3272	BASE CASE	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04832	100.3272	BASE CASE	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05215	100.3272	BASE CASE	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08492	100.3272	BASE CASE	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07044	100.3272	BASE CASE	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	139.2204	BASE CASE	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	175.0341	BASE CASE	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0585	103.0801	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04849	103.0801	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05261	103.0801	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08493	103.0801	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07044	103.0801	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	145.2934	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	182.0469	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03478	136.2304	G08-127T 345.00 - SOONER 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03478	171.5915	G08-127T 345.00 - SOONER 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03462	121.4127	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03757	121.4127	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03998	109.143	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21376	121.4099	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21376	112.9322	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21396	161.0248	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06069	107.6888	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05075	107.6888	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05483	107.6888	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08662	107.6888	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07233	107.6888	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03833	160.0036	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03833	199.0015	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03462	112.0827	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03757	112.0827	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03998	101.1929	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21376	119.2967	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21376	110.9225	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21396	158.534	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06069	105.7052	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05075	105.7052	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05483	105.7052	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08662	105.7052	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07233	105.7052	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03833	155.2267	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03833	193.5016	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1328	0.3951	39.76305	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1328	0.17822	39.76305	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1328	0.09011	39.76305	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_036		Non Converged Contingency	1328	0.034	39.76305	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	717	0.11532	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	717	0.05838	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	717	0.1626	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	717	0.10267	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	717	0.04086	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	717	0.05118	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	717	0.0512	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_012		Non Converged Contingency	717	0.03566	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	717	0.06149	47.35357	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1792	0.12538	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1792	0.16656	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1792	0.1123	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1792	0.05864	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1792	0.0892	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	1792	0.084	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	1792	0.08401	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_012		Non Converged Contingency	1792	0.06455	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	1792	0.11695	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	1792	0.12538	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	1792	0.16656	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	1792	0.1123	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	1792	0.05864	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	1792	0.0892	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	1792	0.084	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	1792	0.08401	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_012		Non Converged Contingency	1792	0.06455	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	1792	0.11695	38.43386	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	319	0.05818	100.3272	CIRCLE - MULLERGREEN 230KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	319	0.04832	100.3272	CIRCLE - MULLERGREEN 230KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	319	0.05215	100.3272	CIRCLE - MULLERGREEN 230KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	319	0.08492	100.3272	CIRCLE - MULLERGREEN 230KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	319	0.07044	100.3272	CIRCLE - MULLERGREEN 230KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54011	88.19373	NINNESCS3 115.00 - PRATT 115KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54011	85.71501	NINNESCS3 115.00 - ST JOHN 115KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	250	0.31674	50.92354	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37243	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04157	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06847	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07423	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.26348	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23457	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.0903	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37243	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_041		Non Converged Contingency	0	0.04157	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.06847	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.07423	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.5693	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.28348	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.23457	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.0903	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.25076	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.33313	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.2246	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.11728	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17839	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16799	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16802	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.1291	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23389	9999	DBL-MEDLO-WI
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.09518	9999	DBL-HIT-G084'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.16377	9999	DBL-HIT-G084'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.03301	9999	DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16498	9999	DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16519	9999	DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.09518	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.16377	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03301	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.16498	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.16519	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.65164	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03825	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09173	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05144	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03544	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08637	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04798	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0369	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08858	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04963	9999	ATC_B2_BE2'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03624	101.8585	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04124	101.8585	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03001	101.8585	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03968	101.8585	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.04608	101.8585	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.04589	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_041	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03122	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_051	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03173	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_047	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03229	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03848	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.05142	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03898	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03581	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_036	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.03019	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.04749	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	0.05685	106.8077	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21346	119.0599	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346	110.7133	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21366	157.8085	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06278	109.7844	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05268	109.7844	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05566	109.7844	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05805	109.7844	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07214	109.7844	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21415	124.5902	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21415	115.9989	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21435	163.823	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06929	118.1328	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05765	118.1328	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06209	118.1328	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.11065	118.1328	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07598	118.1328	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	144.1244	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	180.7185	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03657	156.7582	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03657	195.5454	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10466	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10808	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.07281	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03225	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03225	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.04017	152.3848	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	398	0.07516	105.2581	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	398	0.07543	105.2581	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	398	0.05533	105.2581	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	398	0.04319	105.2581	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06845	112.0568	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06054	112.0568	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05584	112.0568	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.14145	112.0568	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.04174	112.0568	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21481	122.1338	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21481	113.6324	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21501	161.6987	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06777	114.1491	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05903	114.1491	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05859	114.1491	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09983	114.1491	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0801	114.1491	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03785	146.7379	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03785	183.7462	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21415	127.0696	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21415	118.3648	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21435	166.5441	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06929	122.1495	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05765	122.1495	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06209	122.1495	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.11065	122.1495	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07598	122.1495	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	145.1898	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	181.9589	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06236	110.0609	HUNTSVILLE - ST JOHN 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05202	110.0609	HUNTSVILLE - ST JOHN 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05598	110.0609	HUNTSVILLE - ST JOHN 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08994	110.0609	HUNTSVILLE - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13873	110.0609	HUNTSVILLE - ST JOHN 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06236	109.7226	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05202	109.7226	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05598	109.7226	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08994	109.7226	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13873	109.7226	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21337	147.3429	KINSLEY - PAWNEE-EDWARDS_JCT 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06242	113.3826	ST JOHN - ST JOHN 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05208	113.3826	ST JOHN - ST JOHN 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05605	113.3826	ST JOHN - ST JOHN 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09	113.3826	ST JOHN - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13879	113.3826	ST JOHN - ST JOHN 115KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04378	143.6756	'ST JOHN - ST_JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04378	180.1951	'ST JOHN - ST_JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46822	123.4147	'ST JOHN - ST_JOHN 115KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05703	100.3225	'HEIZER 6 230.00 - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04923	100.3225	'HEIZER 6 230.00 - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04923	100.3225	'HEIZER 6 230.00 - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08525	100.3225	'HEIZER 6 230.00 - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06126	100.3225	'HEIZER 6 230.00 - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03627	142.7949	'HOLCOMB - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03656	146.3944	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	183.3578	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.0753	102.4552	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.07107	102.4552	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06008	102.4552	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	86	0.21372	107.1312	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21392	144.6855	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03726	132.0191	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03726	166.5501	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03657	149.9711	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03657	187.4997	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10466	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10980	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.07281	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	ASGI_2010_020	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03225	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	ASGI_2010_021	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03225	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.04017	130.6552	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0635	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04218	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05619	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08827	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07173	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03593	136.1379	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03593	171.5079	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0635	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04218	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05619	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08827	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07173	107.267	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03593	136.1379	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03593	171.5079	'COMANCHS 345.00 - SPEARVILLE 345KV CKT 2'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05781	101.7804	'IATAN - STRANGER CREEK 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04781	101.7804	'IATAN - STRANGER CREEK 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05184	101.7804	'IATAN - STRANGER CREEK 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08453	101.7804	'IATAN - STRANGER CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06973	101.7804	'IATAN - STRANGER CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04036	149.4093	'BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04036	186.7414	'BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03536	135.9948	'G05-13T 345.00 - NEOSHO 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03536	171.3087	'G05-13T 345.00 - NEOSHO 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03559	134.9198	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03559	170.0793	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05974	102.8758	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0495	102.8758	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05374	102.8758	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09328	102.8758	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07247	102.8758	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	146.3113	'CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	183.1874	'CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	144.6456	'CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	181.2728	'CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05894	101.7004	'CLEARWATER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04928	101.7004	'CLEARWATER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05282	101.7004	'CLEARWATER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08535	101.7004	'CLEARWATER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07193	101.7004	'CLEARWATER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	150.6119	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	188.1878	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03713	173.2483	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03713	214.4385	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03656	149.6091	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	186.9895	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03594	135.6188	'GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03594	170.8888	'GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03385	133.9073	'GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03385	168.9152	'GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03656	148.3551	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	185.5441	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21396	117.3191	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21416	156.0093	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05894	102.1331	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04928	102.1331	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05282	102.1331	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08535	102.1331	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07193	102.1331	'FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21571	117.921	'MULLERGREEN - PIONTP3 115.00 115KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21571	109.6234	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21591	156.6273	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05945	104.0174	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0497	104.0174	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05309	104.0174	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07844	104.0174	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07689	104.0174	MULLERGREN - PIONTP 3	115.00 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05945	102.9269	PIONTP 3	115.00 - RUSSELL 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0497	102.9269	PIONTP 3	115.00 - RUSSELL 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05309	102.9269	PIONTP 3	115.00 - RUSSELL 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07844	102.9269	PIONTP 3	115.00 - RUSSELL 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07689	102.9269	PIONTP 3	115.00 - RUSSELL 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39033	125.8504	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39033	117.22	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.39053	164.8624	MEDICINE LODGE - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39033	125.8749	PRATT - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39033	117.2432	PRATT - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.39053	164.8912	PRATT - SAWYER 3	115.00 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05818	101.5775	GREAT BEND FREY STREET - NORTH WEST GREAT BEND 115KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04832	101.5775	GREAT BEND FREY STREET - NORTH WEST GREAT BEND 115KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05215	101.5775	GREAT BEND FREY STREET - NORTH WEST GREAT BEND 115KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08492	101.5775	GREAT BEND FREY STREET - NORTH WEST GREAT BEND 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07044	101.5775	GREAT BEND FREY STREET - NORTH WEST GREAT BEND 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	137.064	GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04232	135.8913	GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04232	171.1904	GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	135.6511	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04232	135.5825	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04232	170.8304	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05894	101.9049	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04928	101.9049	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05282	101.9049	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08535	101.9049	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07183	101.9049	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2324	137.5924	MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04232	136.0031	MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04232	171.3214	MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20803	155.6674	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20803	193.8553	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	147.1224	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	170.1515	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21584	102.3386	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21604	139.7078	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03499	143.6822	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03499	180.2089	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39359	119.9179	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39359	111.538	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.39379	158.6365	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05945	102.0866	RUSSELL - WALDO 115KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0497	102.0866	RUSSELL - WALDO 115KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05309	102.0866	RUSSELL - WALDO 115KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07844	102.0866	RUSSELL - WALDO 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07689	102.0866	RUSSELL - WALDO 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03559	134.5658	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03559	169.8723	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06063	104.7822	AXTELL - PAULINE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05046	104.7822	AXTELL - PAULINE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05452	104.7822	AXTELL - PAULINE 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08809	104.7822	AXTELL - PAULINE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07225	104.7822	AXTELL - PAULINE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06042	102.2625	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04945	102.2625	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05531	102.2625	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08691	102.2625	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07123	102.2625	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05908	101.8622	MCCOOL - MOORE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04899	101.8622	MCCOOL - MOORE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05315	101.8622	MCCOOL - MOORE 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08598	101.8622	MCCOOL - MOORE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07097	101.8622	MCCOOL - MOORE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05909	102.2204	GRAND ISLAND - MCCOOL 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04899	102.2204	GRAND ISLAND - MCCOOL 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05316	102.2204	GRAND ISLAND - MCCOOL 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08596	102.2204	GRAND ISLAND - MCCOOL 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07123	102.2204	GRAND ISLAND - MCCOOL 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06037	104.3055	MOORE - PAULINE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05017	104.3055	MOORE - PAULINE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05434	104.3055	MOORE - PAULINE 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08771	104.3055	MOORE - PAULINE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07199	104.3055	MOORE - PAULINE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05996	105.2366	GRAND ISLAND - SWEETWATER 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04967	105.2366	GRAND ISLAND - SWEETWATER 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05411	105.2366	GRAND ISLAND - SWEETWATER 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08701	105.2366	GRAND ISLAND - SWEETWATER 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07154	105.2366	GRAND ISLAND - SWEETWATER 345KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_045	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.08164	118.2756	POSTROCK7	345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.08176	118.2756	POSTROCK7	345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.05733	118.2756	POSTROCK7	345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05703	100.3155	HEIZER 6	230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04879	100.3155	HEIZER 6	230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04923	100.3155	HEIZER 6	230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08525	100.3155	HEIZER 6	230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06126	100.3155	HEIZER 6	230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03589	142.4695	ROSE HILL (ROSEHL1X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03589	178.7731	ROSE HILL (ROSEHL1X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03589	142.4743	ROSE HILL (ROSEHL3X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03589	178.7782	ROSE HILL (ROSEHL3X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03636	146.6386	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03636	183.5669	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0364	148.4603	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	185.6616	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05812	101.562	EAST MANHATTAN (EMANHT3X)	230/115/18.0KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04824	101.562	EAST MANHATTAN (EMANHT3X)	230/115/18.0KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0521	101.562	EAST MANHATTAN (EMANHT3X)	230/115/18.0KV TRANSFORMER CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08523	101.562	EAST MANHATTAN (EMANHT3X)	230/115/18.0KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07035	101.562	EAST MANHATTAN (EMANHT3X)	230/115/18.0KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21328	127.4278	CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21328	118.7394	CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348	166.1013	CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	143.4059	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	179.8268	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	146.7819	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	170.3125	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.26231	105.3724	MULLERGREN (MULGRENE)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.26251	143.3141	MULLERGREN (MULGRENE)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05845	102.2695	STEGALL - STEGALL TRANSFORMER 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04851	102.2695	STEGALL - STEGALL TRANSFORMER 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05246	102.2695	STEGALL - STEGALL TRANSFORMER 230KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08521	102.2695	STEGALL - STEGALL TRANSFORMER 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07059	102.2695	STEGALL - STEGALL TRANSFORMER 230KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05845	102.2693	STEGALL TY 345/230KV TRANSFORMER CKT 1'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04851	102.2693	STEGALL TY 345/230KV TRANSFORMER CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05246	102.2693	STEGALL TY 345/230KV TRANSFORMER CKT 1'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08521	102.2693	STEGALL TY 345/230KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07059	102.2693	STEGALL TY 345/230KV TRANSFORMER CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03363	148.058	DBL-WOOD-MED	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04406	185.4048	DBL-WOOD-MED	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03363	185.4048	DBL-WOOD-MED	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04406	185.4048	DBL-WOOD-MED	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05782	101.8566	KCPL-OPGD#02	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04782	101.8566	KCPL-OPGD#02	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05186	101.8566	KCPL-OPGD#02	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08455	101.8566	KCPL-OPGD#02	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06973	101.8566	KCPL-OPGD#02	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05782	101.8807	KCPL-OPGD#07	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04782	101.8807	KCPL-OPGD#07	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05186	101.8807	KCPL-OPGD#07	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08455	101.8807	KCPL-OPGD#07	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06973	101.8807	KCPL-OPGD#07	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.06236	109.9468	MIDW-CATB05	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05202	109.9468	MIDW-CATB05	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05598	109.9468	MIDW-CATB05	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08994	109.9468	MIDW-CATB05	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.13873	109.9468	MIDW-CATB05	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05845	102.2681	TRF-STEGALL'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04851	102.2681	TRF-STEGALL'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05246	102.2681	TRF-STEGALL'	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08521	102.2681	TRF-STEGALL'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07059	102.2681	TRF-STEGALL'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21571	117.6462	SPP-MKEC-02	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21571	109.3587	SPP-MKEC-02	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21591	156.3207	SPP-MKEC-02	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05945	103.8722	SPP-MKEC-02	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0497	103.8722	SPP-MKEC-02	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05309	103.8722	SPP-MKEC-02	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07844	103.8722	SPP-MKEC-02	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07689	103.8722	SPP-MKEC-02	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21396	119.0412	SPP-MKEC-08	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21396	110.6873	SPP-MKEC-08	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21571	158.038	SPP-MKEC-08	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05894	104.4542	SPP-MKEC-08	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04928	104.4542	SPP-MKEC-08	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05282	104.4542	SPP-MKEC-08	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08535	104.4542	SPP-MKEC-08	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07183	104.4542	SPP-MKEC-08	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	144.1694	SPP-WERE-28	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	180.7213	SPP-WERE-28	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	145.1762	SPP-WERE-30	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	181.879	SPP-WERE-30	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03656	147.8466	SPP-WERE-32	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONT	COM	NAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP	138KV	CKT 1'	95.6	0.03656	184.9617	SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP	138KV	CKT 1'	95.6	0.03532	171.3747	WRTOD1104'	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.06689	110.3797	BASE CASE	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06689	121.6116	BASE CASE	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.07181	167.1088	BASE CASE	
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE	138KV	CKT 1'	130	0.05304	107.3118	BASE CASE	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.06762	102.9355	LAWTON EASTSIDE - OKLAUNION 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06762	130.2337	LAWTON EASTSIDE - OKLAUNION 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0499	153.7402	LAWTON EASTSIDE - OKLAUNION 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06762	124.4573	G08-14T 345.00 - OKLAUNION 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0499	148.058	G08-14T 345.00 - OKLAUNION 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06767	124.2154	CLINTON JUNCTION - ELK CITY 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05028	148.5886	CLINTON JUNCTION - ELK CITY 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06919	125.1171	ELK CITY - RHWINDA 138.00 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05101	147.8653	ELK CITY - RHWINDA 138.00 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07181	100.0843	WALKOMIS - WALKOMIS TAP 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07181	126.7172	WALKOMIS - WALKOMIS TAP 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07181	100.2636	HENESSEY - WALKOMIS 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07181	126.9379	HENESSEY - WALKOMIS 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06583	118.8571	MARSHALL - WOODRING 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06664	118.9833	CIMARRON - WOODRING 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06682	125.064	G08-13T 345.00 - WOODRING 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.05947	113.9161	IMO TAP - SOUTH 4TH ST 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06583	118.9155	COTTONWOOD CREEK - MARSHALL 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07181	127.474	DOVER SW - HENESSEY 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07181	124.2502	CLEO - CLEO CORNER 69KV	
FDNS	11G	G10_043	TO->FROM	KNOBHILL - MOORELAND	138KV	CKT 1'	96	0.03695	101.7552	CLEO CORNER - GLASS MOUNTAIN 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0521	149.69	CLEO CORNER - GLASS MOUNTAIN 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05288	150.1012	CLEO CORNER - MEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE	138KV	CKT 1'	130	0.0628	101.7602	CLEO CORNER - MEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05239	140.4409	DEWEY - IODINE 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.06958	100.9608	DEWEY - SOUTHWARD 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06958	126.7007	DEWEY - SOUTHWARD 138KV	
FDNS	11G	G10_043	TO->FROM	KNOBHILL - MOORELAND	138KV	CKT 1'	96	0.03695	102.3216	GLASS MOUNTAIN - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0521	149.793	GLASS MOUNTAIN - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05288	150.0702	IMO TAP - MEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE	138KV	CKT 1'	130	0.0628	101.6588	IMO TAP - MEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06905	124.4909	ALINE - CLEO 69KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06905	124.622	ALINE - ALVA 69KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.06878	101.0805	ALVA - KNOBHILL 69KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06878	127.9552	ALVA - KNOBHILL 69KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07303	107.0665	KNOBHILL - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07303	135.3482	KNOBHILL - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05239	139.5965	IODINE - WWRDEHV4 138.00 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	153	0.04785	142.4531	EL RENO - JENSEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.06958	103.6011	EL RENO - ROMAN NOSE 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06958	131.0721	EL RENO - ROMAN NOSE 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.04528	137.7856	CIMARRON - EL RENO 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0475	142.7279	CIMARRON - JENSEN TAP 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06958	126.1427	ROMAN NOSE - SOUTHWARD 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.04943	148.163	CIMARRON - NORTHWEST 345KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07696	132.8221	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	FROM->TO	CLEO CORNER - MEN TAP	138KV	CKT 1'	191	0.08721	109.9165	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07696	167.1745	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	KNOBHILL - MOORELAND	138KV	CKT 1'	96	0.03152	105.087	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.06104	186.4261	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	ROMAN NOSE - SOUTHWARD	138KV	CKT 1'	153	0.06104	111.8448	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	CEDARDALE - MOORELAND	138KV	CKT 1'	179	0.0665	101.9084	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	FROM->TO	CEDARDALE - OKEENE	138KV	CKT 1'	179	0.0665	100.5922	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE	138KV	CKT 1'	130	0.06157	124.5963	NORTHWEST - TATONGA7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07696	103.9447	TATONGA7 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07696	131.4769	TATONGA7 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.06104	154.5078	TATONGA7 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.06839	125.9909	BORDER 7345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05094	149.6233	BORDER 7345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.10294	104.3322	MOORELAND 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.10294	131.9396	MOORELAND 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.0668	149.1438	MOORELAND 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07083	103.6213	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07083	131.0864	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05233	151.5892	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07083	103.6213	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07083	131.0864	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05233	151.5892	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07584	118.3771	FPL SWITCH - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05027	147.5541	ARAPAH0 - HAMON BUTLER 69KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05027	147.5502	ARAPAH0 - INDUSTRIAL PARK 69KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.04986	148.6085	CANTON - OKEENE 69KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.04986	148.8357	CANTON - TALOGA 69KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07354	105.663	CEDARDALE - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07354	133.6099	CEDARDALE - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE	138KV	CKT 1'	153	0.05092	147.8139	CEDARDALE - MOORELAND 138KV	
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN	138KV	CKT 1'	153	0.07354	105.4759	CEDARDALE - OKEENE 138KV	
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND	138KV	CKT 1'	124	0.07354	133.3781	CEDARDALE - OKEENE 138KV	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05092	147.806		CEDARDALE - OKEENE 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.07186	102.735		DOVER SW - OKEENE 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07186	129.9669		DOVER SW - OKEENE 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05199	149.4614		DOVER SW - OKEENE 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.05036	124.1493		HAZELTON JCT - WAKITA 69KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05027	147.5562		HAMON BUTLER - PUTNAM 69KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03261	139.7952		MOORELAND - TALOGA 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.07165	101.0177		MOORELAND - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07165	127.8712		MOORELAND - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05322	149.521		MOORELAND - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06919	124.3837		MOREWOOD SW - RHWINDA 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.07165	101.0095		MOREWOOD SW - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07165	127.86		MOREWOOD SW - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05322	149.5188		MOREWOOD SW - NINMILE 4 138.00 138KV CKT 1'
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.06081	102.2841		OKEENE - WATONGA SW 69KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05027	147.6651		PUTNAM - TALOGA 69KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06839	125.9909		BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05094	149.6233		BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06855	125.1898		FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.0686	101.6671		MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0686	128.6681		MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05036	149.8333		MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.0686	101.6671		MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0686	128.6681		MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.07303	107.0566		KNOBHILL (KNOBHILL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07303	135.3345		KNOBHILL (KNOBHILL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0522	148.7395		WWRDEHV7 345.00 (WVDEHV) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0522	148.7284		WWRDEHV7 345.00 (WVDEHV-T2) 345/138/13.8KV TRANSFORMER CKT 2'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.10294	104.3147		MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.10294	131.9178		MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0668	149.1285		MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05062	151.1345		TALOGA (TALOGA) 138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.07407	120.5907		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07407	152.0303		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.05482	164.9169		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.23052	112.7189		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.05907	112.6448		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03869	213.4334		DBL-MEDLO-WI
FDNS	11G	G10_043	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03869	260.3685		DBL-MEDLO-WI
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.08195	125.3259		DBL-WOOD-MED
FDNS	11G	G10_043	FROM->TO	CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.093	103.2932		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.08195	157.9017		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	KNOBHILL - MOORELAND 138KV CKT 1'	96	0.03339	100		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.06181	169.6982		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.28516	117.8107		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	130	0.06564	117.1146		DBL-WOOD-MED
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.07023	126.1244		OGE3TERM1
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0666	118.6492		OGE3TERM4
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04838	143.0101		OGE3TERM10
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.2962		GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.2936		GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.3457		GEN334440 1-SABINE UNIT 4'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.9304		GEN334440 1-SABINE UNIT 4'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.2597		GEN335204 1-NELSON UNIT 4'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.8144		GEN335204 1-NELSON UNIT 4'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.559		GEN335206 1-NELSON UNIT 6'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.1035		GEN335206 1-NELSON UNIT 6'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	100.6883		GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	127.4622		GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	150.6901		GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	125.6405		GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.0122		GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.3464		GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.748		GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	101.9123		GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	128.9728		GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	151.9709		GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	125.1307		GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.4691		GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	125.6451		GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.8656		GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.2504		GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.4279		GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.010		GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.2127		GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	100.2784		GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.9562		GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	150.0957		GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	101.1162		GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	127.9901		GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	151.0305		GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.1918		GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.1573		GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.2244		GEN338146 1-INDEPENDENCE UNIT #2'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.2263	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	125.4931	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.507	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	125.4125	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	149.3559	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.5699	GEN501812 1-RODEMACHER UNIT 2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.1533	GEN501812 1-RODEMACHER UNIT 2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.9968	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.5717	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.7149	GEN509394 1-FLINT CREEK'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.6485	GEN509394 1-FLINT CREEK'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.761	GEN509403 1-PIRKEY GENERATION'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.8261	GEN509403 1-PIRKEY GENERATION'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.1406	GEN509404 1-WELSH #1'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.1406	GEN509405 1-WELSH #2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.1408	GEN509406 1-WELSH #3'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.6891	GEN511839 1-NORTHEASTERN STATION #2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.5273	GEN511840 1-NORTHEASTERN STATION #3'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.5592	GEN511841 1-NORTHEASTERN STATION #4'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.2812	GEN512688 2-GRDA1 GSU2 22'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.4116	GEN512689 1-GRDA1 GSU1 22'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	102.4471	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	129.6329	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	100.2988	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	126.9799	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.8897	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.4197	GEN515223 1-MUSKOGEE 4G'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.9977	GEN515223 1-MUSKOGEE 4G'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.3765	GEN515225 1-MUSKOGEE 6G'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.9557	GEN515225 1-MUSKOGEE 6G'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.832	GEN515226 1-MUSKOGEE 6G'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	148.3991	GEN515226 1-MUSKOGEE 6G'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.8349	GEN515364 1-CENT 11 0.6000'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.8179	GEN515364 1-CENT 11 0.6000'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.7548	GEN515389 1-TLGAWND1 34.500'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	132.062	GEN515389 1-TLGAWND1 34.500'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.4047	GEN515393 1-OGEWND2G'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.1803	GEN515393 1-OGEWND2G'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	117.6991	GEN515790 1-FPLWND2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.2215	GEN520922 1-SLEEPING 138.00'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	147.9948	GEN520947 1-HUGO1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.4925	GEN520997 1-MORLND2'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	117.9802	GEN523971 1-HARRINGTON GEN #1 24 KV'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	117.9694	GEN523972 1-HARRINGTON GEN #2 24 KV'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	117.97	GEN523973 1-HARRINGTON GEN #3 24 KV'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	116.6812	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.3961	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	116.1563	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.0923	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	119.0512	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	100.367	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	127.0667	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	124.2702	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	119.0489	GEN560175 1-G07-44 0.5750'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	113.61	GEN560180 1-G07-51 0.6000'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	140.8525	GEN560180 1-G07-51 0.6000'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.3401	GEN560221 1-G07-62-1 0.6900'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.7261	GEN560221 1-G07-62-1 0.6900'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.3401	GEN560222 1-G07-62-2 0.6900'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.7261	GEN560222 1-G07-62-2 0.6900'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.446	GEN560223 1-G07-62-3 0.6900'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.8288	GEN560223 1-G07-62-3 0.6900'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.4267	GEN560224 1-G07-62-4 0.6900'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	142.814	GEN560224 1-G07-62-4 0.6900'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	105.4431	GEN560225 1-G10-43 18.000'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	136.301	GEN560225 1-G10-43 18.000'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	118.9073	GEN560282 1-G08-19 0.6000'
FDNS	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	116.3968	GEN560429 1-G08-29 0.6400'
FDNS	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	140.2778	GEN560429 1-G08-29 0.6400'
FNSL	11G	G10_043	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.06689	101.3981	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_043	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.06689	128.3382	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_043	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04897	151.5287	GEN336153 1-WATERFORD UNIT#3'
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03038	107.1467	BASE CASE
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	118.1476	BASE CASE
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03637	109.3225	BASE CASE
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	126.5511	BASE CASE
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03045	100.0781	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03045	126.7076	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03637	104.2835	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	133.3741	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03045	120.919	G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0362	120.7036	CLINTON JUNCTION - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04583	121.5279	ELK CITY - RHWIND4 138.00 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03017	145.6592	ELK CITY - RHWIND4 138.00 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03318	123.0025	WAUKOMIS - WAUKOMIS TAP 138KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03318	123.2209	HENESSEY - WAUKOMIS 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03005	115.4254	MARSHALL - WOODRING 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03151	115.4882	CIMARRON - WOODRING 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03005	115.4836	COTTONWOOD CREEK - MARSHALL 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03165	121.4582	DOVER SW - HENESSEY 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0314	120.6676	CLEO - CLEO CORNER 69KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03128	123.0823	DEWEY - SOUTHARD 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0314	120.9071	ALINE - CLEO 69KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0314	121.0381	ALINE - ALVA 69KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03111	124.3788	ALVA - KNOBHILL 69KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03307	104.0028	KNOBHILL - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03307	131.574	KNOBHILL - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03128	100.8433	EL RENO - ROMAN NOSE 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03128	127.4198	EL RENO - ROMAN NOSE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03652	130.8497	EL RENO - ROMAN NOSE 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03128	122.5261	ROMAN NOSE - SOUTHARD 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03482	129.5033	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03776	129.5033	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	FROM->TO	CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.03983	106.9372	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	FROM->TO	CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.04316	106.9372	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03482	163.0631	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03776	163.0631	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04023	183.969	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1'	153	0.04023	109.2428	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	DOVER SW - OKEENE 138KV CKT 1'	110	0.03853	130	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03853	123.8788	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03853	157.1878	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03482	100.7492	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03776	100.7492	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03482	127.5323	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03776	127.5323	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04023	152.1457	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03853	104.3831	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	95.6	0.03653	133.4902	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	124	0.03061	122.4469	BORDER 7345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	153	0.04499	100	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	124	0.04499	126.5849	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03288	100.5985	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03031	100.5985	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03288	127.3544	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03031	127.3544	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03841	117.7417	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03288	100.5985	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03031	100.5985	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03288	127.3544	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03031	127.3544	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03841	117.7417	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03396	114.5084	FPL SWITCH - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03305	102.5952	CEDARDALE - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03305	129.8174	CEDARDALE - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03305	102.4086	CEDARDALE - OKEENE 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03305	129.5859	CEDARDALE - OKEENE 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03276	126.2753	DOVER SW - OKEENE 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03063	120.5294	HAZELTON JCT - WAKITA 69KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04593	120.7911	MOREWOOD SW - RHIND4 138.00 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03061	122.4469	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03223	121.5956	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03044	121.5956	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674	104.4224	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674	133.5347	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0374	122.0547	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674	103.6223	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674	132.612	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04054	104.9434	BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04054	134.1235	BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	130.8294	ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03149	125.0905	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03469	124.5914	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04156	124.5914	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03469	157.8451	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04156	157.8451	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03574	121.6399	ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03793	103.3009	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03793	129.9737	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03375	130.6881	59TH ST - EL PASO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03375	129.8778	59TH ST - GILL ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	105.6492	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	135.9724	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	104.4472	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	133.5631	CENTENNIAL - WACO 138KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03647	130.1075	'CHISHOLM - SEVENTEENTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	110.2564	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	141.3185	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03603	130.4834	'EL PASO - ROSE HILL 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03729	133.6934	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03729	168.2379	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03672	108.7852	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03672	139.753	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03672	107.5248	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03672	138.1276	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	106.0624	'MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	122.8114	'MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03574	121.1675	'ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03307	103.9932	'KNOBHILL (KNOBHILL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03307	131.5607	'KNOBHILL (KNOBHILL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.04499	100	'MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04499	126.5648	'MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03634	129.8492	'BENTON (BENTON2X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03605	131.484	'ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03605	131.4905	'ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03652	105.9331	'WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03652	135.2937	'WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03656	107.6804	'WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	137.2726	'WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	104.1052	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	130.9915	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	105.7898	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	122.9751	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03773	118.118	'DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03361	118.118	'DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03361	117.3266	'DBL-COM-MEDL'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03502	117.382	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03491	117.382	'DBL-MEDLO-WT'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03502	148.0643	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03491	148.0643	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.0336	162.6637	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.16352	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_053	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.17897	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_052	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.16502	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_048	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.09955	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_049	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.12127	111.2656	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_020	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.15997	111.2656	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_021	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.16	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_012	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.11118	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.26882	111.2656	'DBL-MEDLO-WT'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.22002	112.1141	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05038	210.6274	'DBL-MEDLO-WT'
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06561	210.6274	'DBL-MEDLO-WT'
FDNS	11G	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04518	210.6274	'DBL-MEDLO-WT'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05821	210.6274	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_020	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03262	210.6274	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03263	210.6274	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04538	210.6274	'DBL-MEDLO-WT'
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05038	257.2531	'DBL-MEDLO-WT'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06561	257.2531	'DBL-MEDLO-WT'
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04518	257.2531	'DBL-MEDLO-WT'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05821	257.2531	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03262	257.2531	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03263	257.2531	'DBL-MEDLO-WT'
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04538	257.2531	'DBL-MEDLO-WT'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03994	121.6693	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.04089	121.6693	'DBL-WOOD-MED'
FDNS	11G	ASGI_2010_020	FROM->TO	'CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.03283	100	'DBL-WOOD-MED'
FDNS	11G	ASGI_2010_021	FROM->TO	'CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.03283	100	'DBL-WOOD-MED'
FDNS	11G	G10_012	FROM->TO	'CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.04573	100	'DBL-WOOD-MED'
FDNS	11G	G10_001	FROM->TO	'CLEO CORNER - MEN TAP 138KV CKT 1'	191	0.04682	100	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03994	153.3806	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04089	153.3806	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03901	166.9994	'DBL-WOOD-MED'
FDNS	11G	G10_045	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.06628	115.9542	'DBL-WOOD-MED'
FDNS	11G	G10_052	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.0955	115.9542	'DBL-WOOD-MED'
FDNS	11G	ASGI_2010_020	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.19027	115.9542	'DBL-WOOD-MED'
FDNS	11G	ASGI_2010_021	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.1903	115.9542	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.14536	115.9542	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.30099	115.9542	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'DOVER SW - OKEENE 138KV CKT 1'	130	0.0334	113.5039	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'DOVER SW - OKEENE 138KV CKT 1'	130	0.03415	113.5039	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03251	122.4845	'OGE3TERM1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0302	115.1972	'OGE3TERM4'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	103.9741	'SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	133.0166	'SPP-WERE-28'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03658	104.5129	'SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	134.6614	'SPP-WERE-30'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03672	107.0337	'SPP-WERE-32'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03672	137.5605	'SPP-WERE-32'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.8876	GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.885	GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.9323	GEN334440 1-SABINE UNIT 4'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.846	GEN335204 1-NELSON UNIT 4'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	95.6	0.03635	121.1505	GEN335206 1-NELSON UNIT 5'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	124.0927	GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	104.3467	GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	133.4483	GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.2436	GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.4962	GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.9348	GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	125.6345	GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	105.8574	GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.7345	GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.6353	GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	130.3561	GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.2496	GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.6315	GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.862	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.2398	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.1721	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.8151	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	110	0.03635	103.0146	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.9124	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	123.5707	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.704	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.707	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	124.6244	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	104.6581	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	133.8059	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.8057	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.4409	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.4041	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.8389	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.4296	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.391	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.097	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.7094	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	122.0166	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.458	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	130.1539	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.1613	GEN501812 1-RODEMACHER UNIT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.5954	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.3444	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	130.0226	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.3034	GEN509394 1-FLINT CREEK
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.3604	GEN509403 1-PIRKEY GENERATION'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.676	GEN509404 1-WELSH #1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.676	GEN509405 1-WELSH #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.676	GEN509406 1-WELSH #3'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.2722	GEN511839 1-NORTHEASTERN STATION #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.1106	GEN511840 1-NORTHEASTERN STATION #3'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.143	GEN511841 1-NORTHEASTERN STATION #4'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.8492	GEN512688 2-GRDA1 GSU2 22'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.9815	GEN512689 1-GRDA1 GSU1 22'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	126.2309	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.5718	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	123.5717	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.1429	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.9929	GEN515223 1-MUSKOGEE 4G'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.9492	GEN515225 1-MUSKOGEE 5G'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	121.4106	GEN515226 1-MUSKOGEE 6G'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.39	GEN515364 1-CENT 11 0.6000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.3042	GEN515369 1-TLGAWIND1 34.500'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.9641	GEN515393 1-OGIEWIND2G'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.2409	GEN515790 1-FPLWIND2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.7663	GEN520922 1-SLEEPING 138.00'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.0199	GEN520997 1-MORLND2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.5427	GEN523971 1-HARRINGTON GEN #1 24 KV'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.532	GEN523972 1-HARRINGTON GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.5326	GEN523973 1-HARRINGTON GEN #3 24 KV'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	113.2613	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03091	102.036	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03473	102.036	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03146	102.036	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03849	102.036	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	122.7737	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	112.7348	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03091	104.8521	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03473	104.8521	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03146	104.8521	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03849	104.8521	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	122.3628	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.6274	GEN531447 1-HOLCOMB GENERATOR'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	121.4451	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	123.711	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	113.8679	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	144.4462	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	120.5287	GEN539630 1-FLATROD#1 34.500'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.3671	GEN542951 5-HAWTHORN UNIT #5'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	130.0417	GEN542951 5-HAWTHORN UNIT #5'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	120.8666	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	104.297	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	133.427	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.9009	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.9704	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	131.352	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	103.2318	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	132.1651	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.6081	GEN560175 1-G07-44 0.5750'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	110.1628	GEN560180 1-G07-51 0.6000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.8986	GEN560221 1-G07-62-1 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.8986	GEN560222 1-G07-62-2 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.0087	GEN560223 1-G07-62-3 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	114.9895	GEN560224 1-G07-62-4 0.6900'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	105.2088	GEN560225 1-G10-43 18.000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	115.4765	GEN560282 1-G08-19 0.6000'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	112.9769	GEN560429 1-G08-29 0.6400'
FNSL	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03038	124.9872	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	105.1638	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	134.3892	GEN336153 1-WATERFORD UNIT#3'
FNSL-Iteration limit exceeded	11G	G10_041	Non Converged Contingency		2598	0.03159	19.49271	LAKEOVER - MCADAMS 500KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_051	Non Converged Contingency		2598	0.03866	19.49271	LAKEOVER - MCADAMS 500KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_047	Non Converged Contingency		2598	0.03336	19.49271	LAKEOVER - MCADAMS 500KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_045	Non Converged Contingency		0	0.04231	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.05056	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.04703	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020	Non Converged Contingency		0	0.13828	9999	SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021	Non Converged Contingency		0	0.13384	9999	SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	G10_001	Non Converged Contingency		0	0.04701	9999	SPP-SWPS-03'
FNSL-Iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.03371	9999	NEB01WAPAB3'
FNSL-Iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.03135	9999	NEB01WAPAB3'
FNSL-Iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.03831	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.09179	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.0515	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.0355	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.08643	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.04804	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.03696	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.08863	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.04969	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.04018	9999	ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.09486	9999	ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.05366	9999	ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.03057	9999	ATC_B2_BE2_G'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03931	102.4489	BASE CASE'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03106	111.952	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03106	110.831	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03106	101.8358	G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03106	101.1099	G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04136	100.174	ELK CITY 230KV - SWEETW76 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03274	109.2346	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.0376	105.9195	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0376	133.9176	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04004	114.6402	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHDARD 138KV CKT 1'	153	0.04004	104.5323	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03261	103.0855	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03261	102.3765	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03274	103.2059	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0376	125.2043	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.04004	107.1532	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03261	100.4016	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.05841	104.6623	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03544	100.66	2008-047T 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03544	100.66	2008-047T 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0302	105.2278	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0302	105.2278	MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03033	109.5513	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04705	100.3369	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03582	108.4956	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03582	107.482	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04146	100.4566	AMARILLO SOUTH INTERCHANGE - NICHOLS STATION 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04353	103.3702	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04643	109.6219	AMARILLO SOUTH INTERCHANGE - G07-48T 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04353	101.4133	CANYON EAST SUB - CANYON WEST SUB 115KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04236	101.8615	SWISHER COUNTY INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04643	116.0479	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05731	120.6459	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_001	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.03106	100.5757	G08-14T 345.00 - TUCO INTERCHANGE 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.04136	100.1731 ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'			153	0.05841	104.5022 MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'			153	0.03476	102.6806 DBL-MEDLO-WF
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03476	129.9175 DBL-MEDLO-WF
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'			153	0.03844	102.6536 DBL-MEDLO-WF
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'			110	0.04518	222.0384 DBL-MEDLO-WF
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.04518	270.4292 DBL-MEDLO-WF
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.04076	125.1533 DBL-WOOD-MED
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'			153	0.03866	100.3364 DBL-WOOD-MED
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.04353	102.4005 SPP-SWFS-V05'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	124.8862 GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	121.7231 GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.1988 GEN527161 1-MUSTANG GEN #1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.1987 GEN527162 1-MUSTANG GEN #2'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.8548 GEN527163 1-MUSTANG GEN #3 22 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.2613 GEN527164 1-MUSTANG GEN #4 22 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.2545 GEN527165 1-Mustang Gen #5'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.4479 GEN527901 1-HOBBS PLANT #1 (CT)'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	100.4477 GEN527902 1-HOBBS PLANT #2 (CT)'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	350	0.03931	103.4705 GEN527903 1-HOBBS PLANT #3 (ST)'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency			0	0.65183	9999 DBL-G0847-WO'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'			110	0.03628	104.0743 BASE CASE'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.03628	130.8811 BASE CASE'
FDNS	11G	G10_040	FROM->TO	LAWEASOKLINI'			425	0.05774	107.9 BASE CASE'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.0442	108.6519 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04423	108.6519 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.2739	108.6519 CLINTON AIR FORCE BASE TAP - ELK CITY 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.0442	107.6878 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04423	107.6878 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.2739	107.6878 CLINTON AIR FORCE BASE TAP - HOBART JUNCTION 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.05422	101.3539 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.05424	101.3539 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.20962	101.3539 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03033	110.3461 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'			110	0.03363	110.3461 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.0363	140.2382 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'			287	0.1083	107.6375 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'			287	0.10833	107.6375 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'			287	0.1083	106.6875 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'			287	0.10833	106.6875 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03033	104.8031 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.0363	136.121 G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03613	101.7773 CLINTON JUNCTION - ELK CITY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03308	101.8325 WALKOMIS - WALKOMIS TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03308	102.0615 HENESSEY - WALKOMIS 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03308	102.6084 DOVER SW - HENESSEY 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03118	103.836 DEWEY - SOUTHARD 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03102	104.7616 ALVA - KNOBHILL 69KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03297	110.6699 KNOBHILL - MOORELAND 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03118	104.3391 EL RENO - ROMAN NOSE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03118	103.2734 ROMAN NOSE - SOUTHARD 138KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04205	105.5787 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04207	105.5787 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.21351	105.5787 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.03209	105.5787 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'			153	0.03467	106.3089 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'			153	0.03803	106.3089 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03467	134.3925 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03803	134.3925 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'			153	0.04045	115.0598 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHARD 138KV CKT 1'			153	0.04045	104.9007 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'			110	0.03845	123.0108 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.03845	156.1469 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04205	100 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.04207	100 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.21351	100 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'			170	0.03209	100 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03467	125.7626 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03803	125.7626 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'			153	0.04045	107.674 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'			110	0.03845	117.9035 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.03845	150.2003 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'			153	0.0308	105.7071 MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'			153	0.03022	105.7071 MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'			153	0.03264	105.7071 MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'			153	0.05949	105.7071 MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03277	105.977 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03062	105.977 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.03832	123.7745 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03277	105.977 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03062	105.977 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'			95.6	0.03832	123.7745 MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03295	108.5624 CEDARDALE - MOORELAND 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03295	108.3424 CEDARDALE - OKEENE 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'			124	0.03266	105.3904 DOVER SW - OKEENE 138KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03047	101.8722	BORDER 7345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03213	107.9375	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03093	107.9375	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03661	100.7398	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03048	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_041	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03045	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_051	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03063	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_047	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03111	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03626	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04305	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03571	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03435	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04749	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04815	104.4009	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03033	104.0425	G08-14T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0363	135.5528	G08-14T 345.00 - TUCO INTERCHANGE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03667	108.8788	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03667	138.6659	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03795	134.5601	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	135.1162	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04387	133.929	ST JOHN - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03735	125.9473	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	135.3142	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03701	135.0774	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03048	102.3761	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03735	123.4882	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03667	108.0742	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03667	137.7377	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04046	109.4501	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04046	139.3064	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03612	135.2773	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03139	105.9159	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	129.4862	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04148	129.4862	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	163.5199	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04148	163.5199	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03139	105.9159	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	129.4862	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04148	129.4862	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	163.5199	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04148	163.5199	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03588	126.1162	ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03786	135.5197	CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03369	134.805	59TH ST - EL PASO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	109.5116	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	140.4535	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	108.3335	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	138.0396	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	134.4766	CHISHOLM - SEVENTEENTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	114.136	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	145.7819	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03597	134.7941	EL PASO - ROSE HILL 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03722	137.7141	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03722	173.0249	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	112.8076	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	144.2391	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	111.3362	HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	142.632	HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07313	134.491	NINNESCO3 115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07313	134.2106	NINNESCO3 115.00 - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	109.8309	MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	127.1383	MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03508	134.1183	MULLERGREEN - SPEARVILLE 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03508	125.6685	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03048	101.823	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03735	124.9216	G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03654	134.0379	GRAND ISLAND - SWEETWATER 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03578	100.2833	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03578	100.2833	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03297	110.6612	KNOBHILL (KNOBHILL4) 138/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.0308	105.5882	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03022	105.5882	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03264	105.5882	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.05949	105.5882	MOORELAND 345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03627	134.8508	BENTON (BENTON1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03627	134.1718	BENTON (BENTON2X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03598	135.742	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03598	135.7486	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	109.7809	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	139.6859	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365	111.5247	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365	141.693	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.8751	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.3392	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	109.5606	MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMUNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	127.3029	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03764	116.6679	'DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03362	116.6679	'DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03362	115.8838	'DBL-COM-MEDL'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03349	102.7573	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.0351	102.7573	'DBL-MEDLO-WT'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0349	130.0048	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0351	130.0048	'DBL-MEDLO-WT'
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03374	102.7748	'DBL-MEDLO-WI'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 151KV CKT 1'	86	0.21993	119.7045	'DBL-MEDLO-WI'
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0502	219.2343	'DBL-MEDLO-WI'
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06546	219.2343	'DBL-MEDLO-WI'
FDNS	11G	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04498	219.2343	'DBL-MEDLO-WI'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05806	219.2343	'DBL-MEDLO-WI'
FDNS	11G	ASGI_2010_020	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0325	219.2343	'DBL-MEDLO-WI'
FDNS	11G	ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0325	219.2343	'DBL-MEDLO-WI'
FDNS	11G	G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04518	219.2343	'DBL-MEDLO-WI'
FDNS	11G	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0502	267.2235	'DBL-MEDLO-WI'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06546	267.2235	'DBL-MEDLO-WI'
FDNS	11G	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04498	267.2235	'DBL-MEDLO-WI'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05806	267.2235	'DBL-MEDLO-WI'
FDNS	11G	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0325	267.2235	'DBL-MEDLO-WI'
FDNS	11G	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0325	267.2235	'DBL-MEDLO-WI'
FDNS	11G	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04518	267.2235	'DBL-MEDLO-WI'
FDNS	11G	ASGI_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08632	100.4983	'DBL-HIT-G084'
FDNS	11G	ASGI_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08638	100.4983	'DBL-HIT-G084'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03637	100.9356	'DBL-G0847-WO'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	127.247	'DBL-G0847-WO'
FDNS	11G	ASGI_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08632	112.437	'DBL-G0847-WO'
FDNS	11G	ASGI_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08638	112.437	'DBL-G0847-WO'
FDNS	11G	G10_001	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06336	112.437	'DBL-G0847-WO'
FDNS	11G	ASGI_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08632	111.2259	'DBL-G0847-WO'
FDNS	11G	ASGI_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.08638	111.2259	'DBL-G0847-WO'
FDNS	11G	G10_001	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06336	111.2259	'DBL-G0847-WO'
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03968	100	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.04132	100	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03968	126.6479	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.04132	126.6479	'DBL-WOOD-MED'
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03935	101.4081	'DBL-WOOD-MED'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03353	103.8484	'DBL-WOOD-MED'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04401	103.8484	'DBL-WOOD-MED'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03242	101.7814	'OGE3TERM1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	107.8593	'SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	137.4919	'SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	100.3983	'SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	139.131	'SPP-WERE-30'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	110.8511	'SPP-WERE-32'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	142.0567	'SPP-WERE-32'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.4777	'GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6418	'GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.4775	'GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6488	'GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.5172	'GEN334440 1-SABINE UNIT 4'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.2023	'GEN334440 1-SABINE UNIT 4'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.428	'GEN335204 1-NELSON UNIT 4'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.1469	'GEN335204 1-NELSON UNIT 4'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.7439	'GEN335206 1-NELSON UNIT 6'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.4415	'GEN335206 1-NELSON UNIT 6'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	104.8115	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.8911	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	137.5271	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.8932	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.8675	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.5224	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.358	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	106.402	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	109.3036	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	139.1563	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.3546	'GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.1975	'GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.9001	'GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.7943	'GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	103.5283	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	106.8391	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.3137	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	103.2733	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	136.0659	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	104.2529	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.2826	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	136.8251	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	105.3367	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	108.1643	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	137.842	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	103.4758	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.0389	'GEN338143 1-INDEPENDENCE UNIT #1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	136.5441	GEN338143 1-INDEPENDENCE UNIT #1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	103.5105	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.0262	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	136.5294	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.7447	GEN338189 1-LS POWER OSCEOLA UNIT G1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.8773	GEN338189 1-LS POWER OSCEOLA UNIT G1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.6443	GEN501801 1-DOLET HILLS UNIT1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.9894	GEN501801 1-DOLET HILLS UNIT1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.7547	GEN501812 1-RODEMACHER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.4233	GEN501812 1-RODEMACHER UNIT 2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	102.2087	GEN501813 1-RODEMACHER UNIT 3'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.874	GEN501813 1-RODEMACHER UNIT 3'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.8842	GEN509394 1-FLINT CREEK	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6251	GEN509394 1-FLINT CREEK	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.9664	GEN509403 1-PIRKEY GENERATION'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.2517	GEN509403 1-PIRKEY GENERATION'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.2531	GEN509404 1-WELSH #1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.2531	GEN509405 1-WELSH #2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.2532	GEN509406 1-WELSH #3'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.8399	GEN511839 1-NORTHEASTERN STATION #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.2931	GEN511839 1-NORTHEASTERN STATION #2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.6792	GEN511840 1-NORTHEASTERN STATION #3'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.3895	GEN511840 1-NORTHEASTERN STATION #3'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.7125	GEN511841 1-NORTHEASTERN STATION #4'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.4205	GEN511841 1-NORTHEASTERN STATION #4'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.3769	GEN512688 2-GRDA1 GSU2 22'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	133.9398	GEN512688 2-GRDA1 GSU2 22'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.5119	GEN512689 1-GRDA1 GSU1 22'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.0444	GEN512689 1-GRDA1 GSU1 22'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	106.8637	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.754	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	104.1809	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.3074	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.5494	GEN515223 1-MUSKOGEE 4G'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.5538	GEN515225 1-MUSKOGEE 5G'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.9814	GEN515226 1-MUSKOGEE 6G'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.1355	GEN515226 1-MUSKOGEE 6G'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03211	112.4475	GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03315	112.4475	GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	100.2951	GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	126.5507	GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03211	110.7085	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03315	110.7085	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	100.5147	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	125.8024	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	125.6164	GEN531447 1-HOLCOMB GENERATOR'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6624	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6737	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.6165	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	104.4379	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.7139	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.805	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	124.8536	GEN539630 1-FLATRDG1 34.500'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.9114	GEN542951 5-HAWTHORN UNIT #5'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.4803	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.927	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	137.5926	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.2699	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.5408	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	137.1474	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	135.5331	GEN542957 1-IATAN UNIT #1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	101.2254	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	106.8451	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	136.3229	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	100.3995	GEN560598 1-G06-49 0.6000'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	126.6662	GEN560598 1-G06-49 0.6000'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	134.1485	GEN640009 1-COOPER NUCLEAR STATION'	
FNSL	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03029	105.7306	GEN336153 1-WATERFORD UNIT#3'	
FNSL	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	106.6383	GEN336153 1-WATERFORD UNIT#3'	
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	138.3889	GEN336153 1-WATERFORD UNIT#3'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency		0.04166		9999 TRF-STE GALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency		0.04966		9999 TRF-STE GALL'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency		0.04662		9999 TRF-STE GALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency		0.03331		9999 NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency		0.03108		9999 NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency		0.03819		9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency		0.09165		9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency		0.05136		9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency		0.03538		9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency		0.0863		9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency		0.04791		9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency		0.03684		9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency		0.0885		9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency		0.04955		9999 ATC_B2_BE2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency		0.04006		9999 ATC_B2_BE2_G'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09472		9999 'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05352		9999 'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03033		9999 'ATC_B2_BE2_G'
FNSL	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03631		112.1504 'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.0885		9999 'DBL-SPRVL-CO'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.0865		9999 'DBL-COM-MEDL'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04547		100.4998 'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10508		114.615 'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10508		101.8536 'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03113		106.7364 'GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03113		107.9603 'GEN525562 1-TOLK GEN #2 24 KV'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37313		9999 'DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.37313		9999 'DBL-COM-MEDL'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.25191		9999 'DBL-MEDLO-WT'
FNSL-Iteration limit exceeded	11G	G10_049		Non Converged Contingency	0	0.09569		9999 'DBL-G0847-WO'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21322		103.0253 'BASE CASE'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348		129.8232 'BASE CASE'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628		120.3442 'BASE CASE'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628		153.0886 'BASE CASE'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628		125.6211 'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628		159.1806 'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21407		136.5246 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03842		137.7767 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03842		173.1567 'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21407		134.4349 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03842		132.7385 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03842		167.3786 'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21444		104.0856 'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21465		140.3616 'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21444		100.7742 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21465		137.3332 'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03537		100.4314 'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21376		134.9663 'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2142		101.867 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446		138.4965 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674		123.8213 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674		157.1125 'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03666		130.8918 'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03666		165.2774 'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21512		136.1372 'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03795		125.0196 'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03795		158.5017 'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2142		104.5072 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21446		141.3362 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674		124.962 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674		158.435 'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21348		125.4857 'KINSLEY - PAWNEE-EDWARDS_JCT 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04387		123.9108 'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04387		157.2166 'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46827		108.0565 'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03733		124.2345 'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03733		157.629 'G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664		124.3129 'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664		157.682 'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03701		124.6263 'MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03701		158.0478 'MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21402		125.0187 'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03733		114.8254 'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03733		146.6214 'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03666		127.6177 'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03666		161.5127 'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04045		128.7244 'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04045		162.7209 'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03611		123.7415 'ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03611		157.0103 'ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21476		105.0599 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502		141.7113 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04146		149.916 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04146		187.1258 'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21476		105.0599 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.21502		141.7113 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04146		149.916 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04146		187.1258 'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03567		116.3911 'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03567		148.5323 'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22125		125.1541 'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22125		116.5599 'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST_JOHN 115KV CKT 1'	86	0.22151		162.5598 'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03785		125.6044 'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03785		159.1736 'CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365		127.7291 'CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365		161.5642 'CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365		125.9346 'CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365		159.5009 'CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365		132.0131 'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365	166.4774	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03721	155.7333	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03721	194.0497	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	130.7516	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	164.8988	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03602	116.8996	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03602	149.1392	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03393	116.1692	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03393	148.2546	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	129.711	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	163.8522	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.17447	136.7376	CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21602	133.9069	MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07312	127.3492	NINNESCS 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07312	161.1954	NINNESCS 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07312	127.1166	NINNESCS 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07312	160.9238	NINNESCS 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39034	107.9215	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39034	100.0625	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.3906	144.7144	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39034	107.9449	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39034	100.0845	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.3906	144.7417	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	119.1513	GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	117.8899	Q01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	119.6368	MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20809	126.9876	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20809	160.6768	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	128.2099	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.3351	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21613	120.375	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03507	123.6426	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03507	156.9095	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39363	100.6382	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.39389	127.1264	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03567	115.9897	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03567	148.069	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21362	100.5641	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21388	137.0865	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	114.415	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	146.3151	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21362	100.5641	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21388	137.0865	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	114.415	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	146.3151	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03597	123.8626	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03597	157.1392	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03597	123.8689	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03597	157.1462	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	127.5225	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	161.3448	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03649	129.287	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03649	163.3744	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21333	104.8094	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21359	141.319	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.2251	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.485	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.28334	115.8771	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28334	107.6786	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2836	153.0332	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	127.8968	MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.4794	MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	86	0.26259	124.3266	MULLERGREEN (MULGRENE) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04412	124.3875	DBL-WOOD-MED	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04412	157.8042	DBL-WOOD-MED	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21602	133.6637	SPP-MKEC-02	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21427	134.414	SPP-MKEC-08	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365	125.4566	SPP-WERE-28	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365	158.9483	SPP-WERE-28	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0365	126.5897	SPP-WERE-30	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0365	160.2485	SPP-WERE-30	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	129.216	SPP-WERE-32	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	163.2805	SPP-WERE-32	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.1818	GEN335831 1-RIVERBEND UNIT#1	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.8748	GEN335831 1-RIVERBEND UNIT#1	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.6595	GEN336251 1-NINEMILE POINT UNIT#4	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.9156	GEN336251 1-NINEMILE POINT UNIT#4	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	133.8077	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	126.5316	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	160.2345	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.7863	GEN337041 1-GERALD ANDRUS	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.0617	GEN337041 1-GERALD ANDRUS	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.2087	GEN337652 1-WHITE BLUFF UNIT #1	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.5503	GEN337652 1-WHITE BLUFF UNIT #1	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.3709	GEN337653 1-WHITE BLUFF UNIT #2	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.7377	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.6162	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.0221	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.4464	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.0217	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.4189	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.7918	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.4025	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.773	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.8775	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.1664	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.7888	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.0679	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.4224	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.8445	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.5377	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.703	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.3618	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.5005	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	124.8313	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	115.5269	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	147.459	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	133.8069	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	134.0829	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	134.0516	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21322	100.722	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	137.1737	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	134.4221	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	169.3018	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	108.1456	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	139.0726	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	122.4348	GEN539677 3-A. M. MULLERGRN GENERATOR'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.5012	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.0395	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.1265	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.6064	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.7442	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.011	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.4472	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.8235	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	125.7057	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.0391	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.049	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	117.315	GEN560342 1-G10-49 0.6900'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	117.2591	GEN560353 1-G10-52 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	117.12	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	149.354	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	124.0946	GEN560502 1-G01_039A 0.6000'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.9601	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	149.1179	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.6145	GEN560558 1-G06-022 0.6900'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.7782	GEN560558 1-G06-022 0.6900'
FNSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.8882	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.4915	GEN336153 1-WATERFORD UNIT#3'
FNSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.09096	9999 DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.09096	9999 DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.17953	9999 DBL-MEDLO-WT	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05105	100.5387	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGRN - SPEARVILLE 230KV CKT 1'	355.3	0.07321	114.8659	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGRN - SPEARVILLE 230KV CKT 1'	355.3	0.07321	102.1096	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03498	106.9545	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03498	107.9575	GEN525562 1-TOLK GEN #2 24 KV'
FNSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.28418	9999 DBL-SPRVL-CO'	
FNSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.28418	9999 DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.22571	9999 DBL-MEDLO-WT	
FNSL	11G	G10_053	TO->FROM	MULLERGRN - SPEARVILLE 230KV CKT 1'	355.3	0.03973	112.2001	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.28337	9999 DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.11186	9999 DBL-MEDLO-WT	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03806	100.4634	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	MULLERGRN - SPEARVILLE 230KV CKT 1'	355.3	0.1085	114.787	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	MULLERGRN - SPEARVILLE 230KV CKT 1'	355.3	0.1085	102.0146	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	150.0217	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	187.2471	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	150.0217	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	187.2471	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03369	124.4394	DBL-WOOD-MED'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03369	157.8698	DBL-WOOD-MED'
FNSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.57002	9999 DBL-COM-MEDL'	
FNSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.33428	9999 DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21322	100.2666	BASE CASE'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	127.1933	BASE CASE'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	119.9254	BASE CASE'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	152.6032	BASE CASE'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03629	125.1886	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03629	158.6795	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03469	108.6202	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03763	108.6202	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21407	133.8548	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	137.5665	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674	172.048	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21407	131.8342	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	132.3139	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	166.8922	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21444	100.8322	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21466	137.3451	'Hitchland Interchange - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21466	134.5933	'FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04545	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_041	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03078	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03128	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_047	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03185	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03803	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05098	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03853	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03536	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04705	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05641	100.3496	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21377	131.9187	'KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21446	135.8235	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674	123.3666	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674	156.6089	'KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03666	130.4253	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03666	164.7337	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.10509	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.10851	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.07324	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	ASGI_2010_020	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03268	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	ASGI_2010_021	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03268	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.0406	112.8263	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21512	133.444	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03795	124.5686	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03795	157.9775	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.2142	101.9664	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21466	138.6729	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03674	124.5351	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03674	157.9405	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	122.8656	'KINSLEY - PAWNEE-EDWARDS_JCT 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04387	123.4301	'ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04387	156.6572	'ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46827	101.8579	'ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03734	123.7713	'G08-18 345.00 - HOLCOMB 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03734	157.0945	'G08-18 345.00 - HOLCOMB 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03665	123.8847	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03665	157.1861	'MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03701	124.1804	'MINGO - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03701	157.531	'MINGO - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21402	122.4229	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03734	114.4227	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03734	146.1546	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03666	127.1794	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03666	161.0052	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.10509	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.10851	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.07324	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	ASGI_2010_020	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03268	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	ASGI_2010_021	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03268	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.0406	100.0582	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04046	128.2667	'BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04046	162.1899	'BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03611	123.3242	'ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03611	156.5268	'ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21477	102.5124	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21502	139.0263	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	149.3961	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04147	149.3961	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	186.5242	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04147	186.5242	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21477	102.5124	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21502	139.0263	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03459	149.3961	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04147	149.3961	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03459	186.5242	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04147	186.5242	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03567	115.9763	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03567	148.0515	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.22126	122.4413	'CIRCLE - MULLERGREN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22126	113.9634	'CIRCLE - MULLERGREN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.22152	159.7195	'CIRCLE - MULLERGREN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03785	125.1585	'CIRCLE - MULLERGREN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03785	158.6566	'CIRCLE - MULLERGREN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	127.3161	'CENTENNIAL - COWSKIN 138KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	161.085	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	125.5199	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	159.0199	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	131.6041	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	165.9891	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03721	155.3298	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03721	193.5786	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	130.5968	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	164.8609	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03602	116.485	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03602	148.6578	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03393	115.7737	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03393	147.7954	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	129.2966	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	163.3714	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.17447	134.5021	CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21602	131.2466	MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07313	126.6912	NINNES3 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07313	160.4297	NINNES3 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07313	126.4555	NINNES3 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07313	160.1548	NINNES3 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39034	103.3981	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.3906	139.9581	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39034	103.4246	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.3906	139.9883	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	116.351	GREENSBURG - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	115.1043	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.23249	116.8298	MEDICINE LODGE - SUN CITY 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.2081	124.9199	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.2081	158.2886	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	127.7901	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	147.8503	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21613	117.7288	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03507	123.2248	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03507	156.427	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.39389	132.4002	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03567	115.5748	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03567	147.5881	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21388	134.3752	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	114.0024	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	145.8372	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21388	134.3752	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	114.0024	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	95.6	0.03597	145.8372	COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03597	156.6582	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03597	123.454	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03597	156.6582	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03645	127.0995	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03645	160.8545	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03649	128.863	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03649	162.883	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21333	102.2599	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21359	138.6409	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.8048	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.004	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.28335	112.5777	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28335	104.5278	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2836	149.5578	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	127.4775	MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	147.9947	MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.26259	121.1852	MULLERGREEN (MULGRENE6) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21337	132.5536	DBL-G0847-WO'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03369	123.8813	DBL-WOOD-MED'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04413	123.8813	DBL-WOOD-MED'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03369	157.2186	DBL-WOOD-MED'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04413	157.2186	DBL-WOOD-MED'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21602	131.0007	SPP-MKEC-02	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21427	131.8482	SPP-MKEC-08	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	125.0419	SPP-WERE-28'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	158.4673	SPP-WERE-28'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03651	126.1765	SPP-WERE-30'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03651	159.769	SPP-WERE-30'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03664	128.7993	SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03664	162.7971	SPP-WERE-32'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.7643	GEN335831 1-RIVERBEND UNIT#1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.1908	GEN335831 1-RIVERBEND UNIT#1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.2624	GEN336251 1-NINEMILE POINT UNIT#4'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.4596	GEN336251 1-NINEMILE POINT UNIT#4'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	126.1163	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.7534	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.3847	GEN337041 1-GERALD ANDRUS'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.6004	GEN337041 1-GERALD ANDRUS'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.7822	GEN337652 1-WHITE BLUFF UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.0558	GEN337652 1-WHITE BLUFF UNIT #1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.947	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.2464	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.1924	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.5307	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.039	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.5086	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.9994	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.3062	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.983	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.2873	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.4796	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.7093	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.3713	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.5841	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.0047	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.1605	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03111	106.5996	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_052	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03493	106.5996	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_012	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03166	106.5996	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_001	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0387	106.5996	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.1244	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.2238	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03111	107.8697	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_052	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03493	107.8697	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03166	107.8697	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_001	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0387	107.8697	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	115.9469	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.0194	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	122.2298	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	146.9863	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	131.2161	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	131.4671	GEN532651 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	131.4001	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	124.5216	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	133.9993	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	168.8116	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	107.7487	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	138.583	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	119.7996	GEN539677 3-A. M. MULLERGREN GENERATOR'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.0866	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.5594	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.7345	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.1557	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.3646	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.5752	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.0245	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.3338	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	123.1012	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	115.6293	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	147.5739	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	117.2039	GEN560342 1-G10-49 0.6900'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.8447	GEN560353 1-G10-52 0.6900'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.7314	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.8623	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	TO->FROM	'ST JOHN - ST JOHN 115KV CKT 1'	86	0.21348	121.4891	GEN560502 1-G01_039A 0.6000'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.5458	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.6374	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	116.2146	GEN560558 1-G06-022 0.6900'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	148.2684	GEN560558 1-G06-022 0.6900'
FNLSL	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.4732	GEN336153 1-WATERFORD UNIT#3'
FNLSL	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.0108	GEN336153 1-WATERFORD UNIT#3'
FNLSL-Iteration limit exceeded	11G	G10_012	Non Converged Contingency		128	0.03979	37.09063	GRAPEVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FNLSL-Blown up	11G	G10_045	Non Converged Contingency		0	0.37311		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_041	Non Converged Contingency		0	0.04226		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_051	Non Converged Contingency		0	0.06915		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_047	Non Converged Contingency		0	0.07491		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.28417		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_048	Non Converged Contingency		0	0.23526		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.09099		9999 DBL-SPRVL-CO'
FNLSL-Blown up	11G	G10_045	Non Converged Contingency		0	0.37311		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_041	Non Converged Contingency		0	0.04226		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_051	Non Converged Contingency		0	0.06915		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_047	Non Converged Contingency		0	0.07491		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.56998		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.28417		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_048	Non Converged Contingency		0	0.23526		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.09099		9999 DBL-COM-MEDL'
FNLSL-Blown up	11G	G10_045	Non Converged Contingency		0	0.25193		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	G10_053	Non Converged Contingency		0	0.33429		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	G10_052	Non Converged Contingency		0	0.22576		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	G10_048	Non Converged Contingency		0	0.11844		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	G10_049	Non Converged Contingency		0	0.17956		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	ASGI_2010_020	Non Converged Contingency		0	0.16916		9999 DBL-MEDLO-WT
FNLSL-Blown up	11G	ASGI_2010_021	Non Converged Contingency		0	0.16916		9999 DBL-MEDLO-WT

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.13027		9999 DBL-MEDLO-WT
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23506		9999 DBL-MEDLO-WT
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13867		9999 SPP-SWPS-03
FNSL-iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13878		9999 SPP-SWPS-03
FNSL-iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.0464		9999 SPP-SWPS-03
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03818		9999 050 1'
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09166		9999 050 1'
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05136		9999 050 1'
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03537		9999 050 2'
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0863		9999 050 2'
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04791		9999 050 2'
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03683		9999 ATC_B2_BE2'
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0885		9999 ATC_B2_BE2'
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04956		9999 ATC_B2_BE2'
FNSL-iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04004		9999 ATC_B2_BE2_G'
FNSL-iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09472		9999 ATC_B2_BE2_G'
FNSL-iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05353		9999 ATC_B2_BE2_G'
FNSL-iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03044		9999 ATC_B2_BE2_G'
FDNS	11G	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	126.6333	'BASE CASE'
FDNS	11G	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	133.0464	'BASE CASE'
FDNS	11G	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.8692	'BASE CASE'
FDNS	11G	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	111.3442	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	116.7135	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	111.0678	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	116.4504	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03272	155.6634	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03272	193.5218	'DBL-MEDLO-WT'
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	1052	0.24599	28.10933	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	351	0.07258	48.17637	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.21774		9999 SPP-SWPS-02A'
FNSL-iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13889		9999 SPP-SWPS-03'
FDNS	11G	ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03274	155.5278	'DBL-MEDLO-WT'
FDNS	11G	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03274	193.3661	'DBL-MEDLO-WT'
FNSL-iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	351	0.07265	48.09349	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.21725		9999 SPP-SWPS-02A'
FNSL-iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13902		9999 SPP-SWPS-03'
FDNS	11G	G10_046	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03127	155.6375	'DBL-MEDLO-WT'
FDNS	11G	G10_046	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03127	193.4919	'DBL-MEDLO-WT'
FNSL-iteration limit exceeded	11G	G10_046		Non Converged Contingency	1052	0.2913	28.167	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FNSL-iteration limit exceeded	11G	G10_046		Non Converged Contingency	351	0.05578	48.10297	'GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNSL-iteration limit exceeded	11G	G10_046		Non Converged Contingency	0	0.16735		9999 SPP-SWPS-02A'
FNSL-iteration limit exceeded	11G	G10_046		Non Converged Contingency	0	0.10666		9999 SPP-SWPS-03'
FDNS	11G	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	102.7125	'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	104.563	'BASE CASE'
FDNS	11G	G10_040	FROM->TO	'LAWEASOKLINI'	425	0.05638	112.4	'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	113.1731	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	109.2482	'G08-14T 345.00 - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03854	120.5449	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03854	114.8033	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	101.0657	'MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	101.0657	'MED-LDG5 345.00 - WWRDEHV7 345.00 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03679	108.7999	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03744	100	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03679	107.909	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04057	108.5779	'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	108.5682	'ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03474	125.1439	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04161	125.1439	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03474	125.1439	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04161	125.1439	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	100.6037	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03378	109.5212	'59TH ST - EL PASO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03378	108.6791	'59TH ST - GILL ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	113.1686	'CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	110.9238	'CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	119.2946	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	108.1685	'EL PASO - ROSE HILL 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03731	115.1716	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03731	146.7767	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	117.4909	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03613	100.8947	'GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	115.2771	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	100.7827	'MILAN 4 - MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	100.1289	'ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03744	101.3768	'G08-18 345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03608	109.0291	'ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03608	109.0362	'ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	112.1927	'WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0366	114.0684	'WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.992	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	100.933	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06572	155.3057	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05049	155.3057	'DBL-MEDLO-WT'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05632	155.3057	'DBL-MEDLO-WT'
FDNS	11G	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04529	155.3057	'DBL-MEDLO-WT'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03273	155.3057	DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03274	155.3057	DBL-MEDLO-WT
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04549	155.3057	DBL-MEDLO-WT
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06572	193.1087	DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06338	193.1087	DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05832	193.1087	DBL-MEDLO-WT
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04529	193.1087	DBL-MEDLO-WT
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03273	193.1087	DBL-MEDLO-WT
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03274	193.1087	DBL-MEDLO-WT
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04549	193.1087	DBL-MEDLO-WT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	110.4016	SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	111.8484	SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	114.7064	SPP-WERE-32'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.9525	GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.9625	GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	111.0553	GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.0324	GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.5274	GEN336831 1-BAXTER WILSON SES'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.1741	GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.7227	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.4041	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	110.2586	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	111.3556	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.9708	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.9565	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.2601	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.3052	GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.1759	GEN501813 1-RODEMACHER UNIT 3'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.9936	GEN509394 1-FLINT CREEK'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.1196	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.6608	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	101.2266	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	101.0156	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.2435	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.3555	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.1886	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	122.1339	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.3265	GEN542951 5-HAWTHORN UNIT #5'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	111.1498	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	110.6653	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.0474	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.9232	GEN542962 2-IATAN UNIT #2'
FNLSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	111.9895	GEN336153 1-WATERFORD UNIT#3'
FNLSL-iteration limit exceeded	11G	G10_012	Non Converged Contingency		128	0.03978	35.18507	GRAPEVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FNLSL-iteration limit exceeded	11G	ASGI_2010_020	Non Converged Contingency		351	0.07259	47.91838	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNLSL-iteration limit exceeded	11G	ASGI_2010_021	Non Converged Contingency		351	0.07266	47.91838	GRAPEVINE INTERCHANGE - STATELINE INTERCHANGE 230KV CKT 1'
FNLSL-iteration limit exceeded	11G	G10_045	Non Converged Contingency		0	0.09632	9999	DBL-HIT-G084'
FNLSL-iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.03415	9999	DBL-HIT-G084'
FNLSL-iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.16491	9999	DBL-HIT-G084'
FNLSL-iteration limit exceeded	11G	ASGI_2010_020	Non Converged Contingency		0	0.16612	9999	DBL-HIT-G084'
FNLSL-iteration limit exceeded	11G	ASGI_2010_021	Non Converged Contingency		0	0.16633	9999	DBL-HIT-G084'
FNLSL-iteration limit exceeded	11G	G10_045	Non Converged Contingency		0	0.04216	9999	TRF-STEGALL'
FNLSL-iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.04688	9999	TRF-STEGALL'
FNLSL-iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.05041	9999	TRF-STEGALL'
FNLSL-iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.04378	9999	SPP-SWPS-02A'
FNLSL-iteration limit exceeded	11G	ASGI_2010_020	Non Converged Contingency		0	0.21778	9999	SPP-SWPS-02A'
FNLSL-iteration limit exceeded	11G	ASGI_2010_021	Non Converged Contingency		0	0.21797	9999	SPP-SWPS-02A'
FNLSL-iteration limit exceeded	11G	G10_001	Non Converged Contingency		0	0.07303	9999	SPP-SWPS-02A'
FNLSL-iteration limit exceeded	11G	ASGI_2010_020	Non Converged Contingency		0	0.13892	9999	SPP-SWPS-03'
FNLSL-iteration limit exceeded	11G	ASGI_2010_021	Non Converged Contingency		0	0.13903	9999	SPP-SWPS-03'
FNLSL-iteration limit exceeded	11G	G10_001	Non Converged Contingency		0	0.04665	9999	SPP-SWPS-03'
FNLSL-iteration limit exceeded	11G	G10_048	Non Converged Contingency		0	0.03125	9999	NEB01WAPAB3'
FNLSL-iteration limit exceeded	11G	G10_052	Non Converged Contingency		0	0.03361	9999	NEB01WAPAB3'
FNLSL-iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.03803	9999	050 1'
FNLSL-iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.09151	9999	050 1'
FNLSL-iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.05121	9999	050 1'
FNLSL-iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.03523	9999	050 2'
FNLSL-iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.08616	9999	050 2'
FNLSL-iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.04777	9999	050 2'
FNLSL-iteration limit exceeded	11G	G10_041	Non Converged Contingency		0	0.03669	9999	ATC_B2_8E2'
FNLSL-iteration limit exceeded	11G	G10_051	Non Converged Contingency		0	0.08836	9999	ATC_B2_8E2'
FNLSL-iteration limit exceeded	11G	G10_047	Non Converged Contingency		0	0.04941	9999	ATC_B2_8E2'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T 138.00 138KV CKT 1'	143	0.16314	126.6014	HINTON - WEATHERFORD JCT. 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T 138.00 138KV CKT 1'	143	0.16314	126.2348	CAN_GASA 138.00 - HINTON 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON - WEATHERFORD 138KV CKT 1'	179	0.16314	103.5921	WEATHERFORD JCT. - WEATHERFORD SOUTHEAST 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T 138.00 138KV CKT 1'	143	0.16314	131.2724	WEATHERFORD JCT. - WEATHERFORD SOUTHEAST 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON CITY - THOMAS TAP 69KV CKT 1'	55	0.03861	122.4901	WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON CITY - FOSS TAP 69KV CKT 1'	72	0.03861	123.6917	WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	THOMAS TAP - WEATHERFORD 69KV CKT 1'	53	0.03861	120.8593	WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION - FOSS TAP 69KV CKT 1'	72	0.03861	124.1621	WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T 138.00 138KV CKT 1'	143	0.14431	111.9707	WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON CITY - THOMAS TAP 69KV CKT 1'	55	0.03861	130.4202	WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON CITY - FOSS TAP 69KV CKT 1'	72	0.03861	129.6689	WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	THOMAS TAP - WEATHERFORD 69KV CKT 1'	53	0.03861	129.0292	WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION - FOSS TAP 69KV CKT 1'	72	0.03861	130.1351	WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	114.9625 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION (CLINTJCT)	138/69/13.8KV	TRANSFORMER	CKT 1'	102.8409 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION (CLINTJCT)	138/69/13.8KV	TRANSFORMER	CKT 1'	102.0433 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	143 0.16314
FDNS	11G	G10_012	TO->FROM	SOUTHWESTERN STATION - WASHITA 138KV CKT 1'				108.5401 GRACINM7T 345.00 (BANK 1) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO	230.00	230KV	CKT 1'	102.7882 GEN525562 1-TOLK GEN #2 24 KV
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				101.6704 BASE CASE
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	123.9385 HINTON - WEATHERFORD JCT. 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	123.5561 CAN_GAS4 138.00 - HINTON 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.6608 LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON - WEATHERFORD 138KV CKT 1'				101.4525 WEATHERFORD JCT. - WEATHERFORD SOUTHEAST 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	128.5921 WEATHERFORD JCT. - WEATHERFORD SOUTHEAST 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON CITY - THOMAS TAP 69KV CKT 1'				120.2858 WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON CITY - FOSS TAP 69KV CKT 1'				122.0032 WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON - G07-32T	138.00	138KV	CKT 1'	118.5826 WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION - FOSS TAP 69KV CKT 1'				122.4744 WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	109.6949 WEATHERFORD SOUTHEAST - WEATHERFORD TAP 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON CITY - THOMAS TAP 69KV CKT 1'				128.2115 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON CITY - FOSS TAP 69KV CKT 1'				127.9739 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	THOMAS TAP - WEATHERFORD 69KV CKT 1'				126.7489 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION - FOSS TAP 69KV CKT 1'				128.4408 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON - G07-32T	138.00	138KV	CKT 1'	112.6786 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION (CLINTJCT)	138/69/13.8KV	TRANSFORMER	CKT 1'	101.6468 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_012	FROM->TO	CLINTON JUNCTION (CLINTJCT)	138/69/13.8KV	TRANSFORMER	CKT 1'	100.8253 WEATHERFORD TAP - WEATHERFORD WIND FARM 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	CLINTON - G07-32T	138.00	138KV	CKT 1'	122.2243 CAN_GAS4 138.00 - JENSEN ROAD 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				114.6903 NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				108.9511 TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.0318 G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.1398 G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.1254 BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.5099 ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				121.2449 MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				121.2449 MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				121.2449 MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.0541 59TH ST - EL PASO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.2106 59TH ST - GILL ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				110.1737 CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.9479 CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				116.309 COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.3247 EL PASO - ROSE HILL 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				112.5066 EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				143.5911 EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				113.9732 EVANS ENERGY CENTER SOUTH - LAKE RIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.03674
FDNS	11G	G10_012	TO->FROM	SOUTH/WESTERN STATION - WASHITA 138KV CKT 1'				260 0.0587
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.1524 ROSE HILL (ROSEHLX) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.2137 ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				109.2633 WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				111.1349 WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.098 HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'				149.0175 DBL-MEDLO-WF
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				185.8417 DBL-MEDLO-WF
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.3998 SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				108.8595 SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				111.7167 SPP-WERE-32'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.1024 GEN300006 1-NEW MADRID UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.1097 GEN300007 1-NEW MADRID UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				104.887 GEN35206 1-NELSON UNIT 6'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				108.2377 GEN35831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.1901 GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				110.019 GEN336821 1-GRAND GULF UNIT
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.8803 GEN336821 1-BAKTER WILSON SES'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.3341 GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.8668 GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.5862 GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.4271 GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				108.5357 GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.1391 GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				107.1269 GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				106.4223 GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.4527 GEN501801 1-DOLET HILLS UNIT1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'				105.3237 GEN501813 1-RODEMACHER UNIT 3'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.0554	GEN509394 1-FLINT CREEK'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	106.1771	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.7267	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03465	102.9402	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03463	102.9402	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03138	102.9402	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03842	102.9402	GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.2762	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.2879	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.2225	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	119.3517	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	105.4374	GEN542951 5-HAWTHORN UNIT #5'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	108.2442	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	107.7612	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	106.1662	GEN542957 1-IATAN UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	107.0414	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	109.1826	GEN336153 1-WATERFORD UNIT#3'	
FNLSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.0505	9999	TRF-STE GALL'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04697	9999	TRF-STE GALL'	
FNLSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.04225	9999	TRF-STE GALL'	
FNLSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03367	9999	NEB01WAPAB3'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03131	9999	NEB01WAPAB3'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09163	9999	050 1'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05134	9999	050 1'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03815	9999	050 1'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08628	9999	050 2'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04789	9999	050 2'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03535	9999	050 2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08848	9999	ATC_B2_8E2'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04953	9999	ATC_B2_8E2'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0368	9999	ATC_B2_8E2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09469	9999	ATC_B2_8E2_G'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.0535	9999	ATC_B2_8E2_G'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.04001	9999	ATC_B2_8E2_G'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03941	9999	ATC_B2_8E2_G'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.04403	102.1393	ALBION - PETERSBURG 115KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.04597	102.3829	FT RANDAL - MADISONCO 230.00 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.04158	100.0782	HOSKINS 230/34.5KV TRANSFORMER CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03974	103.9744	FT RANDAL - UTICA JCT 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03914	102.2783	FT RANDAL - SIOUX CITY 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03976	104.7792	DAK02WAPAB2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09139	9999	050 1'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08605	9999	050 2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08824	9999	ATC_B2_8E2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09444	9999	ATC_B2_8E2_G'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	100.5024	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03856	109.5404	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03856	103.8182	TATONGA7 345.00 - WVRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03624	100.0642	ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03477	112.3417	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04165	112.3417	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03477	112.3417	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04165	112.3417	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03381	101.1962	59TH ST - EL PASO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03381	100.3482	59TH ST - GILL ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03663	104.495	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03663	102.2331	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03663	110.6485	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03733	107.8445	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03733	138.2624	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03677	108.2434	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03677	106.5405	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.04403	101.1394	ALBION - PETERSBURG 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0361	100.315	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0361	100.3224	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03658	103.2644	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	105.1019	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.1917	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.04597	101.3166	FT RANDAL - MADISONCO 230.00 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03974	103.0488	FT RANDAL - UTICA JCT 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03915	101.3962	FT RANDAL - SIOUX CITY 230KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05056	133.334	DBL-MEDLO-WT	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06579	133.334	DBL-MEDLO-WT	
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04535	133.334	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05839	133.334	DBL-MEDLO-WT	
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0328	133.334	DBL-MEDLO-WT	
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0328	133.334	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04555	133.334	DBL-MEDLO-WT	
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05056	166.7298	DBL-MEDLO-WI'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06579	166.7298	DBL-MEDLO-WI'	
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04535	166.7298	DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05839	166.7298	DBL-MEDLO-WI'	
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0328	166.7298	DBL-MEDLO-WI'	
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0328	166.7298	DBL-MEDLO-WI'	
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04555	166.7298	DBL-MEDLO-WI'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03663	101.7001	SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03663	103.1715	SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03677	105.9707	SPP-WERE-32'
FDNS	11G	G10_051	TO->FROM	KELLY - MADISONCO 230.00 230KV CKT 1'	192	0.03976	103.6322	DAK02WAPAB2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	102.42	GEN335521 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.3466	GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	104.2224	GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.4922	GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	101.0518	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.7132	GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	101.5984	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	102.7205	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	101.3065	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	101.2946	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.5808	GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.4361	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100	GEN514806 1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	113.5467	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	102.5079	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	102.0113	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	100.3923	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	101.3026	GEN542962 2-IATAN UNIT #2'
FNLSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	103.3774	GEN361513 1-WATERFORD UNIT#3'
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0379	9999 050 1'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09138	9999 050 1'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05109	9999 050 1'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03511	9999 050 2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08605	9999 050 2'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04766	9999 050 2'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03656	9999 'ATC_B2_BE2'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08824	9999 'ATC_B2_BE2'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04929	9999 ATC_B2_BE2'	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03975	9999 ATC_B2_BE2_G'	
FNLSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09443	9999 ATC_B2_BE2_G'	
FNLSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05324	9999 ATC_B2_BE2_G'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03015	9999 ATC_B2_BE2_G'	
FDNS	11G	G10_048	FROM->TO	CLIFTON - GREENLEAF 115KV CKT 1'	89.6	0.0307	109.1326	EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05255	100.4943	DBL-COM-MEDL'
FDNS	11G	G10_048	FROM->TO	GREENLEAF - KNOB HILL 115KV CKT 1'	92	0.05943	100.7432	EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
FDNS	11G	G10_048	FROM->TO	CLIFTON - GREENLEAF 115KV CKT 1'	89.6	0.05943	110.4779	EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.23086	103.4893	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.14435	108.1417	DBL-SPRVL-CO'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.14435	109.8203	DBL-COM-MEDL'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.12596	103.8617	DBL-MEDLO-WT'
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04893	9999 TRP-STEGALL'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03122	9999 NEB01WAPAB3'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03022	9999 ATC_B2_BE2_G'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	101.6434	BASE CASE'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	106.5543	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03854	116.328	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03854	110.5625	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03686	107.2356	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04057	106.4048	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	105.8164	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03474	119.9994	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04162	119.9994	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03474	119.9994	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04162	119.9994	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_048	FROM->TO	CLIFTON - GREENLEAF 115KV CKT 1'	89.6	0.05944	109.5297	EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03797	105.6337	CIRCLE - MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03379	106.267	59TH ST - EL PASO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03379	105.4236	59TH ST - GILL ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	110.5995	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	108.3369	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	116.6976	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	105.2439	EL PASO - ROSE HILL 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03731	113.4218	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03731	144.7476	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	114.8262	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	112.6219	HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03261	102.4935	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03229	102.4935	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.23087	102.4935	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05207	102.4935	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03608	106.015	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03608	106.0221	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03656	109.3015	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0366	111.1761	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.0702	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.09548	107.4309	DBL-SPRVL-CO'
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.0795	107.4309	DBL-SPRVL-CO'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.14436	107.4309	DBL-SPRVL-CO'
FDNS	11G	G10_049	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03639	107.4309	DBL-SPRVL-CO'
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.09548	109.1088	DBL-COM-MEDL'
FDNS	11G	G10_053	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.11132	109.1088	DBL-COM-MEDL'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_052	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.0795	109.1088	DBL-COM-MEDL'	
FDNS	11G	G10_048	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.14436	109.1088	DBL-COM-MEDL'	
FDNS	11G	G10_049	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03639	109.1088	DBL-COM-MEDL'	
FDNS	11G	G10_045	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.0717	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_053	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.07069	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_052	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06427	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_048	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.12597	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_049	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.04063	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_001	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03696	103.2852	DBL-MEDLO-WF	
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0505	144.5207	DBL-MEDLO-WF	
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06574	144.5207	DBL-MEDLO-WF	
FDNS	11G	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0453	144.5207	DBL-MEDLO-WF	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05833	144.5207	DBL-MEDLO-WF	
FDNS	11G	ASGI_2010_020	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03275	144.5207	DBL-MEDLO-WF	
FDNS	11G	ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03275	144.5207	DBL-MEDLO-WF	
FDNS	11G	G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0455	144.5207	DBL-MEDLO-WF	
FDNS	11G	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0505	180.6292	DBL-MEDLO-WF	
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06574	180.6292	DBL-MEDLO-WF	
FDNS	11G	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0453	180.6292	DBL-MEDLO-WF	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05833	180.6292	DBL-MEDLO-WF	
FDNS	11G	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03275	180.6292	DBL-MEDLO-WF	
FDNS	11G	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03275	180.6292	DBL-MEDLO-WF	
FDNS	11G	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0455	180.6292	DBL-MEDLO-WF	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	107.7874	'SPP-WERE-28'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	109.2421	'SPP-WERE-30'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03675	112.0494	'SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.0589	GEN300006 1-NEW MADRID UNIT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.0667	GEN300007 1-NEW MADRID UNIT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	104.8384	GEN325206 1-NELSON UNIT 6'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.1686	GEN335831 1-RIVERBEND UNIT#1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.1344	GEN336251 1-NINEMILE POINT UNIT#4'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.9407	GEN336821 1-GRAND GULF UNIT'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.6285	GEN336831 1-BAXTER WILSON SES'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.2793	GEN337041 1-GERALD ANDRUS'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.8291	GEN337652 1-WHITE BLUFF UNIT #1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.5043	GEN337653 1-WHITE BLUFF UNIT #2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.3654	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.4682	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.0834	GEN338143 1-INDEPENDENCE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.0705	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.3705	GEN338189 1-LS POWER OSCEOLA UNIT G1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.3917	GEN501801 1-DOLET HILLS UNIT1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.2712	GEN501813 1-RODEMAGHER UNIT 3'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	104.8578	GEN511841 1-NORTHEASTERN STATION #4'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.2371	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.7756	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.3803	GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.3855	GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.3176	GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	119.3173	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	105.4592	GEN542951 5-HAWTHORN UNIT #5'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	108.2955	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.8064	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	106.1869	GEN542957 1-IATAN UNIT #1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	107.0799	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	104.8568	GEN640009 1-COOPER NUCLEAR STATION'	
FNSL	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03638	109.1083	GEN336153 1-WATERFORD UNIT#3'	
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.04212	9999	TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.05037	9999	TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04684	9999	TRF-STEGALL'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03358	9999	NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03123	9999	NEB01WAPAB3'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03797	9999	050 1'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09145	9999	050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05116	9999	050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03518	9999	050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08611	9999	050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04772	9999	050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03663	9999	ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08831	9999	ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04936	9999	ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03983	9999	ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09451	9999	ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05331	9999	ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03022	9999	ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03798	9999	050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03519	9999	050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03983	9999	ATC_B2_8E2_G'	
FDNS	11G	G10_047	FROM->TO	'BEATRICE POWER STATION - CLATONIA 115KV CKT 1'	137	0.26433	104.0744	BEATRICE POWER STATION - SHELDON 115KV CKT 1'	
FDNS	11G	G10_047	FROM->TO	'CLATONIA - SHELDON 115KV CKT 1'	137	0.26433	100.8302	BEATRICE POWER STATION - SHELDON 115KV CKT 1'	
FDNS	11G	G10_047	FROM->TO	'BEATRICE POWER STATION - CLATONIA 115KV CKT 1'	137	0.4016	103.407	BEATRICE POWER STATION - SHELDON 115KV CKT 1'	
FDNS	11G	G10_047	FROM->TO	'CLATONIA - SHELDON 115KV CKT 1'	137	0.4016	100.162	BEATRICE POWER STATION - SHELDON 115KV CKT 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05059	9999	050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04719	9999	050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05271	9999	ATC_B2_8E2_G'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03855	109.1849	NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03855	103.4504	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03476	110.4728	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04164	110.4728	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03476	110.4728	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04164	110.4728	MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0338	100	59TH ST - EL PASO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	103.7698	CENTENNIAL - COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	101.4824	CENTENNIAL - WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	109.9061	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03732	107.6572	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03732	137.9746	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03676	107.4722	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03676	105.7632	HOOVER NORTH - LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03532	104.6095	COOPER - ST JOE 345KV CKT 1'
FDNS	11G	G10_051	FROM->TO	MIDWAY TAP - ST JOE 161KV CKT 1'	199	0.03434	122.335	FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03434	129.1829	FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	11G	G10_051	FROM->TO	MIDWAY TAP - ST JOE 161KV CKT 1'	199	0.03434	117.8388	HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03434	124.6639	HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	11G	G10_051	FROM->TO	MIDWAY TAP - ST JOE 161KV CKT 1'	199	0.03434	117.8804	MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03434	124.7034	MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03657	102.4149	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03661	104.2797	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_051	FROM->TO	MIDWAY TAP - ST JOE 161KV CKT 1'	199	0.03558	110.5738	FAIRPORT - ST JOE 345KV CKT 1'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03558	117.4299	FAIRPORT - ST JOE 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06579	129.0961	DBL-MEDLO-WI
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05056	129.0961	DBL-MEDLO-WI
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05839	129.0961	DBL-MEDLO-WI
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04536	129.0961	DBL-MEDLO-WI
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0328	129.0961	DBL-MEDLO-WI
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03281	129.0961	DBL-MEDLO-WI
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04556	129.0961	DBL-MEDLO-WI
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06579	161.847	DBL-MEDLO-WI
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05056	161.847	DBL-MEDLO-WI
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05339	161.847	DBL-MEDLO-WI
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04536	161.847	DBL-MEDLO-WI
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0328	161.847	DBL-MEDLO-WI
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03281	161.847	DBL-MEDLO-WI
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04556	161.847	DBL-MEDLO-WI
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	100.9528	SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03662	102.4396	SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03676	105.1868	SPP-WERE-32'
FDNS	11G	G10_051	FROM->TO	MIDWAY TAP - ST JOE 161KV CKT 1'	199	0.03434	117.9343	AI15'
FDNS	11G	G10_051	TO->FROM	MIDWAY TAP - NODAWAYCO 161.00 161KV CKT 1'	199	0.03434	124.7606	AI15'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03364	101.4804	GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	103.2821	GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.1099	GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.6556	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	101.7818	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.3638	GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.3514	GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03049	100.6925	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03431	100.6925	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03104	100.6925	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03807	100.6925	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	112.629	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	101.4916	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.9999	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	100.3004	GEN542962 2-IATAN UNIT #2'
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	102.4339	GEN336153 1-WATERFORD UNIT#3'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.0423	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.04702	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.05055	9999	TRF-STEGALL'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.03135	9999	NEB01WAPAB3'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03337	9999	NEB01WAPAB3'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.0374	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.03088	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05059	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03465	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08558	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04719	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03608	9999	ATC_B2_RE2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08775	9999	ATC_B2_RE2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04881	9999	ATC_B2_RE2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03923	9999	ATC_B2_RE2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09391	9999	ATC_B2_RE2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05271	9999	ATC_B2_RE2_G'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03432	109.9258	BASE CASE'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03741	109.9258	BASE CASE'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03237	109.9258	BASE CASE'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03839	109.9258	BASE CASE'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	113.73	BASE CASE'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	145.4016	BASE CASE'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	103.3759	BASE CASE'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	103.3759	BASE CASE'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.6385	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1'
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.6385	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1'
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.7507	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1'
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.7507	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1'
FNSL	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	103.8182	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	103.8182	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	119.449	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	152.0237	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	110.678	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	110.678	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	109.6564	GEN336153 1-WATERFORD UNIT#3
FNSL	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	109.6564	GEN336153 1-WATERFORD UNIT#3
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	1052	0.10892	77.35468	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	1052	0.10898	77.35468	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	1052	0.05369	77.35468	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	1052	0.08718	77.35468	FINNEY SWITCHING STATION - STEVENSCO 345.00 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.08846	9999	DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.20182	9999	DBL-HIT-G084'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.20203	9999	DBL-HIT-G084'
FNSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.24237	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_053		Non Converged Contingency	0	0.06097	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.25693	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.09446	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.11745	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.11765	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.54094	9999	DBL-G0847-WO'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03772	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09112	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05078	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03494	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.0858	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04737	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03639	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08799	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.049	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03957	9999	ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09417	9999	ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05293	9999	ATC_B2_BE2_G'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06739	100	CAN_GAS4 138.00 - JENSEN ROAD 138KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06745	100	CAN_GAS4 138.00 - JENSEN ROAD 138KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03539	106.2325	STLN-DEMARC6230.00 - SWEETW6 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03882	106.2325	STLN-DEMARC6230.00 - SWEETW6 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04015	106.2325	STLN-DEMARC6230.00 - SWEETW6 230.00 230KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.8926	NORTH MEMPHIS REC - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.8926	NORTH MEMPHIS REC - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.016	NORTH MEMPHIS REC - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.016	NORTH MEMPHIS REC - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.9596	MEMPHIS - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.9596	MEMPHIS - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.0979	MEMPHIS - NW MEMPHIS 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.0979	MEMPHIS - NW MEMPHIS 69KV CKT 1'
FDNS-CHECK-TC-Iteration Limit Ex 11G	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.6	JERICHO - KIRBY SWITCHING STATION 115KV CKT 1'
FDNS-CHECK-TC-Iteration Limit Ex 11G	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.6	JERICHO - KIRBY SWITCHING STATION 115KV CKT 1'
FDNS-CHECK-TC-Iteration Limit Ex 11G	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.8	JERICHO - KIRBY SWITCHING STATION 115KV CKT 1'
FDNS-CHECK-TC-Iteration Limit Ex 11G	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.8	JERICHO - KIRBY SWITCHING STATION 115KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.6485	CLARENDON - JERICHO 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.6485	CLARENDON - JERICHO 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.7595	CLARENDON - JERICHO 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.7595	CLARENDON - JERICHO 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.3053	CLARENDON - CLARENDON REC 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.3053	CLARENDON - CLARENDON REC 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.4218	CLARENDON - CLARENDON REC 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.4218	CLARENDON - CLARENDON REC 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.1017	CLARENDON REC - HEDLEY 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.1017	CLARENDON REC - HEDLEY 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.2222	CLARENDON REC - HEDLEY 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.2222	CLARENDON REC - HEDLEY 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.0207	HEDLEY - NORTH MEMPHIS REC 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.0207	HEDLEY - NORTH MEMPHIS REC 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.1421	HEDLEY - NORTH MEMPHIS REC 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.1421	HEDLEY - NORTH MEMPHIS REC 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.5919	MEMPHIS - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.5919	MEMPHIS - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	103.7439	MEMPHIS - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	103.7439	MEMPHIS - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.56	ESELENE - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.56	ESELENE - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	103.7124	ESELENE - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	103.7124	ESELENE - RED RIVER ARSENAL 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.4955	CAREY - ESTELENE 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.4955	CAREY - ESTELENE 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	103.6486	CAREY - ESTELENE 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	103.6486	CAREY - ESTELENE 69KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.4758	AIRPORT - CAREY 69KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.4758	AIRPORT - CAREY 69KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07146	105.006	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07152	105.006	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07146	104.1433	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07152	104.1433	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03754	117.1781	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03754	149.3866	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03637	117.295	SMOKYHLE 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03637	149.5276	SMOKYHLE 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03566	100.9172	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03942	100.9172	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03284	100.9172	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03928	100.9172	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07195	105.629	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07201	105.629	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07195	104.741	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07201	104.741	HOLCOMB - SETAB 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03054	101.6622	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04455	101.6622	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03227	101.6622	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03814	101.6622	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0364	110.1813	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	141.3077	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07125	106.8626	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07131	106.8626	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07125	105.9152	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07131	105.9152	G08-18 345.00 - HOLCOMB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03555	100	MINGO - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03557	100	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20922	100	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03583	101.45	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0398	101.45	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03295	101.45	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03947	101.45	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03625	118.5473	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03625	150.991	MINGO - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0722	106.5759	MINGO - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07226	106.5759	MINGO - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0722	105.6593	MINGO - SETAB 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07226	105.6593	MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03589	101.3033	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03979	101.3033	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03298	101.3033	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03951	101.3033	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03659	118.624	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03659	151.0828	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07228	106.3706	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07234	106.3706	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07228	105.4612	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07234	105.4612	MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	ASGL_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03651	105.9749	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03653	105.9749	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20957	105.9749	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04361	105.4158	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04427	105.4158	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03355	105.4158	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04199	105.4158	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	ALEXANDER - NESS CITY 115KV CKT 1'	99	0.03234	100.5005	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	ALEXANDER - NESS CITY 115KV CKT 1'	99	0.03885	100.5005	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DIGHTON TAP - MANNING TAP 115KV CKT 1'	98	0.03401	105.3276	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03731	104.7384	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03731	135.1033	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07419	113.8536	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07425	113.8536	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07419	112.6534	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07425	112.6534	GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03619	120.7901	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03619	153.5774	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07146	104.8545	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07152	104.8545	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07146	103.9954	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGL_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07152	103.9954	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04006	122.057	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04006	154.973	BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03514	142.0692	G05-13T 345.00 - NEOSHO 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03358	115.1618	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0358	149.0831	ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	ASGL_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.0356	100.6549	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGL_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03562	100.6549	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20933	100.6549	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03036	115.8021	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03406	145.6059	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04107	145.6059	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03406	182.13	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04107	182.13	MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGL_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07173	105.6042	MED-LDG5 345.00 - WICHITA 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07179	105.6042	MED-LDG5	345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07173	104.7341	MED-LDG5	345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07179	104.7341	MED-LDG5	345.00 - WICHITA 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03596	100.8549	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03596	100.8549	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20933	100.8549	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03036	115.8021	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03406	145.6059	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04107	145.6059	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03406	182.13	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04107	182.13	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07173	105.6042	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07179	105.6042	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07173	104.7341	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07179	104.7341	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03535	109.403	ANDERSONCO	345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03535	140.4184	ANDERSONCO	345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.2204	108.3138	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03744	117.9979	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03744	150.3369	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03618	121.1591	CENTENNIAL	COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03618	153.928	CENTENNIAL	COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03618	119.3616	CENTENNIAL	WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03618	151.8673	CENTENNIAL	WACO 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03618	123.9449	HOOPER NORTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03618	159.1733	COWSKIN	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03686	148.9838	EVANS ENERGY CENTER NORTH	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03686	186.1972	EVANS ENERGY CENTER NORTH	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	124.4264	EVANS ENERGY CENTER SOUTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	157.6885	EVANS ENERGY CENTER SOUTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03571	110.3054	GILL ENERGY CENTER EAST	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03571	141.4704	GILL ENERGY CENTER EAST	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03365	110.0112	GILL ENERGY CENTER SOUTH	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03365	141.092	GILL ENERGY CENTER SOUTH	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	123.9449	HOOPER NORTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	156.1027	HOOPER NORTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	148.6583	MINNESCA	115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	121.8074	MILAN 4	MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03535	140.9545	MILAN 4	MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03535	108.9901	ANDERSONCO	345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03054	139.9418	ANDERSONCO	345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04455	101.9687	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03227	101.9687	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03814	101.9687	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0364	109.5404	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0364	140.5741	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07125	107.6198	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07131	107.6198	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07125	106.6446	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07131	106.6446	G08-18	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0721	104.9668	2008-047T	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07216	104.9668	2008-047T	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0721	104.105	2008-047T	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07216	104.105	2008-047T	345.00 - GRAY CO 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03562	110.3587	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03562	141.5693	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03562	110.3587	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03562	141.5693	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03593	105.4837	ELK CITY (ELKCTY-4)	138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03596	105.4837	ELK CITY (ELKCTY-4)	138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21976	105.4837	ELK CITY (ELKCTY-4)	138/69/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03539	108.5153	ELK CITY 230KV (ELKCTY-6)	230/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03862	108.5153	ELK CITY 230KV (ELKCTY-6)	230/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04915	108.5153	ELK CITY 230KV (ELKCTY-6)	230/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03447	101.0564	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03758	101.0564	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03758	101.0564	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03229	101.0564	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03862	101.0564	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07371	107.8648	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07377	107.8648	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07371	106.9517	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07377	106.9517	SHAMROCK (SHAMRCK2)	138/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03447	101.2882	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03758	101.2882	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03229	101.2882	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03862	101.2882	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07371	108.82	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07377	108.82	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07371	107.8635	SHAMROCK (SHAMRCK1)	115/69/14.4KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV					

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_001	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.05267	121.0474	MOORELAND	345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07193	106.5667	MOORELAND	345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07199	106.5667	MOORELAND	345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07193	105.5779	MOORELAND	345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07199	105.5779	MOORELAND	345.00 (MRLNDAUTO) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07269	105.3782	HITCHLAND INTERCHANGE (H TP80148301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07275	105.3782	HITCHLAND INTERCHANGE (H TP80148301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07269	104.4816	HITCHLAND INTERCHANGE (H TP80148301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07275	104.4816	HITCHLAND INTERCHANGE (H TP80148301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03432	101.4872	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03741	101.4872	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03237	101.4872	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03839	101.4872	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	106.6419	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	106.6419	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	105.8344	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	105.8344	STATELINE INTERCHANGE (H TP80154301)	230/115/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03432	100.9084	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03741	100.9084	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03237	100.9084	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03839	100.9084	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	105.3862	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	105.3862	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	104.5799	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	104.5799	Graves Sub (GE D-575998)	115/69/13.2KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03566	117.2768	ROSE HILL (ROSEHL1X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03566	149.4873	ROSE HILL (ROSEHL1X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03566	117.2823	ROSE HILL (ROSEHL3X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03566	149.4933	ROSE HILL (ROSEHL3X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03613	121.0091	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03613	153.7756	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03617	122.7976	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03617	155.8332	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	117.7909	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	150.0018	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	121.5045	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	141.1057	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03791	102.4177	DBL-SPRVL-CO'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04032	102.4177	DBL-SPRVL-CO'	
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03093	102.4177	DBL-SPRVL-CO'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03218	102.4177	DBL-SPRVL-CO'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03919	102.4177	DBL-SPRVL-CO'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03726	126.7989	DBL-SPRVL-CO'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03432	126.7989	DBL-SPRVL-CO'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07117	107.4603	DBL-SPRVL-CO'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07123	107.4603	DBL-SPRVL-CO'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07117	106.4963	DBL-SPRVL-CO'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07123	106.4963	DBL-SPRVL-CO'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03791	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03506	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04032	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03093	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03218	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03919	102.6792	DBL-COM-MEDL'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03432	126.7989	DBL-COM-MEDL'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07117	107.963	DBL-COM-MEDL'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07123	107.963	DBL-COM-MEDL'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07117	106.9863	DBL-COM-MEDL'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07123	106.9863	DBL-COM-MEDL'	
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03861	114.2828	DBL-MEDLO-WT	
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03863	114.2828	DBL-MEDLO-WT	
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21164	114.2828	DBL-MEDLO-WT	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03388	113.2251	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03188	113.2251	DBL-MEDLO-WT	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03388	142.9524	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03188	142.9524	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03101	110.9721	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	ROMAN NOSE - SOUTHWARD 138KV CKT 1'	153	0.03101	101.1202	DBL-MEDLO-WT	
FDNS	11G	G10_045	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.18734	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.18866	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.17955	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_048	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.10853	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_049	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.12707	102.0811	DBL-MEDLO-WI'	
FDNS	11G	ASGI_2010_020	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.15035	102.0811	DBL-MEDLO-WI'	
FDNS	11G	ASGI_2010_021	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.15038	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_012	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.10347	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_001	TO->FROM	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	1195	0.23846	102.0811	DBL-MEDLO-WI'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03635	102.3558	DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0308	102.3558	DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03923	102.3558	DBL-MEDLO-WI'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03344	102.3558	DBL-MEDLO-WI'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04035	102.3558	DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	86	0.21918	135.415		

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06908	108.5509	DBL-MEDLO-WT	
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09281	108.5509	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08627	108.5509	DBL-MEDLO-WT	
FDNS	11G	ASGI_2010_020	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03498	108.5509	DBL-MEDLO-WT	
FDNS	11G	ASGI_2010_021	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03498	108.5509	DBL-MEDLO-WT	
FDNS	11G	G10_001	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05132	108.5509	DBL-MEDLO-WT	
FDNS	11G	G10_045	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04862	109.8711	DBL-MEDLO-WI	
FDNS	11G	G10_053	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.06459	109.8711	DBL-MEDLO-WI	
FDNS	11G	G10_052	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.0439	109.8711	DBL-MEDLO-WI	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05739	109.8711	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03261	109.8711	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_021	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03262	109.8711	DBL-MEDLO-WI	
FDNS	11G	G10_001	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04593	109.8711	DBL-MEDLO-WI	
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04862	245.9066	DBL-MEDLO-WI	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06459	245.9066	DBL-MEDLO-WI	
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0439	245.9066	DBL-MEDLO-WI	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05739	245.9066	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03261	245.9066	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_021	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03262	245.9066	DBL-MEDLO-WI	
FDNS	11G	G10_001	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04593	245.9066	DBL-MEDLO-WI	
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04862	297.9813	DBL-MEDLO-WI	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06459	297.9813	DBL-MEDLO-WI	
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0439	297.9813	DBL-MEDLO-WI	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05739	297.9813	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03261	297.9813	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03262	297.9813	DBL-MEDLO-WI	
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04593	297.9813	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07467	112.6469	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07474	112.6469	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07467	111.583	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07474	111.583	DBL-MEDLO-WI	
FDNS	11G	ASGI_2010_020	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03815	105.9383	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03818	105.9383	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.21197	105.9383	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03576	103.0245	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03158	103.0245	DBL-WOOD-MED	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03576	130.3615	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03158	130.3615	DBL-WOOD-MED	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03107	104.0084	DBL-WOOD-MED	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0305	121.9579	DBL-WOOD-MED	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04171	121.9579	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07239	106.1222	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07245	106.1222	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07239	105.2922	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07245	105.2922	DBL-WOOD-MED	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	105.0902	SPP-AEPW-25	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	105.0902	SPP-AEPW-25	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07171	104.2322	SPP-AEPW-25	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07177	104.2322	SPP-AEPW-25	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.0313	110.9404	OGE3TERM1'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06857	101.767	OGE3TERM10'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06863	101.767	OGE3TERM10'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06857	101.0031	OGE3TERM10'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.06863	101.0031	OGE3TERM10'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03539	106.2325	SPP-SWPS-02	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03882	106.2325	SPP-SWPS-02	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04015	106.2325	SPP-SWPS-02	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03539	106.3121	SPP-SWPS-02A	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03882	106.3121	SPP-SWPS-02A	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04015	106.3121	SPP-SWPS-02A	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03544	107.2278	SPP-SWPS-03	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03888	107.2278	SPP-SWPS-03	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04023	107.2278	SPP-SWPS-03	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03444	101.3569	SPP-SWPS-K19'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03754	101.3569	SPP-SWPS-K19'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03251	101.3569	SPP-SWPS-K19'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03853	101.3569	SPP-SWPS-K19'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07697	101.4839	SPP-SWPS-K31'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07704	101.4839	SPP-SWPS-K31'	
FDNS	11G	ASGI_2010_020	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07697	100.7278	SPP-SWPS-K31'	
FDNS	11G	ASGI_2010_021	FROM->TO	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07704	100.7278	SPP-SWPS-K31'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03433	100.8365	SPP-SWPS-K51'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03741	100.8365	SPP-SWPS-K51'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03238	100.8365	SPP-SWPS-K51'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0384	100.8365	SPP-SWPS-K51'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03811	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03124	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04151	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03159	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03813	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04256	105.9592	SPP-SWPS-T03'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03433	101.1073	SPP-SWPS-T37'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03741	101.1073	SPP-SWPS-T37'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03239	101.1073	SPP-SWPS-T37'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0384	101.1073	SPP-SWPS-T37'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	104.4655	GEN337432	1-PERYVILLE UNIT #5'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	103.6175	GEN337432	1-PERYVILLE UNIT #5'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	103.6175	GEN337432	1-PERYVILLE UNIT #5'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	101.3778	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	101.3778	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	101.3778	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	117.6661	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	149.9566	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.301	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.301	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	107.3472	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	107.3472	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	101.129	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	101.129	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	101.129	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	117.4729	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	149.7338	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.0627	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.0627	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	107.1151	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	107.1151	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	102.0979	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	102.0979	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	102.0979	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	150.4481	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	150.4481	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.8933	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.8933	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	107.924	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	107.924	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	103.2255	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	103.2255	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	103.2255	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	119.0186	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	151.5243	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	109.9493	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	109.9493	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.9524	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.9524	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	101.1638	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	101.1638	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	101.1638	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	117.8697	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	150.1926	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.2163	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.2163	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	107.2647	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	107.2647	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	ASGL_2010_020	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03466	101.2315	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	ASGL_2010_021	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.03468	101.2315	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_012	TO->FROM	'CLINTON JUNCTION - ELK CITY 138KV CKT 1'	170	0.20861	101.2315	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03596	117.8543	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	150.1745	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	ASGL_2010_020	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.0708	108.2698	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	ASGL_2010_021	FROM->TO	'ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	287	0.07087	108.2698	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.2126	117.9143	BASE CASE	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2126	110.1528	BASE CASE	
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST JOHN 115KV CKT 1'	143	0.2128	103.7316	BASE CASE	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	136.6341	BASE CASE	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	171.9275	BASE CASE	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03605	142.7552	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03605	179.0016	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03192	103.7577	'KNOBHILL - MOORELAND 138KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03319	100.1191	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'CLEO CORNER - GLASS MOUNTAIN 138KV CKT 1'	153	0.03317	100.1191	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03319	126.7495	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03317	126.7495	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03585	112.8192	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'ROMAN NOSE - SOUTHARD 138KV CKT 1'	153	0.03585	102.2358	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21332	115.7813	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21332	107.5745	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05135	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04697	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04915	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06289	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06991	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03131	100.2216	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03836	158.6412	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03836	197.39	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03319	117.8997	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03317	117.8997	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	'EL RENO - ROMAN NOSE 138KV CKT 1'	153	0.03585	105.2442	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21332	113.4375	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21332	105.3411	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03836	152.7155	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTECOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03836	190.4883	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03755	106.1281	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03318	106.1281	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03633	106.1281	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_041	TO->FROM	FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.01274	106.1281	MOORELAND 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03188	101.6915	CEDARDALE - MOORELAND 138KV CKT 1'
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03188	101.4608	CEDARDALE - OKEENE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	139.8869	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	175.6842	GEN514805 1-SOONER UNIT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03332	113.0272	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0364	113.0272	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03137	113.0272	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03739	113.0272	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	110	0.036	132.4953	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.149	GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03332	113.5947	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0364	113.5947	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03137	113.5947	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03739	113.5947	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	132.4077	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.0479	GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	102.5913	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	131.9911	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	166.505	GEN531447 1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	113.9162	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2126	105.798	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	151.1648	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	188.712	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	121.3086	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	154.2944	GEN539630 1-FLATRDG1 34.500'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	100.5559	GEN539677 3-A. M. MULLERGRN GENERATOR'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.6781	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	177.7521	GEN542955 1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.3053	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	177.3199	GEN542956 2-LACYGNE UNIT #2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	139.9786	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	175.7905	GEN542957 1-IATAN UNIT #1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.6676	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.587	GEN542962 2-IATAN UNIT #2'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	102.3619	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	131.229	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	165.6178	GEN560279 1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	132.8058	GEN560353 1-G10-52 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.446	GEN560353 1-G10-52 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	132.5873	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.2019	GEN560356 1-G10-53 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	133.2557	GEN560432 1-G08-124 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.9654	GEN560432 1-G08-124 0.6900'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	100	GEN560502 1-G01_039A 0.6000'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2126	103.3381	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	132.3841	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	166.9574	GEN560522 1-G05-12 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	133.1475	GEN560549 1-G06-06 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.8411	GEN560549 1-G06-06 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	131.9861	GEN560558 1-G06-022 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	166.5163	GEN560558 1-G06-022 0.6900'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	133.3091	GEN560659 1-G07-38 0.6900'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	168.0261	GEN560659 1-G07-38 0.6900'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_045		TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05056	106	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_053		TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03144	106	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_052		TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05468	106	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_048		TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03412	106	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_001		TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.07582	106	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_049		TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.2128	119.9	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_049		FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2128	111.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_045		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.05824	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_053		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.04646	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_052		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.05674	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_048		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.08471	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_049		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.06851	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_001		TO->FROM	CIRCLE - MULLERGRN 230KV CKT 1'	319	0.04972	109.5	DBL-G0847-WO'
FNSL-CHECK-TC-Iteration Limit Ex 11G	G10_049		FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03596	173.9	DBL-G0847-WO'
FNSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.9868	GEN336153 1-WATERFORD UNIT#3'
FNSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	178.1137	GEN336153 1-WATERFORD UNIT#3'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	717	0.0132	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	717	0.05242	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	717	0.15384	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	717	0.09697	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	717	0.037	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	717	0.05603	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	717	0.05604	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_012		Non Converged Contingency	717	0.0394	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	717	0.07244	41.39882	MINGO - RED WILLOW 345KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	319	0.04764	91.85542	CIRCLE - MULLERGRN 230KV CKT 1'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	319	0.04377	91.85542	CIRCLE - MULLERGRN 230KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Blown up	11G	G10_052		Non Converged Contingency	319	0.0455	91.85542	CIRCLE - MULLERGREN 230KV CKT 1'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	319	0.08056	91.85542	CIRCLE - MULLERGREN 230KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	319	0.06745	91.85542	CIRCLE - MULLERGREN 230KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54029	87.88059	NINNESCO 115.00 - PRATT 115KV CKT 1'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	198	0.54029	85.44243	NINNESCO 115.00 - ST JOHN 115KV CKT 1'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.2692	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.04872	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.05312	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.21826	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.19166	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.06075	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.05917	9999	DBL-SPRVL-CO'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.2692	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_051		Non Converged Contingency	0	0.04872	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_047		Non Converged Contingency	0	0.05312	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.52447	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.21826	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.19166	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.06075	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.05917	9999	DBL-COM-MEDL'
FNSL-Blown up	11G	G10_045		Non Converged Contingency	0	0.24672	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_053		Non Converged Contingency	0	0.3316	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_052		Non Converged Contingency	0	0.22219	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_048		Non Converged Contingency	0	0.11583	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_049		Non Converged Contingency	0	0.17752	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	ASGI_2010_020		Non Converged Contingency	0	0.16985	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	ASGI_2010_021		Non Converged Contingency	0	0.16988	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_012		Non Converged Contingency	0	0.13061	9999	DBL-MEDLO-WT
FNSL-Blown up	11G	G10_001		Non Converged Contingency	0	0.23767	9999	DBL-MEDLO-WT
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03774	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09114	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05081	9999	050 1'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03496	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08582	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04739	9999	050 2'
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03641	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08801	9999	ATC_B2_BE2'
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04902	9999	ATC_B2_BE2'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03874	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03057	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04278	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.031	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03893	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04402	104.2553	G07-48T 230.00 - SWISHER COUNTY INTERCHANGE 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04884	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_041	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03156	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_051	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03214	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_047	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03274	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03959	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05311	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04004	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0385	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_036	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03042	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04663	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05452	109.6293	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21284	112.0518	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21284	104.0234	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05135	100.1508	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0477	100.1508	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04844	100.1508	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05388	100.1508	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0689	100.1508	KNOLL 230 - POSTROCK6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21346	116.3854	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346	108.167	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05693	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0521	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05406	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.10504	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.07235	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	CIRCLE - MULLERGREN 230KV CKT 1'	319	0.03117	106.971	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03641	140.5339	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	176.4442	KNOLL 230 - SMOKYHL6 230.00 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623	149.1249	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623	186.4002	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.08686	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.09976	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.06152	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03745	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03746	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.05256	129.2657	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05535	101.8297	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05554	101.8297	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.04883	101.8297	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_048	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.13652	101.8297	AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03838	101.8297	AXTELL - POSTROCK7 345.00 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_001	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03329	101.8297	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21412	113.7793	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21412	105.6689	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05568	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05528	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.051	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09448	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07645	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03179	103.0631	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03758	142.2644	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03758	178.4436	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21346	118.7552	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21346	110.4354	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05663	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0521	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05406	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.10504	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07235	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03117	110.9313	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03641	141.473	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03641	177.5287	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05114	100.3058	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04716	100.3058	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04489	100.3058	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08528	100.3058	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13512	100.3058	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05114	100	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04716	100	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0489	100	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08528	100	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13512	100	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0512	103.4464	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04723	103.4464	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04897	103.4464	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08535	103.4464	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13518	103.4464	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04354	140.5353	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04354	176.443	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46864	124.4887	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0363	141.6	'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0363	177.6776	'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623	144.6078	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623	181.1657	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.08686	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09976	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06152	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_020	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03745	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	ASGI_2010_021	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03746	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.05256	114.0864	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03582	133.6702	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03582	168.5199	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03582	133.6702	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03582	168.5199	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04011	146.6611	'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04011	183.4586	'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03517	133.5686	'G05-13T 345.00 - NEOSHO 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03517	168.3774	'G05-13T 345.00 - NEOSHO 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03043	101.8772	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21413	120.2506	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21413	111.8624	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05391	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0522	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05115	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08351	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07196	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03214	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03412	172.1351	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04113	172.1351	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03412	212.8427	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04113	212.8427	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03043	101.8772	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21413	120.2506	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21413	111.8624	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05391	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0522	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05115	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08351	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07196	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03214	103.0733	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03412	172.1351	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04113	172.1351	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03412	212.8427	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04113	212.8427	'MED-LDG5 345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03539	132.196	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03539	166.8077	'ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	143.8099	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	180.171	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	142.119	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	178.2304	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	143.3723	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	185.273	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0369	171.0216	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0369	211.6775	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	147.0813	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	183.9413	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03574	133.0722	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03574	167.8193	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03369	131.5322	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03369	166.0354	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03835	145.7445	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03835	182.3997	HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21338	111.4339	FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21338	103.4317	FLATRDG3 - HARPER 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21512	111.5098	MULLERGREN - PIONTP3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21512	103.5044	MULLERGREN - PIONTP3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.38963	119.3806	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.38963	111.0432	MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.38963	119.4087	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.38963	111.0689	PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04221	133.3723	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04221	168.1563	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21338	111.0566	HARPER - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20716	148.8077	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20716	185.8665	MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	144.8024	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.4333	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03477	140.9052	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03477	176.8799	MULLERGREN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.39348	117.0759	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.39348	108.8343	SEWARD - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03539	131.7901	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03539	166.3395	ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.2132	113.098	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.2132	105.0128	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05828	100.1103	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.04842	100.1103	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05225	100.1103	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08502	100.1103	2008-047T 345.00 - GRAY CO 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	92	0.21283	105.2606	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	319	0.0541	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05635	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05074	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08516	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	92	0.21283	105.2606	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.0541	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05635	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.05074	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREN 230KV CKT 1'	319	0.08516	102.7788	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	92	0.21283	105.2606	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03566	130.3411	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03566	164.7351	COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'	
FDNS	11G	G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03192	103.7482	KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER CKT 1'	
FDNS	11G	G10_045	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03755	106.0057	MOORELAND 345.00 (MRLINDALTO) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_053	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03318	106.0057	MOORELAND 345.00 (MRLINDALTO) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_052	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.03633	106.0057	MOORELAND 345.00 (MRLINDALTO) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_001	TO->FROM	'FPL SWITCH - WOODWARD 138KV CKT 1'	153	0.05274	106.0057	MOORELAND 345.00 (MRLINDALTO) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21351	103.6535	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_045	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.06725	105.815	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.07545	105.815	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.04824	105.815	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_001	TO->FROM	'MULLERGREN - SPEARVILLE 230KV CKT 1'	355.3	0.03825	105.815	POSTROCK7 345.00 (POSTROCK T1) 345/230/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0357	139.8513	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0357	175.6286	ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0357	139.8513	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0357	175.6341	ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03617	143.9345	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03617	180.3268	WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03621	145.7302	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03621	182.3928	WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.21256	119.299	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21256	110.965	CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.0215	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.9554	HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.28214	131.5867	MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28214	122.7198	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	143	0.28234	102.5914	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'NINNES3 115.00 - PRATT 115KV CKT 1'	198	0.7152	101.3825	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	144.4803	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	167.5389	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.26194	100.2214	'MULLERGREEN (MULGRENE) 230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05114	100.2146	'MIDW-CATB05'
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04716	100.2146	'MIDW-CATB05'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0489	100.2146	'MIDW-CATB05'
FDNS	11G	G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08528	100.2146	'MIDW-CATB05'
FDNS	11G	G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.13512	100.2146	'MIDW-CATB05'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21512	111.604	'SPP-MKEC-02'
FDNS	11G	G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21512	103.5947	'SPP-MKEC-02'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	141.6513	'SPP-WERE-28'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	177.6862	'SPP-WERE-28'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03622	142.7715	'SPP-WERE-30'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03622	178.976	'SPP-WERE-30'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03635	145.2597	'SPP-WERE-32'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03635	181.8423	'SPP-WERE-32'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.3066	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	177.3279	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	139.8407	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	175.6335	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	142.8195	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	178.8458	'GEN336821 1-GRAND GULF UNIT'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	139.9673	'GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	175.7796	'GEN337041 1-GERALD ANDRUS'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.3683	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.2429	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.8112	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.7547	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.7568	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.6922	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	141.5597	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	177.921	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.5867	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.495	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.5686	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	176.4742	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.036	140.0671	'GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.036	175.8943	'GEN338189 1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0483	102.4876	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.08721	103.3758	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07851	109.6475	'DBL-SPRVL-CO'
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09131	103.4871	'DBL-SPRVL-CO'
FDNS	11G	G10_045	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.0667	102.7705	'DBL-COM-MEDL'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07851	115.8975	'DBL-COM-MEDL'
FDNS	11G	G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09131	109.8113	'DBL-COM-MEDL'
FDNS	11G	G10_045	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06205	101.3583	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07419	115.8292	'DBL-MEDLO-WT'
FDNS	11G	G10_045	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04891	107.3549	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04891	240.6324	'DBL-MEDLO-WT'
FDNS	11G	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04891	291.9483	'DBL-MEDLO-WT'
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03309	107.7771	'GEN525561 1-TOLK GEN #1 24 KV'
FDNS	11G	G10_045	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03309	109.4616	'GEN525562 1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	119.0495	'BASE CASE'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	151.5096	'BASE CASE'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03612	124.4628	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03612	157.763	'LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	137.3994	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	172.6895	'NORTHWEST - TATONGA7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	132.1155	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	166.587	'TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03613	102.3804	'PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	128.1447	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	162.041	'G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03765	123.1849	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03765	156.2952	'AXTELL - POSTROCK7 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03648	123.038	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03648	156.1274	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0436	122.2668	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0436	155.2344	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46869	109.4345	'ST JOHN - ST_JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03636	122.3359	'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03636	155.5139	'MINGO - SETAB 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03671	122.438	'MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03671	155.433	'MINGO - RED WILLOW 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	125.0698	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	158.4824	'G10-16T 345.00 - SPEARVILLE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04017	127.1347	'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04017	160.8027	'BENTON - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0359	122.3272	'ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0359	155.2928	'ROSE HILL - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21416	100.3653	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04122	148.2351	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04122	185.1342	MED-LDG5	345.00 - WICHITA 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21416	100.3653	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04122	148.2351	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04122	185.1342	MED-LDG5	345.00 - WICHITA 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	115.3185	HOOVERSONCO	345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03545	146.8626	ANDERSONCO	345.00 - WOLF CREEK 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.22025	118.9722	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22025	110.6489	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03755	124.0299	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03755	157.2724	CIRCLE	MULLERGREEN 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	126.3556	CENTENNIAL	COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.8912	CENTENNIAL	COWSKIN 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.5893	CENTENNIAL	WACO 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.8664	CENTENNIAL	WACO 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	130.9352	COWSKIN	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	165.1962	COWSKIN	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03696	154.2992	EVANS ENERGY CENTER NORTH	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03696	192.2961	EVANS ENERGY CENTER NORTH	EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	129.6669	EVANS ENERGY CENTER SOUTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	163.7058	EVANS ENERGY CENTER SOUTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03581	115.5996	GILL ENERGY CENTER EAST	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03581	147.5496	GILL ENERGY CENTER EAST	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03375	114.9896	GILL ENERGY CENTER SOUTH	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03375	146.8066	GILL ENERGY CENTER SOUTH	GILL ENERGY CENTER WEST 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	123.3567	HOOVER NORTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	162.2073	HOOVER NORTH	LAKERIDGE 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07295	126.0833	NINNESCS3	115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07295	159.6839	NINNESCS3	115.00 - PRATT 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07295	125.8713	NINNESCS3	115.00 - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07295	159.4371	NINNESCS3	115.00 - ST JOHN 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38962	103.7687	MEDICINE LODGE	SAWYER 3 115.00 115KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.38962	103.7935	PRATT	SAWYER 3 115.00 115KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.20721	122.6363	MED-LDG5	345.00 345/138KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.20721	155.6849	MED-LDG5	345.00 345/138KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	127.9972	MILAN 4	MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.0286	MILAN 4	MILAN TAP 138KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03484	122.2231	MULLERGREEN	SPEARVILLE 230KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03484	155.1853	MULLERGREEN	SPEARVILLE 230KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03545	114.6089	ANDERSONCO	345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03545	146.3898	ANDERSONCO	345.00 - LACYGNE 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03572	113.6964	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03572	145.3916	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03572	113.6964	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03572	145.3916	COMANCHS	345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03576	122.4971	ROSE HILL	(ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03576	155.4772	ROSE HILL	(ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03576	122.5025	ROSE HILL	(ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03576	155.4832	ROSE HILL	(ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623	126.1362	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623	159.6622	WICHITA (WICHT11X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03627	127.8917	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03627	161.6837	WICHITA (WICHT12X)	345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21259	100	CIRCLE (CIRCLE1X)	230/115/13.8KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.0732	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.0695	HARPER (HARPER 4)	138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28218	110.1493	MEDICINE LODGE (MED-LDG4)	138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.28218	102.2061	MEDICINE LODGE (MED-LDG4)	138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	126.7948	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.1772	MILAN 4 (MILAN 4)	138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	108.1766	DBL-SPRVL-CO	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	100.3094	DBL-SPRVL-CO	
FDNS	11G	G10_049	FROM->TO	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07457	109.6404	DBL-SPRVL-CO	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03442	125.2463	DBL-SPRVL-CO	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	111.9523	DBL-COM-MEDL	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	103.9113	DBL-COM-MEDL	
FDNS	11G	G10_049	FROM->TO	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07457	115.7884	DBL-COM-MEDL	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03442	121.5283	DBL-COM-MEDL	
FDNS	11G	G10_049	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03753	101.1324	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21906	136.4941	DBL-MEDLO-WT	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21906	127.408	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	ST JOHN - ST JOHN 115KV CKT 1'	143	0.21932	104.9295	DBL-MEDLO-WT	
FDNS	11G	G10_049	FROM->TO	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08661	116.0137	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05768	107.413	DBL-MEDLO-WT	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05768	240.7541	DBL-MEDLO-WT	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05768	292.0867	DBL-MEDLO-WT	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.1157	SPP-WERE-28'	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.3185	SPP-WERE-28'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.2202	SPP-WERE-30'	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.5803	SPP-WERE-30'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	127.8693	SPP-WERE-32'	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	161.6422	SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.8948	GEN335831 1-RIVERBEND UNIT#1	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	157.1105	GEN335831 1-RIVERBEND UNIT#1	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.3773	GEN336251 1-NINEMILE POINT UNIT#4	
FDNS	11G	G10_049	TO->FROM	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.3562	GEN336251 1-NINEMILE POINT UNIT#4	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	125.2339	GEN336821	1-GRAND GULF UNIT'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	158.6583	GEN336821	1-GRAND GULF UNIT'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.5016	GEN337041	1-GERALD ANDRUS'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.4995	GEN337041	1-GERALD ANDRUS'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.9141	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.9766	GEN337652	1-WHITE BLUFF UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.0759	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.1637	GEN337653	1-WHITE BLUFF UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.3198	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.4458	GEN337910	1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	124.1501	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	157.4058	GEN337911	1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.1287	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.224	GEN338143	1-INDEPENDENCE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.1121	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.205	GEN338146	1-INDEPENDENCE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.5944	GEN338189	1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.6061	GEN338189	1-LS POWER OSCEOLA UNIT G1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.4827	GEN514805	1-SOONER UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.4757	GEN514805	1-SOONER UNIT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.1141	GEN514806	1-SOONER UNIT 2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.0505	GEN514806	1-SOONER UNIT 2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	115.2308	GEN525561	1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.1036	GEN525561	1-TOLK GEN #1 24 KV'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	114.9922	GEN525562	1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	146.8269	GEN525562	1-TOLK GEN #2 24 KV'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	114.4756	GEN531447	1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	146.2125	GEN531447	1-HOLCOMB GENERATOR'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	133.6029	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	168.3182	GEN532751	1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	106.8882	GEN539630	1-FLATRDG1 34.500'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	137.5421	GEN539630	1-FLATRDG1 34.500'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	124.2216	GEN542955	1-LACYGNE UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	157.4843	GEN542955	1-LACYGNE UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.838	GEN542956	2-LACYGNE UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	157.0408	GEN542956	2-LACYGNE UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	122.4712	GEN542957	1-IATAN UNIT #1'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	155.4632	GEN542957	1-IATAN UNIT #1'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	123.1565	GEN542962	2-IATAN UNIT #2'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	156.2558	GEN542962	2-IATAN UNIT #2'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	114.9182	GEN560279	1-G08-18 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	146.7251	GEN560279	1-G08-18 0.6900'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	115.9083	GEN560356	1-G10-53 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.8738	GEN560356	1-G10-53 0.6900'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	115.7616	GEN560522	1-G06-12 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.6992	GEN560522	1-G06-12 0.6900'
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	115.3813	GEN560558	1-G06-022 0.6900'
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	147.2701	GEN560558	1-G06-022 0.6900'
FNSL	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03606	124.5975	GEN336153	1-WATERFORD UNIT#3'
FNSL	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03606	157.923	GEN336153	1-WATERFORD UNIT#3'
FDNS	11G	G10_052	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05281	102.5522	PLANT X STATION - S-RANDLCO	230.00 230KV CKT 1'
FDNS	11G	G10_052	FROM->TO	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06186	103.6202	G10-16T 345.00 - POSTROCK7	345.00 345KV CKT 1'
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07056	110.1026	DBL-SPRVL-CO'	
FDNS	11G	G10_052	FROM->TO	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06866	103.6992	DBL-SPRVL-CO'	
FDNS	11G	G10_052	TO->FROM	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05989	103.0138	DBL-COM-MEDL'	
FDNS	11G	G10_052	FROM->TO	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07056	116.3615	DBL-COM-MEDL'	
FDNS	11G	G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06866	110.0618	DBL-COM-MEDL'	
FDNS	11G	G10_052	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05799	101.642	DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06942	116.2929	DBL-MEDLO-WI'	
FDNS	11G	G10_052	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04419	107.7328	DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04419	241.4432	DBL-MEDLO-WI'	
FDNS	11G	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04419	292.8838	DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0362	107.9999	GEN525561	1-TOLK GEN #1 24 KV'
FDNS	11G	G10_052	FROM->TO	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.0362	109.4746	GEN525562	1-TOLK GEN #2 24 KV'
FNSL	11G	G10_052	Non Converge Contingency		0	0.03259	9999	SPR-SWPS-03'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.04248	101.6704	G10-16T 345.00 - POSTROCK7	345.00 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03001	113.4047	DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06728	108.2163	DBL-COM-MEDL'	
FDNS	11G	G10_053	FROM->TO	'DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03925	102.4224	PLANT X STATION - S-RANDLCO	230.00 230KV CKT 1'
FDNS	11G	G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10011	103.6543	G10-16T 345.00 - POSTROCK7	345.00 345KV CKT 1'
FDNS	11G	G10_053	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03421	148.3362	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03421	185.2504	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03421	148.3362	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03376	185.2504	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.08783	103.1031	DBL-SPRVL-CO'	
FDNS	11G	G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.1037	116.3036	DBL-COM-MEDL'	
FDNS	11G	G10_053	FROM->TO	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.13338	110.3817	DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06619	101.5117	DBL-MEDLO-WI'	
FDNS	11G	G10_053	FROM->TO	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07936	116.0192	DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.06489	107.6898	DBL-MEDLO-WI'	
FDNS	11G	G10_053	FROM->TO	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06489	241.3544	DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06489	292.7825	DBL-MEDLO-WI'	
FDNS	11G	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	118.6412	BASE CASE	
FDNS	11G	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	151.0366	BASE CASE	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03612	124.0438	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03612	157.2778	LAWTON EASTSIDE - OKLAUNION 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03323	113.1638	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03321	113.1638	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	EL RENO - ROMAN NOSE 138KV CKT 1'	110	0.03843	136.9437	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	136.9437	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	172.1623	NORTHWEST - TATONGA7 345.00 345KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03323	104.7332	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03321	104.7332	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03843	131.6672	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03843	166.0682	TATONGA7 345.00 - WWRDEHV7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04828	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_041	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03412	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_051	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03178	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_047	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03238	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03923	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05275	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_048	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03967	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03613	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_036	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03005	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04627	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05416	102.2905	PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	127.7209	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	161.5506	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.08723	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.10013	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06188	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	ASGI_2010_020	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03782	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	ASGI_2010_021	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.03783	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_001	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.05292	101.9901	G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03765	122.7513	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03765	155.7931	'AXTELL - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03648	122.6138	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03648	155.6361	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04336	121.8254	ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0436	154.7247	ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	'SEWARD - ST JOHN 115KV CKT 1'	79.7	0.46869	103.2941	ST JOHN - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03636	121.9151	MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03636	154.8262	MINGO - SETAB 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03671	122.0058	MINGO - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03671	154.9321	MINGO - RED WILLOW 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03631	124.6426	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03631	157.9877	G10-16T 345.00 - SPEARVILLE 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04018	126.6912	BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04018	160.289	BENTON - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.0359	121.9223	ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0359	154.8238	ROSE HILL - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03421	147.7364	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04122	147.7364	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03421	184.5574	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04122	184.5574	MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03421	147.7364	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04122	147.7364	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03421	184.5574	MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03545	114.6167	ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03545	146.397	ANDERSONCO 345.00 - WOLF CREEK 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.22025	116.3768	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.22025	108.1656	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03755	123.5983	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03755	156.7725	CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	125.9546	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	159.4267	CENTENNIAL - COWSKIN 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.1858	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	157.3953	CENTENNIAL - WACO 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	130.5369	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	164.7338	COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03696	153.9087	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03696	191.8412	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	129.265	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	163.2397	EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03581	115.1953	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03581	147.0805	GILL ENERGY CENTER EAST - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03375	114.6254	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03375	146.3817	GILL ENERGY CENTER SOUTH - GILL ENERGY CENTER WEST 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	127.9551	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	161.7394	'HOOVER NORTH - LAKERIDGE 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07295	125.4547	NINNESCS3 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07295	158.9496	NINNESCS3 115.00 - PRATT 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.07295	125.2381	NINNESCS3 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.07295	158.6975	NINNESCS3 115.00 - ST JOHN 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	126.689	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	146.5579	MILAN 4 - MILAN TAP 138KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03484	121.818	MULLERGREEN - SPEARVILLE 230KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03484	154.7164	MULLERGREEN - SPEARVILLE 230KV CKT 1'	

SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03545	114.207	'ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03545	145.9241	'ANDERSONCO 345.00 - LACYGNE 345KV CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03572	113.3002	'COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03572	144.9324	'COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03572	113.3002	'COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03572	144.9324	'COMANCHS 345.00 - MED-LDG5 345.00 345KV CKT 2'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	122.0929	'ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	155.0089	'ROSE HILL (ROSEHL1X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03577	122.0984	'ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03577	155.0149	'ROSE HILL (ROSEHL3X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03623	125.7259	'WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03623	159.1869	'WICHITA (WICHT11X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	127.4804	'WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	161.2073	'WICHITA (WICHT12X) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.8662	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.5974	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.28218	106.9139	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	110	0.03607	126.3872	'MILAN 4 (MILAN 4) 138/34.5/12.47KV TRANSFORMER CKT 1'
FDNS	11G G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	105.5406	'DBL-SPRVL-CO'
FDNS	11G G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0785	109.2339	'DBL-SPRVL-CO'
FDNS	11G G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07056	109.2339	'DBL-SPRVL-CO'
FDNS	11G G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.10259	109.2339	'DBL-SPRVL-CO'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	319	0.07458	109.2339	'DBL-SPRVL-CO'
FDNS	11G G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03304	109.2339	'DBL-SPRVL-CO'
FDNS	11G G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03736	124.8081	'DBL-SPRVL-CO'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03442	124.8081	'DBL-SPRVL-CO'
FDNS	11G G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09131	101.9561	'DBL-SPRVL-CO'
FDNS	11G G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06867	101.9561	'DBL-SPRVL-CO'
FDNS	11G G10_001	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.0402	101.9561	'DBL-SPRVL-CO'
FDNS	11G G10_045	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.0667	102.1506	'DBL-COM-MEDL'
FDNS	11G G10_053	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.08782	102.1506	'DBL-COM-MEDL'
FDNS	11G G10_052	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05989	102.1506	'DBL-COM-MEDL'
FDNS	11G G10_048	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.13006	102.1506	'DBL-COM-MEDL'
FDNS	11G G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21372	109.3987	'DBL-COM-MEDL'
FDNS	11G G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21372	101.3813	'DBL-COM-MEDL'
FDNS	11G G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.0785	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.10369	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07056	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.10259	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07458	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03304	115.4699	'DBL-COM-MEDL'
FDNS	11G G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03442	121.1277	'DBL-COM-MEDL'
FDNS	11G G10_045	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09131	108.2937	'DBL-COM-MEDL'
FDNS	11G G10_053	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.13338	108.2937	'DBL-COM-MEDL'
FDNS	11G G10_052	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06867	108.2937	'DBL-COM-MEDL'
FDNS	11G G10_001	TO->FROM	'MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.0402	108.2937	'DBL-COM-MEDL'
FDNS	11G G10_012	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03403	116.0823	'DBL-MEDLO-WT'
FDNS	11G G10_001	TO->FROM	'GLASS MOUNTAIN - MOORELAND 138KV CKT 1'	124	0.03204	116.0823	'DBL-MEDLO-WT'
FDNS	11G G10_045	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06205	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_053	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06618	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_052	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.058	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_048	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.12172	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_049	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03754	100.8555	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_020	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03011	100.8555	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_021	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.03012	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_001	FROM->TO	'SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.04341	100.8555	'DBL-MEDLO-WT'
FDNS	11G G10_049	TO->FROM	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	88	0.21906	133.863	'DBL-MEDLO-WT'
FDNS	11G G10_049	FROM->TO	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.21906	124.8908	'DBL-MEDLO-WT'
FDNS	11G G10_049	FROM->TO	'ST JOHN - ST_JOHN 115KV CKT 1'	143	0.21932	103.246	'DBL-MEDLO-WT'
FDNS	11G G10_045	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07418	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_053	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07935	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_052	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06943	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_048	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.09316	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_049	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.08662	115.5592	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_020	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03533	115.5592	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_021	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.03534	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_001	TO->FROM	'CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.05167	115.5592	'DBL-MEDLO-WT'
FDNS	11G G10_045	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04891	107.028	'DBL-MEDLO-WT'
FDNS	11G G10_053	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.06488	107.028	'DBL-MEDLO-WT'
FDNS	11G G10_052	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04419	107.028	'DBL-MEDLO-WT'
FDNS	11G G10_049	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05768	107.028	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_020	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03291	107.028	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_021	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.03291	107.028	'DBL-MEDLO-WT'
FDNS	11G G10_001	FROM->TO	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04322	107.028	'DBL-MEDLO-WT'
FDNS	11G G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04891	239.9319	'DBL-MEDLO-WT'
FDNS	11G G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06488	239.9319	'DBL-MEDLO-WT'
FDNS	11G G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04419	239.9319	'DBL-MEDLO-WT'
FDNS	11G G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05768	239.9319	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_020	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03291	239.9319	'DBL-MEDLO-WT'
FDNS	11G ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03291	239.9319	'DBL-MEDLO-WT'
FDNS	11G G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04622	239.9319	'DBL-MEDLO-WT'
FDNS	11G G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04891	291.0934	'DBL-MEDLO-WT'
FDNS	11G G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06488	291.0934	'DBL-MEDLO-WT'
FDNS	11G G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04419	291.0934	'DBL-MEDLO-WT'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%	LOADING	CONTNAME
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05768	291.0934	DBL-MEDLO-W1'	
FDNS	11G	ASGI_2010_020	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03291	291.0934	DBL-MEDLO-W1'	
FDNS	11G	ASGI_2010_021	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03291	291.0934	DBL-MEDLO-W1'	
FDNS	11G	G10_001	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04622	291.0934	DBL-MEDLO-W1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	123.7122	SPP-WERE-28'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	156.8508	SPP-WERE-28'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03628	124.8185	SPP-WERE-30'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03628	158.1143	SPP-WERE-30'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03642	127.4644	SPP-WERE-32'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03642	161.1729	SPP-WERE-32'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	123.4841	GEN335831 1-RIVERBEND UNIT#1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	156.6348	GEN335831 1-RIVERBEND UNIT#1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	121.9663	GEN336251 1-NINEMILE POINT UNIT#4'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	154.8799	GEN336251 1-NINEMILE POINT UNIT#4'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	124.8291	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	158.1895	GEN336821 1-GRAND GULF UNIT	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.0911	GEN337041 1-GERALD ANDRUS'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.0239	GEN337041 1-GERALD ANDRUS'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.5037	GEN337652 1-WHITE BLUFF UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.5012	GEN337652 1-WHITE BLUFF UNIT #1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.6644	GEN337653 1-WHITE BLUFF UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.8869	GEN337653 1-WHITE BLUFF UNIT #2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.9092	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.9702	GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	123.7395	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	156.9302	GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.7188	GEN338143 1-INDEPENDENCE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.7492	GEN338143 1-INDEPENDENCE UNIT #1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.7017	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.7295	GEN338146 1-INDEPENDENCE UNIT #2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.1842	GEN338189 1-LS POWER OSCEOLA UNIT G1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.131	GEN338189 1-LS POWER OSCEOLA UNIT G1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.0759	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.0045	GEN514805 1-SOONER UNIT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	121.707	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	154.5791	GEN514806 1-SOONER UNIT 2'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03307	107.627	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03616	107.627	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03112	107.627	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03714	107.627	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	114.8263	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	146.6347	GEN525561 1-TOLK GEN #1 24 KV	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03307	109.318	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03616	109.318	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_012	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03112	109.318	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_001	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03714	109.318	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	114.5833	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	146.3543	GEN525562 1-TOLK GEN #2 24 KV	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	114.0729	GEN531447 1-HOLCOMB GENERATOR'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	145.7458	GEN531447 1-HOLCOMB GENERATOR'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	133.19	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	167.8402	GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	106.4828	GEN539630 1-FLATRDG1 34.500'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	137.0715	GEN539630 1-FLATRDG1 34.500'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	123.8103	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	157.0078	GEN542955 1-LACYGNE UNIT #1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	123.4273	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	156.5651	GEN542956 2-LACYGNE UNIT #2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.0605	GEN542957 1-IATAN UNIT #1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	154.9876	GEN542957 1-IATAN UNIT #1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	122.7446	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	155.7786	GEN542962 2-IATAN UNIT #2'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	114.514	GEN560279 1-G08-18 0.6900'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	146.2568	GEN560279 1-G08-18 0.6900'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	115.5023	GEN560356 1-G10-53 0.6900'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	147.4032	GEN560356 1-G10-53 0.6900'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	115.3568	GEN560522 1-G05-12 0.6900'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	147.2302	GEN560522 1-G05-12 0.6900'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	114.9607	GEN560558 1-G06-022 0.6900'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	146.7847	GEN560558 1-G06-022 0.6900'	
FNLSL	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03607	124.1869	GEN336153 1-WATERFORD UNIT#3'	
FNLSL	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03607	157.4473	GEN336153 1-WATERFORD UNIT#3'	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	351	0.07121	57.77528	ELK CITY 230KV - SWEETW16 230.00 230KV CKT 1'	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	351	0.07127	57.77528	ELK CITY 230KV - SWEETW16 230.00 230KV CKT 1'	
FNLSL-Iteration limit exceeded	11G	G10_012		Non Converged Contingency	128	0.03887	36.9393	GRAPVINE INTERCHANGE 230/115KV TRANSFORMER CKT 1'	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	287	0.07121	63.60866	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	287	0.07127	63.60866	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1'	
FNLSL-Iteration limit exceeded	11G	G10_045		Non Converged Contingency	0	0.03669	9999	TRF-STEGALL'	
FNLSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.04695	9999	TRF-STEGALL'	
FNLSL-Iteration limit exceeded	11G	G10_048		Non Converged Contingency	0	0.0446	9999	TRF-STEGALL'	
FNLSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03261	9999	SPP-SWPS-03	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_020		Non Converged Contingency	0	0.13626	9999	SPP-SWPS-03	
FNLSL-Iteration limit exceeded	11G	ASGI_2010_021		Non Converged Contingency	0	0.13638	9999	SPP-SWPS-03	
FNLSL-Iteration limit exceeded	11G	G10_001		Non Converged Contingency	0	0.04066	9999	SPP-SWPS-03	
FNLSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03764	9999	050 1'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09104	9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05007	9999 050 1'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03487	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08572	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04729	9999 050 2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03631	9999 ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.08791	9999 ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.04892	9999 ATC_B2_8E2'	
FNSL-Iteration limit exceeded	11G	G10_041		Non Converged Contingency	0	0.03949	9999 ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_051		Non Converged Contingency	0	0.09408	9999 ATC_B2_8E2_G'	
FNSL-Iteration limit exceeded	11G	G10_047		Non Converged Contingency	0	0.05284	9999 ATC_B2_8E2_G'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.04828	102.4188 PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.0876	104.7772 G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07614	104.1463 DBL-SPRVL-CO'	
FDNS	11G	G10_045	FROM->TO	GREENSBURG - SUN CITY 115KV CKT 1'	129.5	0.03176	119.8739 DBL-SPRVL-CO'	
FDNS	11G	G10_045	FROM->TO	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	129.5	0.03176	126.2893 DBL-SPRVL-CO'	
FDNS	11G	G10_045	TO->FROM	MEDICINE LODGE - SUN CITY 115KV CKT 1'	129.5	0.03176	117.0259 DBL-SPRVL-CO'	
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09195	103.6958 DBL-SPRVL-CO'	
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06546	100.0797 DBL-COM-MEDL'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07614	111.1414 DBL-COM-MEDL'	
FDNS	11G	G10_045	FROM->TO	GREENSBURG - SUN CITY 115KV CKT 1'	129.5	0.03176	127.9732 DBL-COM-MEDL'	
FDNS	11G	G10_045	FROM->TO	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	129.5	0.03176	134.3363 DBL-COM-MEDL'	
FDNS	11G	G10_045	TO->FROM	MEDICINE LODGE - SUN CITY 115KV CKT 1'	129.5	0.03176	125.1122 DBL-COM-MEDL'	
FDNS	11G	G10_045	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09195	110.8985 DBL-COM-MEDL'	
FDNS	11G	G10_045	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06198	101.2766 DBL-MEDLO-WI'	
FDNS	11G	G10_045	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07434	115.606 DBL-MEDLO-WI'	
FDNS	11G	G10_045	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04489	107.2309 DBL-MEDLO-WI'	
FDNS	11G	G10_045	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04899	240.3697 DBL-MEDLO-WI'	
FDNS	11G	G10_045	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04899	291.6478 DBL-MEDLO-WI'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03307	107.7195 GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_045	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03307	109.4251 GEN525562 1-TOLK GEN #2 24 KV'	
FDNS	11G	G10_049	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03494	102.3002 PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03265	146.5605 MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03265	183.2014 MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03265	146.5605 MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03265	183.2014 MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.15974	101.2549 CIRCLE - MULLERGREEN 230KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.38961	103.5429 MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.38961	103.5676 PRATT - SAWYER 3 115.00 115KV CKT 1'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03473	123.1165 MED-LDG5 345.00 345/138KV TRANSFORMER CKT 1'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04221	103.7195 DBL-SPRVL-CO'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.04221	110.7779 DBL-COM-MEDL'	
FDNS	11G	G10_049	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.04049	101.0398 DBL-MEDLO-WI'	
FDNS	11G	G10_049	TO->FROM	HUNTSVILLE - ST JOHN 115KV CKT 1'	88	0.16667	131.8954 DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	92	0.16667	123.0125 DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	ST JOHN - ST JOHN 115KV CKT 1'	143	0.16693	101.9633 DBL-MEDLO-WI'	
FDNS	11G	G10_049	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07892	115.6746 DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.05821	107.2474 DBL-MEDLO-WI'	
FDNS	11G	G10_049	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05821	240.4039 DBL-MEDLO-WI'	
FDNS	11G	G10_049	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05821	291.6852 DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.05278	102.4837 PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.0623	105.0473 G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06851	104.5136 DBL-SPRVL-CO'	
FDNS	11G	G10_052	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06922	103.9484 DBL-SPRVL-CO'	
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05822	100.2987 DBL-COM-MEDL'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06851	111.5882 DBL-COM-MEDL'	
FDNS	11G	G10_052	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06922	110.9669 DBL-COM-MEDL'	
FDNS	11G	G10_052	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.05793	101.5801 DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.06953	116.1508 DBL-MEDLO-WI'	
FDNS	11G	G10_052	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.04417	107.668 DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04417	241.3051 DBL-MEDLO-WI'	
FDNS	11G	G10_052	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04417	292.725 DBL-MEDLO-WI'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03618	107.942 GEN525561 1-TOLK GEN #1 24 KV'	
FDNS	11G	G10_052	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03618	109.4381 GEN525562 1-TOLK GEN #2 24 KV'	
FNSL-Iteration limit exceeded	11G	G10_052		Non Converged Contingency	0	0.03256	9999 SPR-SWRS-03'	
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.04165	103.1739 G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.06761	109.1127 DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	DEAF SMITH COUNTY INTERCHANGE - S-RANDLCO 230.00 230KV CKT 1'	350	0.03925	102.3534 PLANT X STATION - S-RANDLCO 230.00 230KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.09997	105.0462 G10-16T 345.00 - POSTROCK7 345.00 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03432	146.9098 MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03432	183.6049 MED-LDG5 345.00 - WICHITA 345KV CKT 1'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03432	146.9098 MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03432	183.6049 MED-LDG5 345.00 - WICHITA 345KV CKT 2'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03818	122.7539 DBL-SPRVL-CO'	
FDNS	11G	G10_053	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.08598	100.3805 DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.10016	111.5231 DBL-COM-MEDL'	
FDNS	11G	G10_053	FROM->TO	GREENSBURG - SUN CITY 115KV CKT 1'	129.5	0.04569	128.5057 DBL-COM-MEDL'	
FDNS	11G	G10_053	FROM->TO	G01_039AT 115.00 - GREENSBURG 115KV CKT 1'	129.5	0.04569	134.8702 DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	MEDICINE LODGE - SUN CITY 115KV CKT 1'	129.5	0.04569	125.6429 DBL-COM-MEDL'	
FDNS	11G	G10_053	TO->FROM	MULLERGREEN - SPEARVILLE 230KV CKT 1'	355.3	0.13434	111.2833 DBL-COM-MEDL'	
FDNS	11G	G10_053	FROM->TO	SMOKYHL6 230.00 - SUMMIT 230KV CKT 1'	319	0.06603	101.437 DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	CIRCLE - MULLERGREEN 230KV CKT 1'	319	0.07975	115.8143 DBL-MEDLO-WI'	
FDNS	11G	G10_053	FROM->TO	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	234	0.06486	107.5728 DBL-MEDLO-WI'	
FDNS	11G	G10_053	TO->FROM	CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06486	241.1038 DBL-MEDLO-WI'	
FDNS	11G	G10_053	FROM->TO	HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06486	292.4936 DBL-MEDLO-WI'	

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	125.362	'BASE CASE'
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	132.1752	'BASE CASE'
FDNS	11SP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.7205	'BASE CASE'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03851	103.1756	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03851	103.1761	'LAMB COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	109.8099	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.5383	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	109.5274	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.2712	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11SP	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03304	112.0569	'DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03851	103.1761	'SPP-SWPS-K37'
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	133.718	'BASE CASE'
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	138.1973	'BASE CASE'
FDNS	11WP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	120.3416	'BASE CASE'
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	103.4349	'LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1'
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-LOVINGTON INTERCHANGE - LEA COUNTY REC-REED 69KV CKT 1'	41	1	104.3807	'LEA COUNTY REC-DENTON SUB - LEA COUNTY REC-REED 69KV CKT 1'
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	112.3507	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.9796	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	112.0991	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	11WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	115.727	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	11WP	ASGI_2010_020	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03304	100.3581	'DBL-MEDLO-WI'
FDNS	11WP	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03304	129.2011	'DBL-MEDLO-WI'
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	120.8013	'BASE CASE'
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	128.332	'BASE CASE'
FDNS	16SP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.1261	'BASE CASE'
FDNS	16SP	ASGI_2010_020	FROM->TO	'WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1'	154	0.08885	103.1394	'CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04946	102.0732	'HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	104.9821	'MADDOX STATION - MONUMENT SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	101.2641	'MONUMENT SUB - WEST HOBBS SWITCHING STATION 115KV CKT 1'
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	107.9673	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.4097	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	16SP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	107.6789	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.1407	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	102.2377	'SPP-SWPS-T42'
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	130.3833	'BASE CASE'
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	135.3384	'BASE CASE'
FDNS	16WP	ASGI_2010_020	FROM->TO	'ASGI-10-20T 69.000 - LEA COUNTY REC-TATUM 69KV CKT 1'	54	1	119.8069	'BASE CASE'
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	100.7426	'LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1'
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-LOVINGTON INTERCHANGE - LEA COUNTY REC-REED 69KV CKT 1'	41	1	101.6689	'LEA COUNTY REC-DENTON SUB - LEA COUNTY REC-REED 69KV CKT 1'
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	110.7209	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.7908	'LEA COUNTY REC-BRONCO TAP - LEA COUNTY REC-TATUM 69KV CKT 1'
FDNS	16WP	ASGI_2010_020	FROM->TO	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-REED 69KV CKT 1'	41	1	110.4344	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	16WP	ASGI_2010_020	TO->FROM	'LEA COUNTY REC-MCDONALD - LEA COUNTY REC-TATUM 69KV CKT 1'	41	1	114.5147	'LEA COUNTY REC-BRONCO - LEA COUNTY REC-BRONCO TAP 69KV CKT 1'
FDNS	16WP	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03167	123.7514	'DBL-MEDLO-WI'
FDNS	16SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03934	102.9076	'LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
FDNS	11SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03934	102.9081	'LAMB COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FDNS	11SP	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03305	111.5839	'DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03934	102.9081	'SPP-SWPS-K37'
FDNS	11WP	ASGI_2010_021	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.03305	100	'DBL-MEDLO-WI'
FDNS	11WP	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03305	128.7654	'DBL-MEDLO-WI'
FDNS	16SP	ASGI_2010_021	FROM->TO	'WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1'	154	0.08732	102.6421	'CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05662	101.9833	'HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05146	104.9288	'MADDOX STATION - MONUMENT SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05146	101.2152	'MONUMENT SUB - WEST HOBBS SWITCHING STATION 115KV CKT 1'
FDNS	16WP	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03169	123.2903	'DBL-MEDLO-WI'
FDNS	11SP	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0458	123.8798	'DBL-MEDLO-WI'
FDNS	11WP	G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04456	110.3911	'DBL-MEDLO-WI'
FDNS	11WP	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04456	140.7901	'DBL-MEDLO-WI'
FDNS	16SP	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04558	106.288	'DBL-MEDLO-WI'
FDNS	16WP	G10_001	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04442	105.2993	'DBL-MEDLO-WI'
FDNS	16WP	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04442	135.1781	'DBL-MEDLO-WI'
FDNS	16SP	G10_036	FROM->TO	'LAWRENCE HILL - MOCKINGBIRD HILL SWITCHING STATION 115KV CKT 1'	92	0.12244	100	'BISMARCK JUNCTION SWITCHING STATION - FARMERS CONSUMER CO-OP 115KV CKT 1'
FDNS	11SP	G10_040	FROM->TO	'NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1'	493	0.03974	100.7879	'NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	16SP	G10_040	FROM->TO	'NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1'	493	0.03878	104.1475	'NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1'
FDNS	16SP	G10_040	FROM->TO	'NORTHWEST (NORTWST2) 345/138/13.8KV TRANSFORMER CKT 1'	493	0.03878	106.9511	'NORTHWEST (NORTWST3) 345/138/13.8KV TRANSFORMER CKT 1'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	0	0.03864	9999	'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	1793	0.03223	19.88545	'GEN30015 1-1SGPDEL 18.000'
FDNS	11SP	G10_043	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03922	110.3841	'DBL-MEDLO-WI'
FDNS	11WP	G10_043	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.038	127.5624	'DBL-MEDLO-WI'
FDNS	16WP	G10_043	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0377	122.1126	'DBL-MEDLO-WI'
FDNS	11SP	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05089	120.1404	'DBL-MEDLO-WI'
FDNS	11WP	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04966	107.2212	'DBL-MEDLO-WI'
FDNS	16SP	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04966	137.1307	'DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11WP	G10_045		Non Converged Contingency	0	0.03893	9999	'TRF-STEGALL'
FDNS	16SP	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05085	102.5546	'DBL-MEDLO-WI'
FNSL-Blown up	16SP	G10_045		Non Converged Contingency	0	0.03989	9999	'TRF-STEGALL'
FDNS	16WP	G10_045	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04969	102.2086	'DBL-MEDLO-WI'
FDNS	16WP	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04969	131.6094	'DBL-MEDLO-WI'
FNSL-Blown up	16WP	G10_045		Non Converged Contingency	0	0.03951	9999	'TRF-STEGALL'
FDNS	11SP	G10_046	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0316	110.3841	'DBL-MEDLO-WI'
FDNS	11WP	G10_046	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0305	127.5624	'DBL-MEDLO-WI'
FDNS	16WP	G10_046	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03047	122.1126	'DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	0	0.05216	9999	'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	1793	0.03566	19.99307	'GEN30015 1-1SGPDEL 18.000'

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FDNS	11SP	G10_048	FROM->TO	'COLBY2 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3'	13.33	0.08259	190.847	COLBY (COLBY T2) 115/34.5/12.47KV TRANSFORMER CKT 2'
FDNS	11WP	G10_048	FROM->TO	'COLBY2 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3'	13.33	0.05884	124.6841	COLBY (COLBY T2) 115/34.5/12.47KV TRANSFORMER CKT 2'
FDNS	16SP	G10_048	FROM->TO	'COLBY2 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3'	13.33	0.08483	194.8926	COLBY (COLBY T2) 115/34.5/12.47KV TRANSFORMER CKT 2'
FDNS	16WP	G10_048	FROM->TO	'COLBY2 (COLBY T3) 69/34.5/13.8KV TRANSFORMER CKT 3'	13.33	0.06254	127.442	COLBY (COLBY T2) 115/34.5/12.47KV TRANSFORMER CKT 2'
FNSL-Iteration limit exceeded	11WP	G10_048		Non Converged Contingency	0	0.0439	9999	TRF-STE GALL'
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.04524	9999	TRF-STE GALL'
FNSL-Blown up	16WP	G10_048		Non Converged Contingency	0	0.03016	9999	NEB01WAPAB3'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	106.1044	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	108.8465	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0378	110.0326	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	106.0532	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	108.7904	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11SP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05879	113.298	DBL-MEDLO-WI'
FDNS	11WP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.037	118.9784	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11WP	G10_049	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.05758	101.4455	DBL-MEDLO-WI'
FDNS	11WP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05758	130.4489	DBL-MEDLO-WI'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	114.5525	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	117.7817	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	114.4919	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	117.7188	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	16WP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03726	112.0342	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	16WP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05786	125.0023	DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.08736	9999	ATC_B2_BEZ_G'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.09349	9999	ATC_B2_BEZ_G'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	1793	0.04391	20.29645	GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038	9999	IWA001WAPAB2
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038	9999	ALTW-B111-SW'
FDNS	11SP	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04565	123.6383	DBL-MEDLO-WI'
FDNS	11WP	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04442	110.2837	DBL-MEDLO-WI'
FDNS	11WP	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04442	140.6654	DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11WP	G10_052		Non Converged Contingency	0	0.04682	9999	TRF-STE GALL'
FNSL-Iteration limit exceeded	11WP	G10_052		Non Converged Contingency	0	0.03121	9999	NEB01WAPAB3'
FDNS	16SP	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04557	106.0633	DBL-MEDLO-WI'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.04802	9999	TRF-STE GALL'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.03201	9999	NEB01WAPAB3'
FDNS	16WP	G10_052	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.04441	105.2489	DBL-MEDLO-WI'
FDNS	16WP	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04441	135.1179	DBL-MEDLO-WI'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.04762	9999	TRF-STE GALL'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.03175	9999	NEB01WAPAB3'
FDNS	11SP	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06615	123.0109	DBL-MEDLO-WI'
FDNS	11WP	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06492	109.6688	DBL-MEDLO-WI'
FDNS	11WP	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06492	139.9571	DBL-MEDLO-WI'
FDNS	16SP	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06613	105.405	DBL-MEDLO-WI'
FDNS	16WP	G10_053	TO->FROM	'CLEARWATER - MILAN TAP 138KV CKT 1'	110	0.06498	104.7112	DBL-MEDLO-WI'
FDNS	16WP	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06498	134.499	DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03854	102.3946	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
FDNS	11SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03935	102.3946	LAMB COUNTY INTERCHANGE - TOLK STATION WEST 230KV CKT 1'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03854	102.395	LAMB COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FDNS	11SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03935	102.395	LAMB COUNTY INTERCHANGE 230/115KV TRANSFORMER CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	102.4978	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	105.3439	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0378	108.2288	EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	102.4438	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05433	105.2859	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	11SP	G10_043	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03922	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_049	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05879	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_046	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0316	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_053	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06616	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_052	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04588	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_045	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05091	110.3841	DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_020	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03305	110.3841	DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_021	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03305	110.3841	DBL-MEDLO-WI'
FDNS	11SP	G10_001	FROM->TO	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04582	110.3841	DBL-MEDLO-WI'
FDNS	11SP	ASGI_2010_020	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03854	102.395	SPP-SWPS-K37'
FDNS	11SP	ASGI_2010_021	FROM->TO	'PLANT X STATION (WH ALM20171) 230/115/13.2KV TRANSFORMER CKT 1'	239	0.03935	102.395	SPP-SWPS-K37'
FDNS	16SP	ASGI_2010_020	FROM->TO	'WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1'	154	0.08886	101.0001	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	16SP	ASGI_2010_021	FROM->TO	'WOLFFORTH INTERCHANGE - YUMA INTERCHANGE 115KV CKT 1'	154	0.08733	101.0001	CARLISLE INTERCHANGE - TUCO INTERCHANGE 230KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04947	100.727	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05662	100.727	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	103.7485	MADDOX STATION - MONUMENT SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05146	103.7485	MADDOX STATION - MONUMENT SUB 115KV CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	100	MONUMENT SUB - WEST HOBBS SWITCHING STATION 115KV CKT 1'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05146	100	MONUMENT SUB - WEST HOBBS SWITCHING STATION 115KV CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	110.2713	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	113.4099	HEIZER 6 230.00 - MULLERGREN 230KV CKT 1'
FDNS	16SP	G10_036	FROM->TO	'LAWRENCE HILL - MOCKINGBIRD HILL SWITCHING STATION 115KV CKT 1'	92	0.12244	100	BISMARCK JUNCTION SWITCHING STATION - FARMERS CONSUMER CO-OP 115KV CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	110.2079	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	16SP	G10_049	FROM->TO	'SEWRDMW3 (SEWARD T1) 115/69/12.5KV TRANSFORMER CKT 1'	44.8	0.05445	113.345	HEIZER 6 230.00 (HEIZER T1) 230/115/12.5KV TRANSFORMER CKT 1'
FDNS	16SP	ASGI_2010_020	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.04396	101.0011	'SPP-SWPS-T42'
FDNS	16SP	ASGI_2010_021	TO->FROM	'OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1'	141	0.05146	101.0011	'SPP-SWPS-T42'
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.04799	9999	TRF-STE GALL'
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.04524	9999	TRF-STE GALL'
FNSL-Blown up	16SP	G10_045		Non Converged Contingency	0	0.03987	9999	TRF-STE GALL'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038	9999	IWA001WAPAB2

SOLUTIONTYPE	SEASON	SOURCE	DIRECTION	MONTCOMMONNAME	RATEB	TDF	TC%LOADING	CONTNAME
FNSL-Blown up	16SP	G10_052		Non Converged Contingency	0	0.03199		9999 'NEB01WAPAB3'
FNSL-Blown up	16SP	G10_048		Non Converged Contingency	0	0.03016		9999 'NEB01WAPAB3'
FNSL-Iteration limit exceeded	16SP	G10_051		Non Converged Contingency	0	0.06038		9999 'ALTW-B111-SW'
FDNS	11WP	G10_049	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.037	115.3685	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	11WP	G10_043	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.038	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_049	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05758	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_046	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0305	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_053	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.06495	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_052	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04446	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_045	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04969	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	ASGI_2010_020	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03192	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	ASGI_2010_021	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03193	127.5624	'DBL-MEDLO-WI'
FDNS	11WP	G10_001	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04459	127.5624	'DBL-MEDLO-WI'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	0	0.05216		9999 'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	0	0.03864		9999 'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	0	0.09346		9999 'ATC_B2_BE2_G'
FNSL-Iteration limit exceeded	11WP	G10_047		Non Converged Contingency	1793	0.03565	19.86837	'GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	11WP	G10_041		Non Converged Contingency	1793	0.03223	19.86837	'GEN300015 1-1SGPDEL 18.000'
FNSL-Iteration limit exceeded	11WP	G10_051		Non Converged Contingency	1793	0.04388	19.86837	'GEN300015 1-1SGPDEL 18.000'
FDNS	16WP	G10_049	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03726	110.2995	'EVANS ENERGY CENTER NORTH - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
FDNS	16WP	G10_043	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0377	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_049	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.05786	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_046	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03047	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_053	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.065	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_052	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04446	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_045	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04972	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	ASGI_2010_020	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.03169	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	ASGI_2010_021	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.0317	122.1126	'DBL-MEDLO-WI'
FDNS	16WP	G10_001	'FROM->TO'	'HARPER - MILAN TAP 138KV CKT 1'	95.6	0.04445	122.1126	'DBL-MEDLO-WI'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.04763		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_048		Non Converged Contingency	0	0.04488		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_045		Non Converged Contingency	0	0.03951		9999 'TRF-STEGALL'
FNSL-Blown up	16WP	G10_052		Non Converged Contingency	0	0.03175		9999 'NEB01WAPAB3'

I: Stability Study for Group 1



SPP

*Southwest
Power Pool*

***Definitive Interconnection
System Impact Study***

DISIS-2010-002-Group1Restudy

***SPP Generation
Interconnection Studies***

***(DISIS-2010-002)
Group 1 Restudy***

July 2011

Executive Summary

A transient stability re-study has been performed by Southwest Power Pool (SPP) to evaluate the interconnection requests in the Definitive Impact Study Interconnection Study (DISIS-2010-002) for Group 1 in the Woodward area.

The DISIS-2010-002 study has one (1) Interconnection Requests in the Woodward area. The interconnection request includes GEN-2010-043, dispatching 320MW. The point of interconnection is a proposed Mooreland 345kV substation.

Proposed upgrades added to the models for DISIS-2010-002 include the Beaver County – Gray County 345kV line assigned to DISIS-2010-002 customers and the Hitchland – Border 345kV line assigned to DISIS-2010-001 customers. . After the addition of this new line the prior queued requests GEN-2006-024 and GEN-2007-006 were tripping due to the low voltage in the Roman Nose 138kV substation area, around 0.89pu, under the contingencies from Woodward – Medicine Lodge 345KV lines circuit 1 & 2 (FLT05_3PH) and Medicine Lodge – Wichita 345kV lines (FLT46_3PH) circuit 1 & 2. The adopted solution was to increase the size of the SVC at GEN-2007-006 34.5kV terminals from +/- 20 MVAR to +/- 60 MVAR comparing with the DISIS-2010-002 original study.

The results of a stability analysis determined that for the addition of the DISIS-2010-002 interconnection request, the transmission system was found to remain stable for both summer and winter peak conditions with all required network upgrades in service.

Since the study project is using a synchronous generator, no power factor analysis was performed, the request is required by the SPP tariff to maintain a 95% lagging (producing vars) and a 95% leading (absorbing vars) power factor at the point of interconnection.

Should any previously queued projects that were included in this study withdraw from the queue, then this System Impact Study may have to be revised to determine the impacts of this Interconnection Customer's project on transmission facilities.

1.0 Introduction

A transient stability re-study has been performed by Southwest Power Pool (SPP) to evaluate the interconnection requests in the Definitive Impact Study Interconnection Study (DISIS-2010-002) for Group 1 in the Woodward area.

The DISIS-2010-002 study has one (1) Interconnection Requests in the Woodward area. The interconnection request includes GEN-2010-043, dispatching 320MW. The point of interconnection is Mooreland 345kV substation.

Two seasonal base cases were used in the study to analyze the stability impacts of the proposed generation facility. A 2011 summer peak case and a 2011 winter peak case which were both modified to include the prior queued projects shown in Table 1.

In this study SPP monitored the generators and transmission lines in Areas 520, 524, 525, 526, 531, 534 and 536.

2.0 Purpose

The purpose of this Definitive Impact Study Interconnection Study (DISIS), is to evaluate the impact of the proposed interconnection on the reliability of the Transmission System. Table 1 below lists the requests that were analyzed in this study.

Request	Size (MW)	Wind Turbine Model	Point of Interconnection
GEN-2010-043	320	GENROU	Mooreland 345kV (560304)

Table 1: DISIS-2010-002 Group 1 Interconnection Request Table

Should any previously queued projects that were included in this study withdraw, listed in Table 2, then this System Impact Study may require a re-study of this request at the expense of the customer.

Request	Size (MW)	Wind Turbine Model	Point of Interconnection
GEN-2001-014	94	Suzlon 2.1MW	Fort Supply 138kV (520920)
GEN-2001-037	102	GE 1.5MW	Woodward-Mooreland 138kV (515785)
GEN-2002-005	120	Acciona 1.5MW	Moorewood – Elk City 138kV (521116)
GEN-2005-008	120	GE 1.5MW	Woodward 138kV (514785)
GEN-2006-024S	18.9	Suzlon 2.1MW	Buffalo Bear 69kV (521120)
GEN-2006-046	130	Mitsubishi 2.3MW	Dewey 138kV (514787)
GEN-2007-006	160	Suzlon 2.1MW	Roman Nose 138kV (514823)
GEN-2007-021	201	GE 1.6MW	Tatonga 345kV (515407)
GEN-2007-044	300	GE 1.6MW	Tatonga 345kV (515407)
GEN-2007-050	171	Siemens 2.3MW	Woodward 138kV (515376)
GEN-2007-051	200	GE 1.5MW	Mooreland 138kV (520999)
GEN-2007-062	765	GE 1.5MW	Woodward 345kV (515375)
GEN-2008-003	101	Siemens 2.3MW	Woodward 138kV (515376)
GEN-2008-019	300	Mitsubishi 2.3MW	Tatonga 345kV (515407)
GEN-2008-029	250	GE 1.5MW	Woodward 138kV (515376)
GEN-2008-044	197.8	Siemens 2.3MW	Tatonga 345kV (515407)
GEN-2010-008	64.4	Vestas V90 1.8MW	Fargo Jct 69kV (521196)
GEN-2010-011	29.7	Siemens 2.3MW	Addition to Gen-2008-044 34.5kV bus (576503)

Table 2: DISIS-2010-002 Group 1 Prior Queued Request Table

to whether the reactive compensation can be static or a portion must be dynamic (such as a SVC or STATCOM).

5.0 Stability Study Analysis

For group one 54 (fifty four) contingencies were considered for the transient stability simulations. These contingencies included three phase faults and single phase line faults at locations defined by SPP. Single-phase line faults were simulated by applying a fault impedance to the positive sequence network at the fault location to represent the effect of the negative and zero sequence networks on the positive sequence network. The fault impedance was computed to give a positive sequence voltage at the specified fault location of approximately 60% of pre-fault voltage. This method is in agreement with SPP current practice.

The faults that were defined and simulated are listed in Table 3 below. The faults were simulated on a summer peak and a winter peak model.

Cont. No.	Cont. Name	Description
1	FLT01-3PH	3 phase fault on one of the Woodward (515375) to Tatonga (515407) 345kV line, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
2	FLT02-1PH	Single phase fault and sequence like previous
3	FLT03-3PH	3 phase fault on one of the Woodward (515375) to Beaver County (580500) 345kV lines, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the lines in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the lines in (b) and remove fault.
4	FLT04-1PH	Single phase fault and sequence like previous
5	FLT05-3PH	3 phase fault on one of the Woodward (515375) to Medicine Lodge (765342) 345kV lines, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the lines in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the lines in (b) and remove fault.
6	FLT06-1PH	Single phase fault and sequence like previous
7	FLT07-3PH	3 phase fault on the Woodward 345kV (515375) to 138kV (515376) transformer, near the 345 kV bus. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
8	FLT08-3PH	3 phase fault on the Northwest (514880) to Tatonga (515407) 345kV line, near Tatonga. a. Apply fault at the Tatonga 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
9	FLT09-1PH	Single phase fault and sequence like previous
10	FLT10-3PH	3 phase fault on the Northwest (514880) to Spring Creek (514881) 345kV line, near Northwest. a. Apply fault at the Northwest 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

11	FLT11-1PH	Single phase fault and sequence like previous
12	FLT12-3PH	3 phase fault on the Northwest (514880) to Cimarron (514901) 345kV line, near Northwest. a. Apply fault at the Northwest 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
13	FLT13-1PH	Single phase fault and sequence like previous
14	FLT14-3PH	3 phase fault on Northwest 345kV (514880) to 138kV (514879) transformer T2, near the 345 kV bus. a. Apply fault at the Northwest 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
15	FLT15-3PH	3 phase fault on the Northwest (514880) to Arcadia (514908) 345kV line, near Arcadia. a. Apply fault at the Arcadia 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
16	FLT16-1PH	Single phase fault and sequence like previous
17	FLT17-3PH	3 phase fault on the Woodward EHV (515376) to Iodine (514796) 138kV line, near Woodward EHV. a. Apply fault at the Woodward EHV 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
18	FLT18-1PH	Single phase fault and sequence like previous
19	FLT19-3PH	3 phase fault on the Mooreland (520999) to GEN-2001-037 (515785) 138kV line, near Mooreland. a. Apply fault at the Mooreland 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
20	FLT20-1PH	Single phase fault and sequence like previous
21	FLT21-3PH	3 phase fault on the Mooreland (520999) to Glass Mountain (514788) 138kV line, near Mooreland. a. Apply fault at the Mooreland 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
22	FLT22-1PH	Single phase fault and sequence like previous
23	FLT23-3PH	3 phase fault on the Mooreland (520999) to Windfarm (515785) 138kV line, near Mooreland. a. Apply fault at the Mooreland 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
24	FLT24-1PH	Single phase fault and sequence like previous
25	FLT25-3PH	3 phase fault on the Taloga (521065) to Dewey (514787) 138kV line, near Taloga. a. Apply fault at the Taloga 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
26	FLT26-1PH	Single phase fault and sequence like previous
27	FLT27-3PH	3 phase fault on the Dewey (514787) to Southard (514822) 138kV line,

		<p>near Dewey.</p> <p>a. Apply fault at the Dewey 138kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
28	FLT28-1PH	Single phase fault and sequence like previous
29	FLT29-3PH	<p>3 phase fault on the Woodward (515375) to Border (525835) 345kV line, near Woodward.</p> <p>a. Apply fault at the Woodward 345kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
30	FLT30-1PH	Single phase fault and sequence like previous
31	FLT31-3PH	<p>3 phase fault on the Hitchland (523097) 345kV to Hitchland (523095) 230kV transformer, 230 kV bus.</p> <p>a. Apply fault at the Hitchland 230kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted transformer.</p>
32	FLT32-3PH	<p>3 phase fault on the Fargo Jct (5211196) to Ft. Supply (520919) 69kV line, near Fargo Jct.</p> <p>a. Apply fault at the Fargo Jct 69kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
33	FLT33-1PH	Single phase fault and sequence like previous
34	FLT34-3PH	<p>3 phase fault on the Mooreland (520999) to Knob Hill (514795) 138kV line, near Knob Hill.</p> <p>a. Apply fault at the Knob Hill 138kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
35	FLT35-1PH	Single phase fault and sequence like previous
36	FLT36-3PH	<p>3 phase fault on the Mooreland (520999) to Cedardale (520848) 138kV line, near Cedardale.</p> <p>a. Apply fault at Cedardale 138kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
37	FLT37-1PH	Single phase fault and sequence like previous
38	FLT38-3PH	<p>3 phase fault on the Mooreland (520999) to Iodine (520957) 138kV line, near Iodine.</p> <p>a. Apply fault at Iodine 138kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
39	FLT39-1PH	Single phase fault and sequence like previous
40	FLT40-3PH	<p>3 phase fault on the Mooreland (520999) to Taloga (521065) 138kV line, near Taloga.</p> <p>a. Apply fault at Taloga 138kV bus.</p> <p>b. Clear fault after 5 cycles by tripping the faulted line.</p> <p>c. Wait 20 cycles, and then re-close the line in (b) back into the fault.</p> <p>d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.</p>
41	FLT41-1PH	Single phase fault and sequence like previous
42	FLT42-3PH	<p>3 phase fault on one of the Ft. Supply (520919) 69kV to Ft. Supply (520920) 230kV transformer, 230 kV bus.</p> <p>a. Apply fault at the Ft. Supply 230kV bus.</p>

		b. Clear fault after 5 cycles by tripping the faulted transformer.
43	FLT43-1PH	Single phase fault and sequence like previous
44	FLT44-3PH	3 phase fault on the Mooreland (520999) to Ninmile (521128) 138kV line, near Ninmile. a. Apply fault at Ninmile 138kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
45	FLT45-1PH	Single phase fault and sequence like previous
46	FLT46-3PH	3 phase fault on one of the Medicine Lodge (765342) to Wichita (532796) 345kV line, near Medicine Lodge. a. Apply fault at the Medicine Lodge 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
47	FLT47-1PH	Single phase fault and sequence like previous
48	FLT48-3PH	3 phase fault on one of the Woodward (515375) to Mooreland (560304) 345kV line, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
49	FLT49-1PH	Single phase fault and sequence like previous
50	FLT50-3PH	3 phase fault on the Mooreland (560304) 345kV to Mooreland (520999) 230kV transformer, 345 kV bus. a. Apply fault at the Mooreland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
51	FLT51-3PH	3 phase fault on one of the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
52	FLT52-1PH	Single phase fault and sequence like previous
53	FLT53-3PH	3 phase fault on one of the Woodward (515375) to Mooreland (560304) 345kV line, near Mooreland. a. Apply fault at the Mooreland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
54	FLT54-1PH	Single phase fault and sequence like previous

Table 3: Contingency List for Group 1

6.0 Simulation Results

All faults were run for both summer and winter cases, no tripping occurred in this study.

Table 4 summarizes the results for all faults. Complete sets of plots for summer and winter cases are available on request.

The models included a new 345kV line from Beaver to Gray County. After the addition of this new line the prior queued requests GEN-2006-024 and GEN-2007-006 tripped due to the low voltage in the Roman Nose 138kV substation area, around 0.89pu, under the contingencies from Woodward – Medicine Lodge 345KV lines (FLT05_3PH) and Medicine Lodge – Wichita 345kV

lines (FLT46_3PH). The adopted solution was to increase the size of the SVC at GEN-2007-006 34.5kV terminals from +/- 20 MVAR to +/- 60 MVAR comparing with the DISIS-2010-002 original study.

Based on the dynamic results, with all network upgrades in service, all the requests in Group 1 did not cause any stability problems and remained stable for all faults studied, with the addition the proposed upgrades.

Cont. No.	Cont. Name	Description	Summer	Winter
1	FLT01-3PH	3 phase fault on one of the Woodward (515375) to Tatonga (515407) 345kV line, near Woodward.		
2	FLT02-1PH	Single phase fault and sequence like previous		
3	FLT03-3PH	3 phase fault on one of the Woodward (515375) to Beaver County (580500) 345kV lines, near Woodward.		
4	FLT04-1PH	Single phase fault and sequence like previous		
5	FLT05-3PH	3 phase fault on one of the Woodward (515375) to Medicine Lodge (765342) 345kV lines, near Woodward.		
6	FLT06-1PH	Single phase fault and sequence like previous		
7	FLT07-3PH	3 phase fault on the Woodward 345kV (515375) to 138kV (515376) transformer, near the 345 kV bus.		
8	FLT08-3PH	3 phase fault on the Northwest (514880) to Tatonga (515407) 345kV line, near Tatonga.		
9	FLT09-1PH	Single phase fault and sequence like previous		
10	FLT10-3PH	3 phase fault on the Northwest (514880) to Spring Creek (514881) 345kV line, near Northwest.		
11	FLT11-1PH	Single phase fault and sequence like previous		
12	FLT12-3PH	3 phase fault on the Northwest (514880) to Cimarron (514901) 345kV line, near Northwest.		
13	FLT13-1PH	Single phase fault and sequence like previous		
14	FLT14-3PH	3 phase fault on Northwest 345kV (514880) to 138kV (514879) transformer T2, near the 345 kV bus.		
15	FLT15-3PH	3 phase fault on the Northwest (514880) to Arcadia (514908) 345kV line, near Arcadia.		
16	FLT16-1PH	Single phase fault and sequence like previous		
17	FLT17-3PH	3 phase fault on the Woodward EHV (515376) to Iodine (514796) 138kV line, near Woodward EHV.		
18	FLT18-1PH	Single phase fault and sequence like previous		
19	FLT19-3PH	3 phase fault on the Mooreland (520999) to GEN-2001-037 (515785) 138kV line, near Mooreland.		
20	FLT20-1PH	Single phase fault and sequence like previous		
21	FLT21-3PH	3 phase fault on the Mooreland (520999) to Glass Mountain (514788) 138kV line, near Mooreland.		
22	FLT22-1PH	Single phase fault and sequence like previous		
23	FLT23-3PH	3 phase fault on the Mooreland (520999) to Windfarm (515785) 138kV line, near Mooreland.		
24	FLT24-1PH	Single phase fault and sequence like previous		
25	FLT25-3PH	3 phase fault on the Taloga (521065) to Dewey (514787) 138kV line, near Taloga.		
26	FLT26-1PH	Single phase fault and sequence like previous		
27	FLT27-3PH	3 phase fault on the Dewey (514787) to Southard (514822) 138kV line, near Dewey.		

28	FLT28-1PH	Single phase fault and sequence like previous		
29	FLT29-3PH	3 phase fault on the Woodward (515375) to Border (525835) 345kV line, near Woodward.		
30	FLT30-1PH	Single phase fault and sequence like previous		
31	FLT31-3PH	3 phase fault on the Hitchland (523097) 345kV to Hitchland (523095) 230kV transformer, 230 kV bus.		
32	FLT32-3PH	3 phase fault on the Fargo Jct (5211196) to Ft. Supply (520919) 69kV line, near Fargo Jct.		
33	FLT33-1PH	Single phase fault and sequence like previous		
34	FLT34-3PH	3 phase fault on the Mooreland (520999) to Knob Hill (514795) 138kV line, near Knob Hill.		
35	FLT35-1PH	Single phase fault and sequence like previous		
36	FLT36-3PH	3 phase fault on the Mooreland (520999) to Cedardale (520848) 138kV line, near Cedardale. a. Apply fault at Cedardale 138kV bus.		
37	FLT37-1PH	Single phase fault and sequence like previous		
38	FLT38-3PH	3 phase fault on the Mooreland (520999) to Iodine (520957) 138kV line, near Iodine.		
39	FLT39-1PH	Single phase fault and sequence like previous		
40	FLT40-3PH	3 phase fault on the Mooreland (520999) to Taloga (521065) 138kV line, near Taloga.		
41	FLT41-1PH	Single phase fault and sequence like previous		
42	FLT42-3PH	3 phase fault on one of the Ft. Supply (520919) 69kV to Ft. Supply (520920) 230kV transformer, 230 kV bus.		
43	FLT43-1PH	Single phase fault and sequence like previous		
44	FLT44-3PH	3 phase fault on the Mooreland (520999) to Ninemile (521128) 138kV line, near Ninemile.		
45	FLT45-1PH	Single phase fault and sequence like previous		
46	FLT46-3PH	3 phase fault on one of the Medicine Lodge (765342) to Wichita (532796) 345kV line, near Medicine Lodge.		
47	FLT47-1PH	Single phase fault and sequence like previous		
48	FLT48-3PH	3 phase fault on one of the Woodward (515375) to Mooreland (560304) 345kV line, near Woodward.		
49	FLT49-1PH	Single phase fault and sequence like previous		
50	FLT50-3PH	3 phase fault on the Mooreland (560304) 345kV to Mooreland (520999) 230kV transformer, 345 kV bus.		
51	FLT51-3PH	3 phase fault on one of the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb.		
52	FLT52-1PH	Single phase fault and sequence like previous		
53	FLT53-3PH	3 phase fault on one of the Woodward (515375) to Mooreland (560304) 345kV line, near Mooreland.		
54	FLT54-1PH	Single phase fault and sequence like previous		

Table 4: Contingency List Simulation Results for Group 1

7.0 Generator Performance

GEN-2010-043

The transmission system and the study generators were found to remain stable during the dynamic analysis.

Figures 2, 3, 4, 5 and 6 shows the output power for GEN-2010-043, summer and winter cases respectively, under contingencies FLT53-3PH. The contingency is in the point of interconnection of the generator. The equivalent model is represented by two equivalent generators.

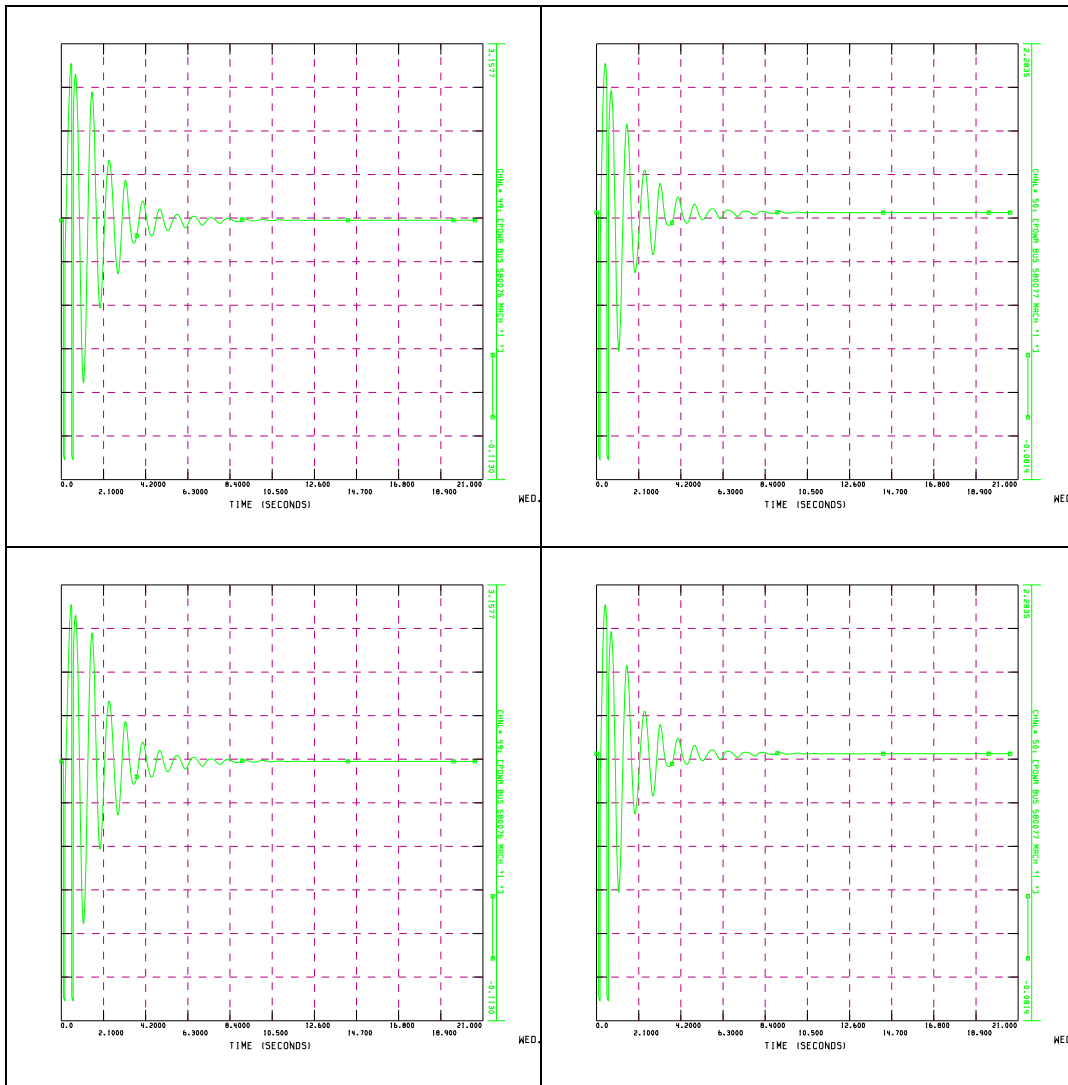


Figure 2: GEN-2010-43 output power for fault FLT53-3PH summer and winter cases

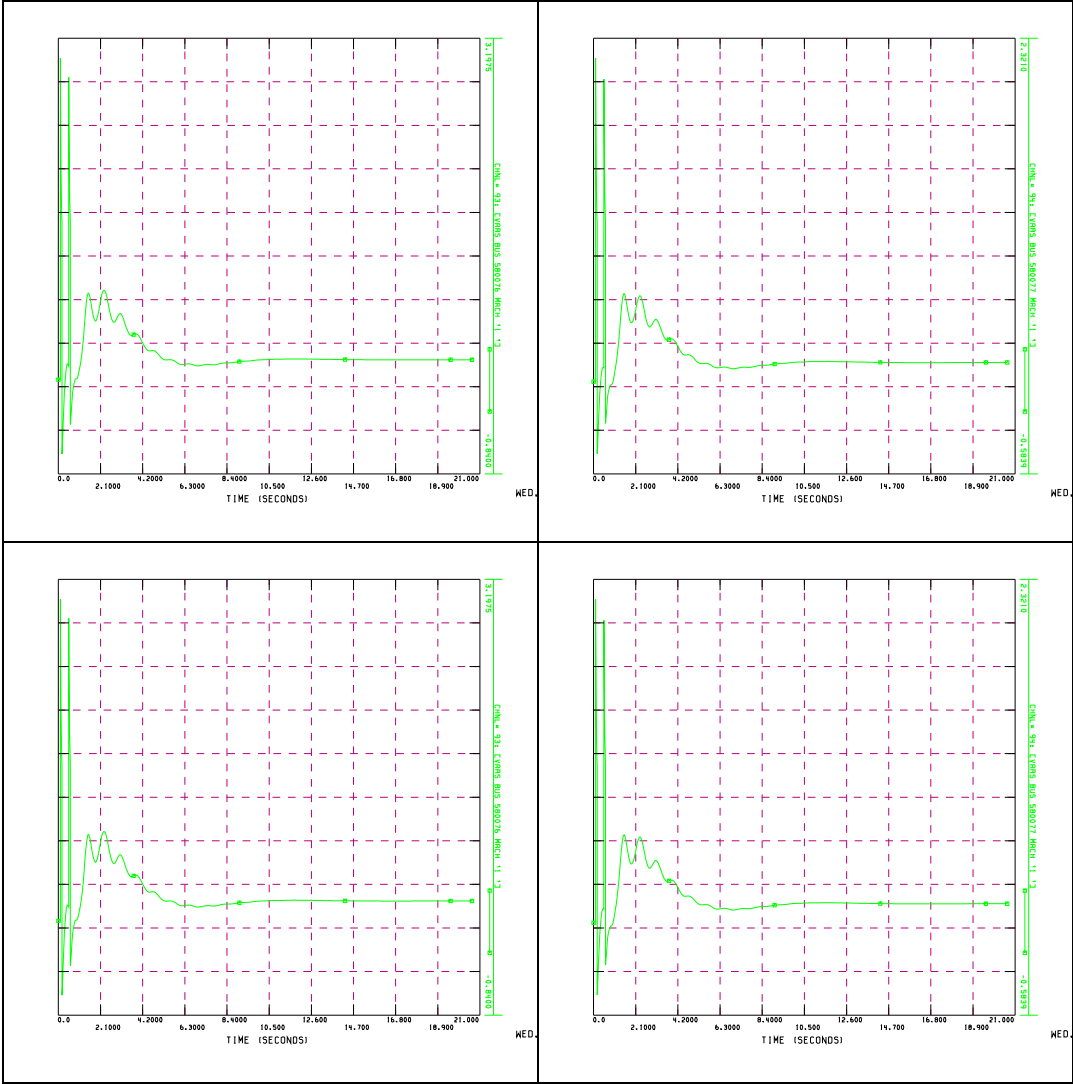
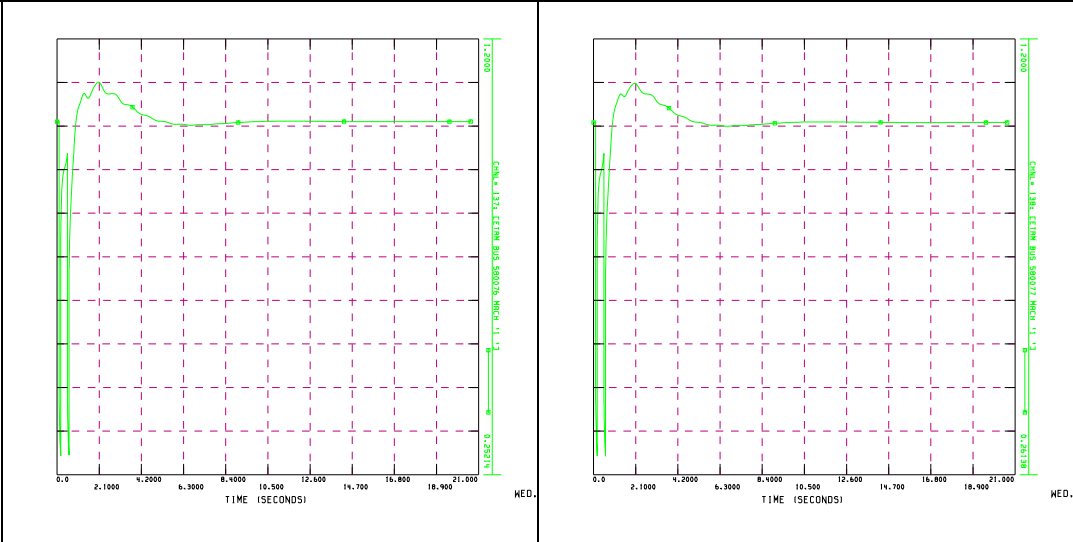


Figure 3: GEN-2010-43 reactive power for fault FLT53-3PH summer and winter cases



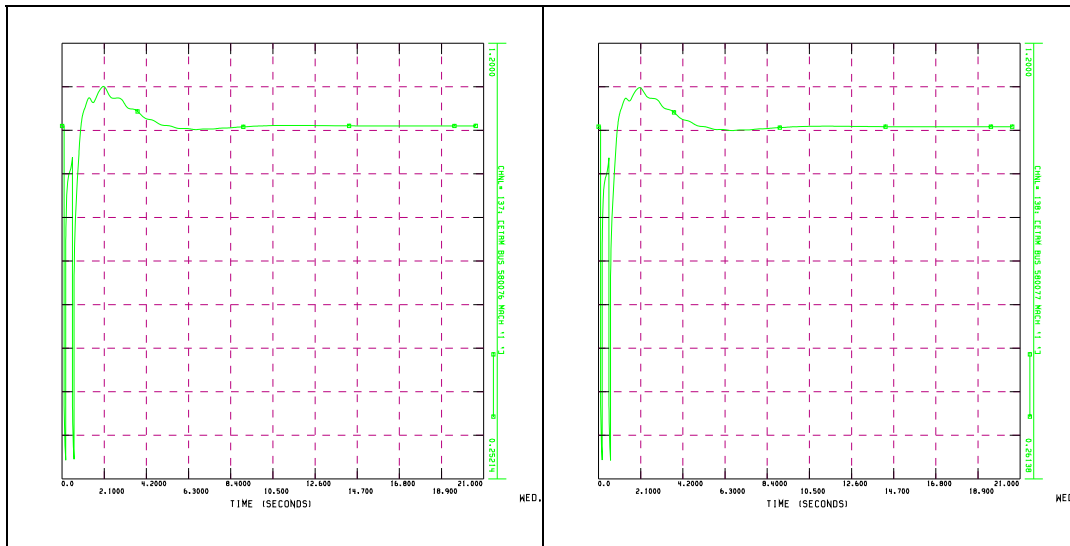


Figure 4: GEN-210-43 terminal voltage for fault FLT53-3PH summer and winter cases

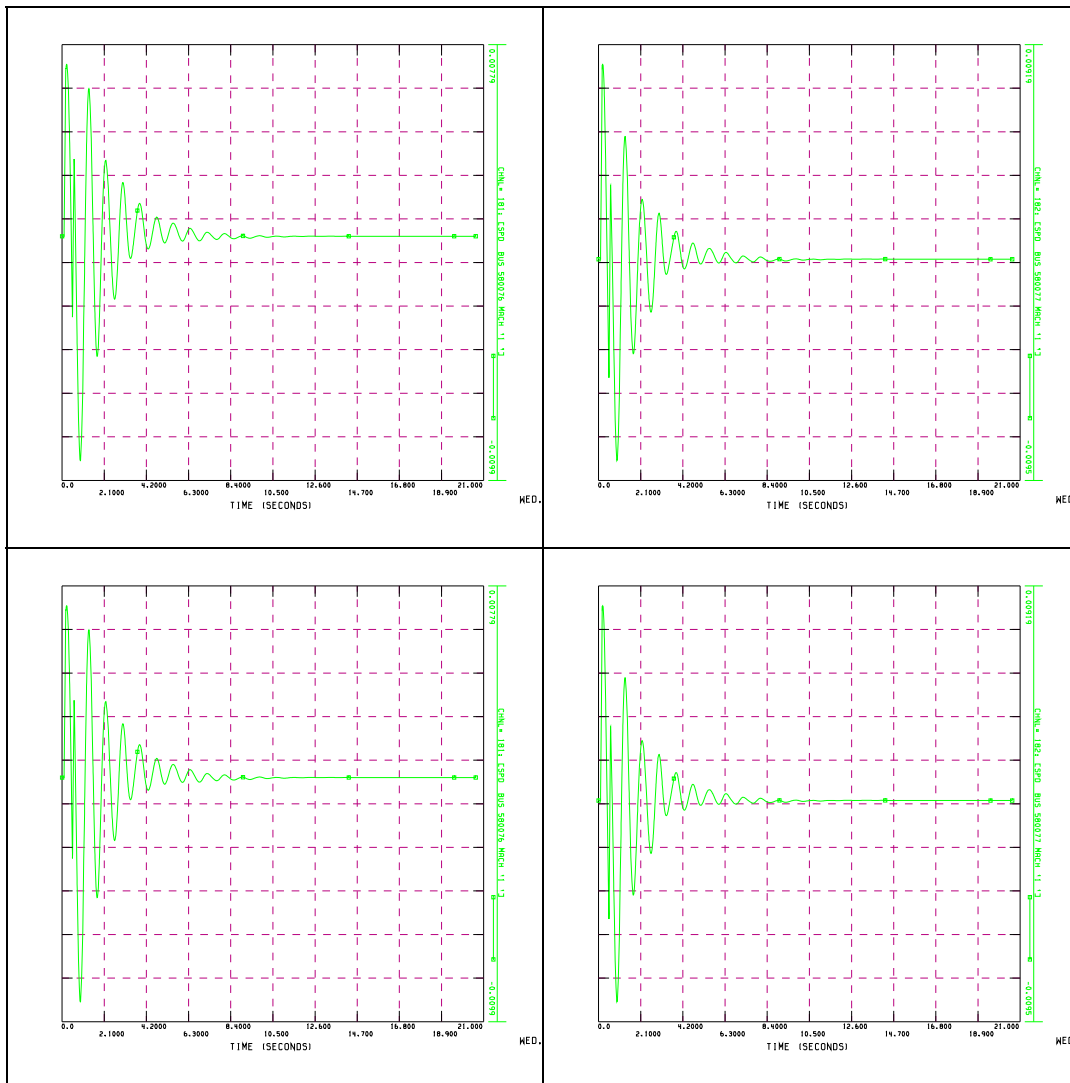


Figure 5: GEN-2010-43 speed for fault FLT53-3PH summer and winter cases

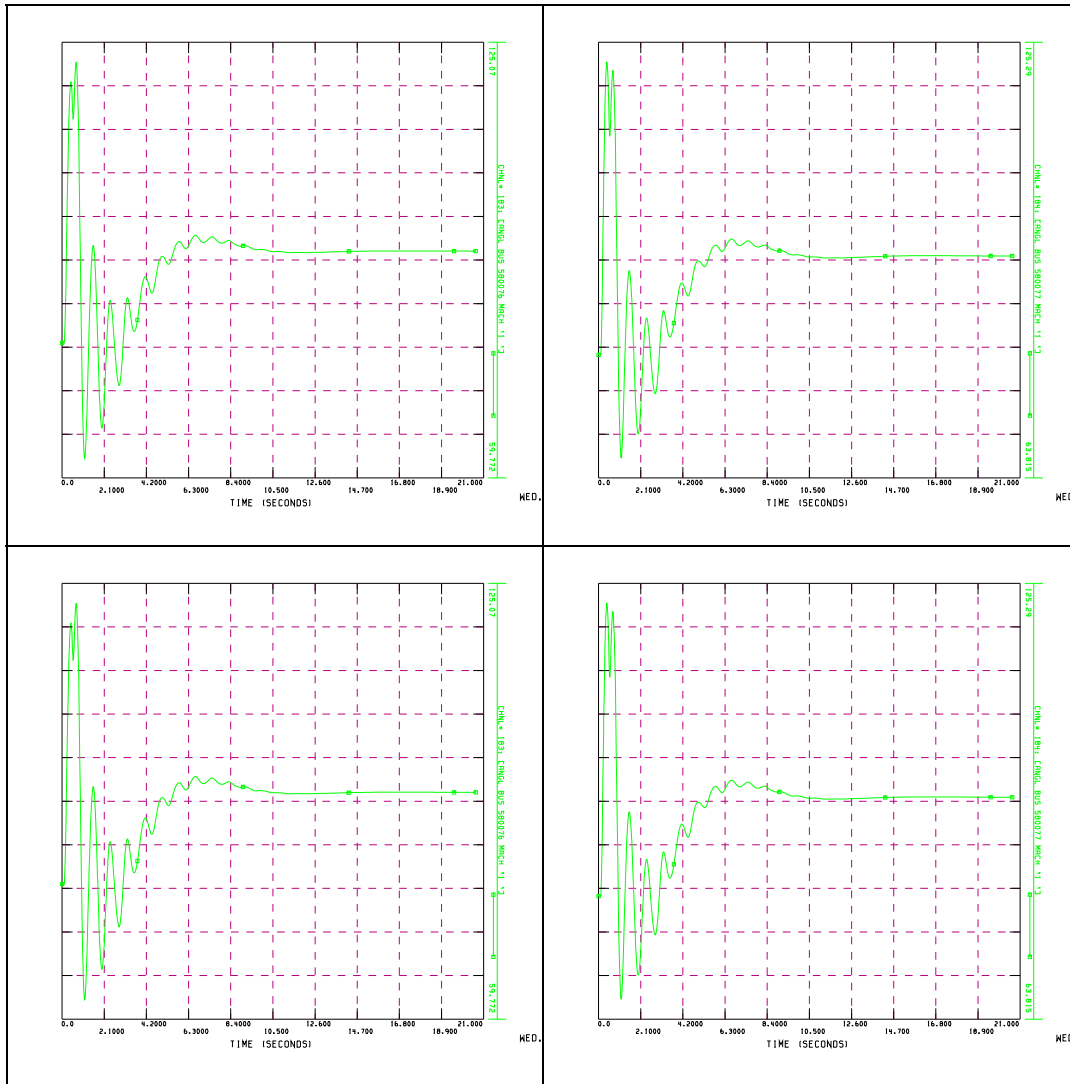


Figure 6: GEN-2010-43 angle for fault FLT53-3PH summer and winter cases

8.0 Power Factor Analysis

All interconnection requests are required by the SPP tariff to maintain a 95% lagging (producing vars) and a 95% leading (absorbing vars) power factor at the point of interconnection. These requirements are below.

REQUEST	Power Factor Requirement	
	Lead	Lag
GEN-2010-043	95%	95%

Table 5: Required Power Factor for GEN-2010-043

9.0 Conclusion

A transient stability re-study has been performed by Southwest Power Pool (SPP) to evaluate the interconnection requests in the Definitive Impact Study Interconnection Study (DISIS-2010-002) for Group 1 in the Woodward area.

The DISIS-2010-002 study has one (1) Interconnection Requests in the Woodward area. The interconnection request includes GEN-2010-043, dispatching 320MW. The point of interconnection is Mooreland 345kV substation.

Proposed upgrades added to the models for DISIS-2010-002 include the Beaver County – Gray County 345kV line assigned to DISIS-2010-002 customers and the Hitchland – Border 345kV line assigned to DISIS-2010-001 customers. . After the addition of this new line the prior queued requests GEN-2006-024 and GEN-2007-006 were tripping due to the low voltage in the Roman Nose 138kV substation area, around 0.89pu, under the contingencies from Woodward – Medicine Lodge 345KV lines (FLT05_3PH) and Medicine Lodge – Wichita 345kV lines (FLT46_3PH). The adopted solution was to increase the size of the SVC at GEN-2007-006 34.5kV terminals from +/- 20 MVAR to +/- 60 MVAR comparing with the DISIS-2010-002 original study.

The results of a stability analysis determined that for the addition of the DISIS-2010-002 interconnection request, the transmission system was found to remain stable for both summer and winter peak conditions with all required network upgrades in service.

Since the study project is using a synchronous generator, no power factor analysis was performed, the request is required by the SPP tariff to maintain a 95% lagging (producing vars) and a 95% leading (absorbing vars) power factor at the point of interconnection.

The results of a stability analysis determined that for the addition of the DISIS-2011-001 interconnection requests, the transmission system was found to remain stable for both summer and winter peak conditions with all required network upgrades in service. Additionally, the projects that were wind farms were found to stay connected during the contingencies that were studied, meeting the Low Voltage Ride Through (LVRT) requirements of FERC Order #661A.

If any previously queued projects that were included in this study drop out, then this System Impact Study may have to be revised to determine the impacts of this Interconnection Customer's project on transmission facilities. Since this is also a preliminary System Impact Study, not all previously queued projects were assumed to be in service in this System Impact Study. If any of those projects are constructed, then this System Impact Study may have to be revised to determine the impacts of this Interconnection Customer's project on transmission facilities. In accordance with FERC and SPP procedures, the study cost for restudy shall be borne by the Interconnection Customer.

J: Stability Study for Group 2

SPP DISIS-2010-002 Group 2
Definitive Impact Study
Restudy

Draft Report for
Southwest Power Pool

Prepared by:
Excel Engineering, Inc.

May 4, 2011

Principal Contributor:
William Quaintance, P.E.



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0. Certification

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of **Oklahoma**.

William Quaintance
Oklahoma License Number 24320

1. Background and Scope

The DISIS-2010-002 Group 2 Definitive Impact Restudy is a generation interconnection study performed by Excel Engineering, Inc. for its non-affiliated client, Southwest Power Pool (SPP). Its purpose is to study the impacts of interconnecting the projects shown in Table 1-1. The in-service date assumed for the generation addition was 2011. This restudy was needed due to the withdrawal of project GEN-2002-006 and other assumption changes in the area.

Table 1-1. Interconnection Requests Evaluated in this Study

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2010-001	300	Suzlon 2.1MW	Beaver Co. 345 (580500)	580500	578545 578548

The prior-queued requests shown in Table 1-2 were included in this study and dispatched at 100% of rated capacity.

The study included stability analysis of each proposed interconnection request. Contingencies that resulted in a prior-queued project tripping off-line, if any, were re-run with the prior-queued project's voltage and frequency tripping disabled. A power factor analysis was performed for the wind farms in Table 1-1.

ATC (Available Transfer Capability) studies were not performed as part of this study. These studies will be required at the time transmission service is actually requested. Additional transmission upgrades may be required based on that analysis.

Study assumptions in general have been based on Excel's knowledge of the electric power system and on the specific information and data provided by SPP. The accuracy of the conclusions contained within this study is sensitive to the assumptions made with respect to generation additions and transmission improvements being contemplated. Changes in the assumptions of the timing of other generation additions or transmission improvements will affect this study's conclusions.

Table 1-2. Nearby Interconnection Requests Already in the Queue

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2002-008	240	GE 1.5MW	Hitchland 345kV (523097)	523097	579077 579078 579079
GEN-2002-009	79.8	Suzlon 2.1MW	Hansford 115kV (523195)	523195	579084
GEN-2003-013	198	GE 1.5 MW	Conestoga 345kV (560029)	560029	579091
GEN-2003-020	159	GE 1.5 MW	Martin 115kV (523928)	523928	560845 560846
GEN-2005-017	339	GE 1.5 MW	Hitchland – Potter 345kV (579118)	579118	579119 579120 579121
GEN-2006-020	19.5	GE 1.5 MW	Hitchland – Sherman Tap 115kV (523160)	523160	579138
GEN-2006-044	370.5	GE 1.5 MW	Hitchland 345kV (523097)	523097	579173 579174 579175
GEN-2006-049	399	GE 1.5 MW	Conestoga 345kV (560029)	560029	560946 560947
GEN-2007-046	199.5	GE 1.5MW	Hitchland 115kV (523093)	523093	1050
GEN-2007-057	34.5	GE 1.5MW	Moore Co. East 115kV (523308)	523308	523313
GEN-2008-047	300	GE 1.5MW	Beaver Co. 345 (580500)	580500	573506 573510
GEN-2008-110	299.2	GE 1.6MW	Hitchland 345kV (523097)	523097	575083
GEN-2010-007	73.8	Vestas V100 1.8MW	Tap Riverside – Pringle 115kV (575090)	575090	575094
GEN-2010-014	358.8	Siemens SWT 2.3MW	Hitchland 345kV (523097)	523097	576400 576410

2. Executive Summary

The DISIS-2010-002 Group 2 Definitive Impact Study evaluated the impacts of interconnecting the Table 1-1 study projects to the SPP transmission system.

Steady-state stability problems were found during the power factor analysis for the following outages:

- Fault 43 on both of the Beaver Co. (G08-47) to Woodward 345kV lines
- Fault 46 on both of the Woodward to Medicine Lodge 345kV lines
- Fault 47 on the Tatonga to Northwest 345kV line

To fix these problems, a new line is needed from Beaver County (GEN-2008-047 and GEN-2010-001 POI), to Gray County (GEN-2007-040 POI). With this line in service, all steady-state and dynamic analyses are stable.

Final power factor and capacitor requirements for the Group 2 projects are listed in Table 4-2. GEN-2010-001 will need to add 145 Mvar of capacitors to meet the 95% lagging power factor requirement.

With the assumptions and upgrades described in this report, DISIS-2010-002 Group 2 should be able to connect without causing any stability problems on the SPP transmission grid.

Any change in system or wind farm models or assumptions could change these results.

3. Study Development and Assumptions

3.1 *Simulation Tools*

The Siemens Power Technologies, Inc. PSS/E power system simulation program Version 30.3.3 was used in this study.

3.2 *Models Used*

SPP provided its latest stability database cases for both summer and winter peak seasons. The model included the study and prior-queued projects. A power flow one-line diagram of the study project is shown in Figure 3-1.

Transmission lines and substation transformers are modeled explicitly in the power flow cases. The 34.5 kV collector systems and wind turbines are modeled as a single equivalent for each substation transformer. Steady-state and dynamic model data for the study plants are given in Appendix D.

A one-line diagram of the SPP 345 kV system in the Group 2 area is shown in Appendix E.

No special modeling is required of line relays in these cases, except for the special modeling related to the wind-turbine tripping.

3.3 *Monitored Facilities*

All generators and transmission buses in Areas 520, 524, 525, 526, 531, 534, and 536 were monitored.

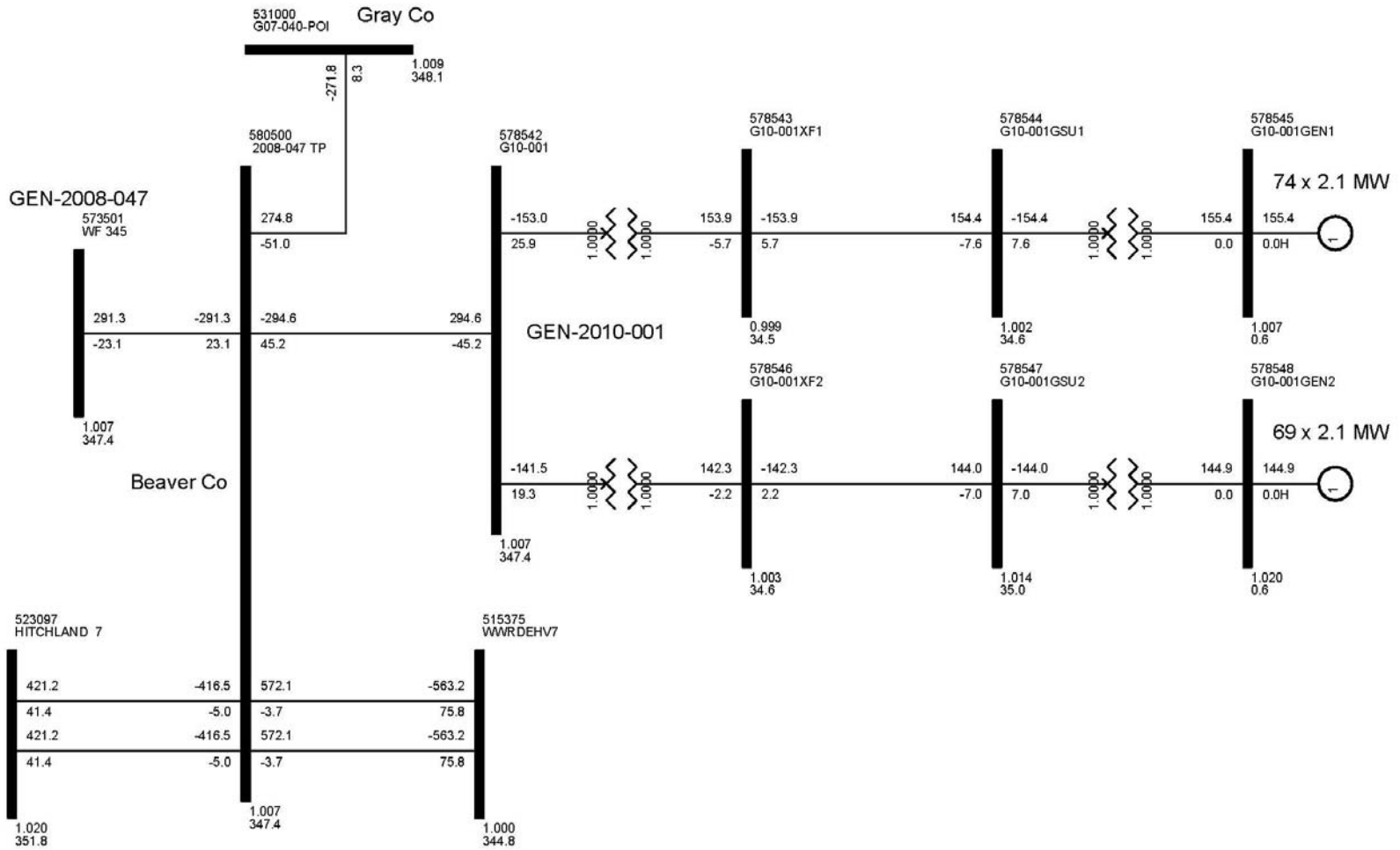


Figure 3-1. Power Flow One-line for GEN-2010-001

3.4 Performance Criteria

Any wind generators must comply with FERC Order 661A on low voltage ride through for wind farms. Therefore, the wind generators should not trip off line for faults for under voltage relay actuation. If a wind generator trips off line, an appropriately sized SVC or STATCOM device may need to be specified to keep the wind generator on-line for the fault. SPP was consulted to determine if the addition of an SVC or STATCOM is warranted for the specific condition.

Contingencies that resulted in a prior-queued project tripping off-line, if any, were re-run with the prior-queued project's voltage and frequency tripping disabled to check for stability issues.

3.5 Performance Evaluation Methods

A power factor analysis was performed for all study projects that are wind farms. The power factor analysis consisted of modeling a var generator in each wind farm holding a voltage schedule at the POI. The voltage schedule was set to the higher of the voltage with the wind farm off-line or 1.0 per unit.

If the required power factor at the POI is beyond the capability of the studied wind turbines, then capacitor banks would be considered. Factors used in sizing capacitor banks would include two requirements of FERC Order 661A: the ability of the wind farm to ride through low voltage with and without capacitor banks and the ability of the wind farm to recover to pre-fault voltage. If a wind generator trips on high voltage, a leading power factor may be required.

ATC studies were not performed as part of this study. These studies will be required at the time transmission service is actually requested. Additional transmission facilities may be required based on subsequent ATC analysis.

Stability analysis was performed for each proposed interconnection request. Faults were simulated on transmission lines at the POIs and on other nearby transmission equipment. The faults in Table 3-1 were run for each case (three phase and single phase as noted).

Table 3-1. Fault Definitions for DISIS-2010-002 Group 2

Cont. No.	Contingency Name	Contingency Description
1	FLT01-3PH	3 phase fault on the Hitchland (523097) to GEN-2003-013 (560029) 345kV line, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
2	FLT02-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
3	FLT03-3PH	3 phase fault on the Hitchland (523097) to GEN-2005-017 (579118) 345kV line, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
4	FLT04-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
5	FLT05-3PH	3 phase fault on the Hitchland 230kV (523095) to 345kV (523097) transformer, near the 230kV bus. a. Apply fault at the Hitchland 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
6	FLT06-3PH	3 phase fault on the Moore Co (523309) to Hitchland (523095) 230kV near Moore Co. a. Apply fault at the Moore Co 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
7	FLT07-3PH	3 phase fault on the GEN-2005-017 (579118) to Potter Co. (523961) 345kV line, near GEN-2005-017. a. Apply fault at the GEN-2005-017 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
8	FLT08-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
9	FLT09-3PH	3 phase fault on the Potter Co (523959) to Moore Co. (523309) 230kV line, near Potter Co. a. Apply fault at the Potter Co. 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
10	FLT10-3PH	3 phase fault on the Pringle (523267) to Harrington (523979) 230kV line, near Pringle. a. Apply fault at the Pringle 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
11	FLT11-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
12	FLT12-3PH	3 phase fault on the GEN-2003-013 (560029) to Finney (523853) 345kV line, near GEN-2003-013. a. Apply fault at the GEN-2003-013 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line
13	FLT13-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
14	FLT14-3PH	3 phase fault on the Holcomb (531449) to Setab (531465) 345kV line, near Holcomb. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
15	FLT15-1PH	Single phase fault and sequence like previous
16	FLT16-3PH	3 phase fault on the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
17	FLT17-1PH	Single phase fault and sequence like previous
18	FLT18-3PH	3 phase fault on the Woodward (515375) to Tatonga (515407) 345kV line, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
19	FLT19-3PH	3 phase fault on the DWS Frisco (523160) to Lasley (523175) 115kV line, near DWS Frisco. a. Apply fault at the DWS Frisco 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line (all segments listed above). c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
20	FLT20-1PH	Single phase fault and sequence like previous
21	FLT21-3PH	3 phase fault on the Hitchland 115kV (523093) to 230kV (523095) transformer, near the 115 kV bus. a. Apply fault at the Hitchland 115kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
22	FLT22-3PH	3 phase fault on the Pringle (523266) to Spearman (523186) 115kV line #1, near Pringle. a. Apply fault at the Pringle 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
23	FLT23-1PH	Single phase fault and sequence like previous
24	FLT24-3PH	3 phase fault on the Moore Co. East 115kV (523308) to 230kV (523309) transformer, near the 115 kV bus. a. Apply fault at the Moore Co. East 115kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
25	FLT25-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
26	FLT26-3PH	3 phase fault on the Spearman (523186) to Spearman Sub (523203) 115kV line, near Spearman. a. Apply fault at the Spearman 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
27	FLT27-1PH	Single phase fault and sequence like previous
28	FLT28-3PH	3 phase fault on the Texas Co. 115kV phase shifting transformer (523090 to 523106), near the main 115 kV bus. a. Apply fault at the main Texas Co. 115kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
29	FLT29-3PH	3 phase fault on the Gen-2010-007 Tap (575090) to Pringle (523266) 115kV line, near Gen-2010-007 Tap. a. Apply fault at the Gen-2010-007 Tap 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
30	FLT30-1PH	Single phase fault and sequence like previous
31	FLT31-3PH	3 phase fault on the Pringle 115kV (523266) to Pringle 230kV (523267) transformer near the 115 kV bus. a. Apply fault at the Pringle 115kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
32	FLT32-3PH	3 phase fault on the Riverview (523377) to Harrington Tap (523352) 115kV line, near Riverview. a. Apply fault at the Riverview 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
33	FLT33-1PH	Single phase fault and sequence like previous
34	FLT34-3PH	3 phase fault on the Hutchison 115kV (523546) to the Hutchison 230kV (523551) transformer near the 115 kV bus. a. Apply fault at the Hutchison 115kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
35	FLT35-3PH	3 phase fault on the Pringle (523266) to Q_RYTON_TP (523478) 115kV line, near Pringle. a. Apply fault at the Pringle 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
36	FLT36-1PH	Single phase fault and sequence like previous
37	FLT37-3PH	3 phase fault on the TMP_MIDPT (525835) – Woodward (515375) 345 kV line, at TMP_MIDPT. a Apply fault at TMP_MIDPT b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
38	FLT38-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
39	FLT39-3PH	3 phase fault on one of the Finney (523853) to Holcomb (531449) 345kV lines, near Finney. a. Apply fault at the Finney 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
40	FLT40-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
41	FLT41-3PH	3 phase fault on both of the Hitchland (523097) to Gen-2008-047Tap (580500) 345kV lines, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
42	FLT42-1PH	Single phase fault on both lines in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping both lines. c. Wait 20 cycles, and then re-close both lines back into the fault. d. Leave fault on for 5 cycles, then trip both lines and remove fault.
43	FLT43-3PH	3 phase fault on both of the Woodward (515375) to Gen-2008-047Tap (580500) 345kV lines, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
44	FLT44-1PH	Single phase fault on both lines in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping both lines. c. Wait 20 cycles, and then re-close both lines back into the fault. d. Leave fault on for 5 cycles, then trip both lines and remove fault.
45	FLT45-3PH	3 phase fault on both of the Hitchland (523097) to Border (525835) 345kV lines, near Hitchland. a. Apply fault at the Hitchland 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
46	FLT46-3PH	3 phase fault on both of the Woodward (515375) to Medicine Lodge (765342) 345kV lines, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
47	FLT47-3PH	3 phase fault on the Tatonga (515407) to Northwest (514880) 345kV line, near Tatonga. a. Apply fault at the Tatonga 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
48	FLT48-3PH	3 phase fault on both of the Gen-2008-047Tap (580500) to Hitchland (523097) 345kV lines, near Gen-2008-047Tap. a. Apply fault at the Gen-2008-047Tap 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
49	FLT49-3PH	3 phase fault on both of the Gen-2008-047Tap (580500) to Woodward (515375) 345kV lines, near Gen-2008-047Tap. a. Apply fault at the Gen-2008-047Tap 345kV bus. b. Clear fault after 5 cycles by tripping both lines.

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Cont. No.	Contingency Name	Contingency Description
50	FLT50-3PH	3 phase fault on both of the Medicine Lodge (765342) to Wichita (532796) 345kV lines, near Medicine Lodge. a. Apply fault at the Medicine Lodge 345kV bus. b. Clear fault after 5 cycles by tripping both lines.
51	FLT51-3PH	3 phase fault on the Beaver Co (580500) to Gray Co (531000) 345kV line, near Beaver Co. a. Apply fault at the Beaver Co 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

4. Results and Observations

4.1 Stability Analysis Results

Table 4-1 summarizes the results. Figure 4-1 through Figure 4-2 show representative summer peak season plots for faults at the POI's of the study projects. Complete sets of plots for both summer and winter peak seasons for each fault and each project are included in Appendices A and B.

In the initial power factor analysis of the Winter case, some of the contingencies, listed below, would not solve in power flow, even with reactive power compensation added to the study plant.

- Fault 43 on both of the Beaver Co. (G08-47) to Woodward 345kV lines
- Fault 46 on both of the Woodward to Medicine Lodge 345kV lines
- Fault 47 on the Tatonga to Northwest 345kV line

These faults are considered to be steady-state unstable. The Winter case is more severe because, with less load and the same wind generation, more power has to be exported from west to east, increasing the flows on the transmission system.

To fix these problems, a new line was added from Beaver County (GEN-2008-047 and GEN-2010-001 POI), to Gray County (GEN-2007-040 POI). With this line in service, all steady-state and dynamic analyses were stable. However, the following behaviors were noted:

In Fault 12, the GEN-2003-013 plant tripped due to low voltage during the fault. This wind plant has a sensitive under-voltage trip setting (<30% voltage for >20ms). The pre-fault voltage is fine at around 1.045, but the 83ms fault takes the voltage below 30%. When the fault was rerun with tripping disabled, everything was fine.

In Fault 18 and 47, the GEN-2008-019 plant tripped due to high voltage following fault clearing. This wind plant has a sensitive over-voltage trip setting (>110% voltage for >20ms). The pre-fault voltage is fine at around 1.0 pu, but tripping the line results in high voltages at the Tatonga plants. When the fault was rerun with tripping disabled, everything was fine.

In Faults 21 and 28, the ASGI-011 plant tripped due to low voltage during the fault. This wind plant has a sensitive under-voltage trip setting (<30% voltage for >20ms). The pre-fault voltage is fine at around 1.01, but the 83ms faults take the voltage below 30%. When the fault was rerun with tripping disabled, everything was fine.

Table 4-1. Summary of Stability Results

Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
1	FLT01-3PH	3 phase fault on the Hitchland (523097) to GEN-2003-013 (560029) 345kV line, near Hitchland.	OK	OK
2	FLT02-1PH	Single phase fault on the line in previous	OK	OK
3	FLT03-3PH	3 phase fault on the Hitchland (523097) to GEN-2005-017 (579118) 345kV line, near Hitchland.	OK	OK
4	FLT04-1PH	Single phase fault on the line in previous	OK	OK
5	FLT05-3PH	3 phase fault on the Hitchland 230kV (523095) to 345kV (523097) transformer, near the 230kV bus.	OK	OK
6	FLT06-3PH	3 phase fault on the Moore Co (523309) to Hitchland (523095) 230kV near Moore Co.	OK	OK
7	FLT07-3PH	3 phase fault on the GEN-2005-017 (579118) to Potter Co. (523961) 345kV line, near GEN-2005-017.a. Apply fault at the GEN-2005-017 345kV bus.	OK	OK
8	FLT08-1PH	Single phase fault on the line in previous	OK	OK
9	FLT09-3PH	3 phase fault on the Potter Co (523959) to Moore Co. (523309) 230kV line, near Potter Co.	OK	OK
10	FLT10-3PH	3 phase fault on the Pringle (523267) to Harrington (523979) 230kV line, near Pringle.	OK	OK
11	FLT11-1PH	Single phase fault and sequence like previous	OK	OK
12	FLT12-3PH	3 phase fault on the GEN-2003-013 (560029) to Finney (523853) 345kV line, near GEN-2003-013.	OK G03-18 tripped	OK
	FLT12-3PH- nt	3 phase fault on the GEN-2003-013 (560029) to Finney (523853) 345kV line, near GEN-2003-013. Tripping blocked.	OK	n/a
13	FLT13-1PH	Single phase fault on the line in previous	OK	OK
14	FLT14-3PH	3 phase fault on the Holcomb (531449) to Setab (531465) 345kV line, near Holcomb.	OK	OK
15	FLT15-1PH	Single phase fault and sequence like previous	OK	OK
16	FLT16-3PH	3 phase fault on the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb.	OK	OK
17	FLT17-1PH	Single phase fault and sequence like previous	OK	OK
18	FLT18-3PH	3 phase fault on the Woodward (515375) to Tatonga (515407) 345kV line, near Woodward.	OK G08-19 tripped	OK G08-19 tripped
	FLT18-3PH- nt	3 phase fault on the Woodward (515375) to Tatonga (515407) 345kV line, near Woodward. Tripping blocked.	OK	OK
19	FLT19-3PH	3 phase fault on the DWS Frisco (523160) to Lasley (523175) 115kV line, near DWS Frisco.	OK	OK
20	FLT20-1PH	Single phase fault and sequence like previous	OK	OK

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Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
21	FLT21-3PH	3 phase fault on the Hitchland 115kV (523093) to 230kV (523095) transformer, near the 115 kV bus.	OK ASGI-11 tripped	OK ASGI-11 tripped
	FLT21-3PH-nt	3 phase fault on the Hitchland 115kV (523093) to 230kV (523095) transformer, near the 115 kV bus. Tripping blocked.	OK	OK
22	FLT22-3PH	3 phase fault on the Pringle (523266) to Spearman (523186) 115kV line #1, near Pringle.	OK	OK
23	FLT23-1PH	Single phase fault and sequence like previous	OK	OK
24	FLT24-3PH	3 phase fault on the Moore Co. East 115kV (523308) to 230kV (523309) transformer, near the 115 kV bus.	OK	OK
25	FLT25-1PH	Single phase fault and sequence like previous	OK	OK
26	FLT26-3PH	3 phase fault on the Spearman (523186) to Spearman Sub (523203) 115kV line, near Spearman.	OK	OK
27	FLT27-1PH	Single phase fault and sequence like previous	OK	OK
28	FLT28-3PH	3 phase fault on the Texas Co. 115kV phase shifting transformer (523090 to 523106), near the main 115 kV bus.	OK ASGI-11 Tripped	OK ASGI-11 tripped
	FLT28-3PH-nt	3 phase fault on the Texas Co. 115kV phase shifting transformer (523090 to 523106), near the main 115 kV bus. Tripping blocked.	OK	OK
29	FLT29-3PH	3 phase fault on the Gen-2010-007 Tap (575090) to Pringle (523266) 115kV line, near Gen-2010-007 Tap.	OK	OK
30	FLT30-1PH	Single phase fault and sequence like previous	OK	OK
31	FLT31-3PH	3 phase fault on the Pringle 115kV (523266) to Pringle 230kV (523267) transformer near the 115 kV bus.	OK	OK
32	FLT32-3PH	3 phase fault on the Riverview (523377) to Harrington Tap (523352) 115kV line, near Riverview.	OK	OK
33	FLT33-1PH	Single phase fault and sequence like previous	OK	OK
34	FLT34-3PH	3 phase fault on the Hutchison 115kV (523546) to the Hutchison 230kV (523551) transformer near the 115 kV bus.	OK	OK
35	FLT35-3PH	3 phase fault on the Pringle (523266) to Q_RYTON_TP (523478) 115kV line, near Pringle.	OK	OK
36	FLT36-1PH	Single phase fault and sequence like previous	OK	OK
37	FLT37-3PH	3 phase fault on the TMP_MIDPT (525835) – Woodward (515375) 345 kV line, at TMP_MIDPT.	OK	OK
38	FLT38-1PH	Single phase fault and sequence like previous	OK	OK
39	FLT39-3PH	3 phase fault on one of the Finney (523853) to Holcomb (531449) 345kV lines, near Finney.	OK	OK
40	FLT40-1PH	Single phase fault on the line in previous	OK	OK
41	FLT41-3PH	3 phase fault on both of the Hitchland (523097) to Gen-2008-047Tap (580500) 345kV lines, near Hitchland.	OK	OK

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Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
42	FLT42-1PH	Single phase fault on both lines in previous	OK	OK
43	FLT43-3PH	3 phase fault on both of the Woodward (515375) to Gen-2008-047Tap (580500) 345kV lines, near Woodward.	OK	OK
44	FLT44-1PH	Single phase fault on both lines in previous	OK	OK
45	FLT45-3PH	3 phase fault on both of the Hitchland (523097) to Border (525835) 345kV lines, near Hitchland.	OK	OK
46	FLT46-3PH	3 phase fault on both of the Woodward (515375) to Medicine Lodge (765342) 345kV lines, near Woodward.	OK	OK
47	FLT47-3PH	3 phase fault on the Tatonga (515407) to Northwest (514880) 345kV line, near Tatonga.	OK G08-19 tripped	OK G08-19 tripped
	FLT47-3PH- nt	3 phase fault on the Tatonga (515407) to Northwest (514880) 345kV line, near Tatonga. Tripping blocked.	OK	OK
48	FLT48-3PH	3 phase fault on both of the Gen-2008-047Tap (580500) to Hitchland (523097) 345kV lines, near Gen-2008-047Tap.	OK	OK
49	FLT49-3PH	3 phase fault on both of the Gen-2008-047Tap (580500) to Woodward (515375) 345kV lines, near Gen-2008-047Tap.	OK	OK
50	FLT50-3PH	3 phase fault on both of the Medicine Lodge (765342) to Wichita (532796) 345kV lines, near Medicine Lodge.	OK	OK
51	FLT51-3PH	3 phase fault on the Beaver Co (580500) to Gray Co (531000) 345kV line, near Beaver Co.	OK	OK

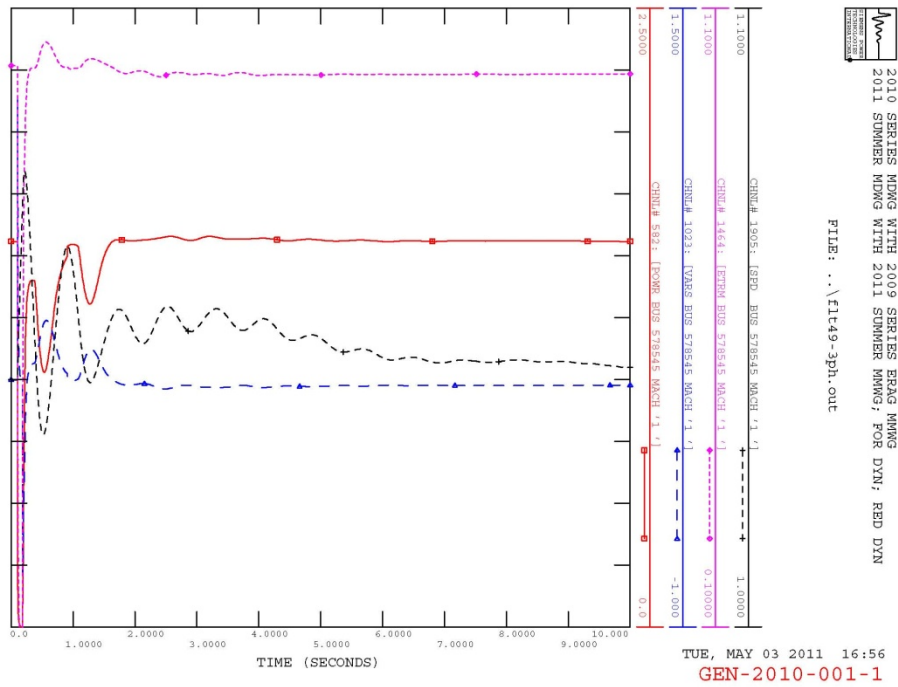


Figure 4-1. GEN-2010-001 Plot for Fault 12 – 3-Phase Fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040

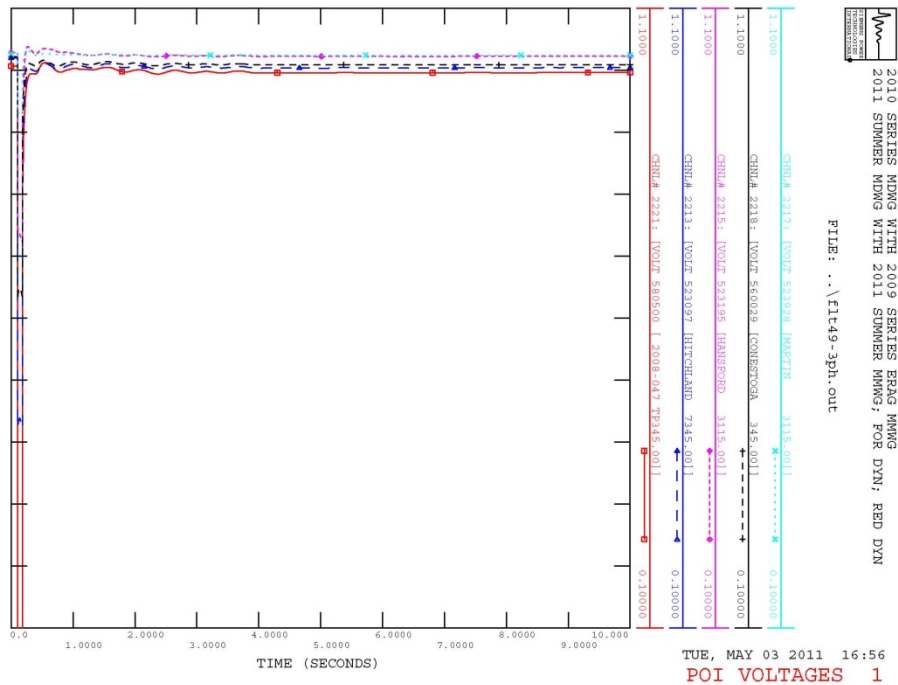


Figure 4-2. POI Voltages for Fault 12 – 3-Phase Fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040

4.2 Power Factor Requirements

All stability faults were tested as power flow contingencies to determine the power factor requirements for the wind farm study projects to maintain scheduled voltage at their respective points of interconnection (POI). The voltage schedules are set equal to the voltages at the POIs before the projects are added, with a minimum of 1.0 per unit. Fictitious reactive power sources were added to the study projects to maintain scheduled voltage during all studied contingencies. The MW and Mvar injections from the study projects at the POIs were recorded and the resulting power factors were calculated for all contingencies for summer peak and winter peak cases. The most leading and most lagging power factors determine the minimum power factor range capability that the study projects must install before commercial operation.

If more than one study project shared a single POI, the projects were grouped together and a common power factor requirement was determined for those study projects. This ensures that none of the study projects is required to provide more or less than its fair share of the reactive power requirements at a single POI. *Prior-queued* projects at the same POI, if any, were not grouped with the study projects because their interconnection requirements were determined in previous studies. The voltage schedules of prior-queued and study projects at the same POI were coordinated.

Per FERC and SPP Tariff requirements, if the power factor needed to maintain scheduled voltage is less than 0.95 lagging, then the requirement is limited to 0.95 lagging. The lower limit for leading power factor requirement is also 0.95. If a project never operated leading under any contingency, then the leading requirement is set to 1.0. The same applies on the lagging side. Estimates were made of the capacitor additions needed to meet the lagging power factor requirement.

Power factor analysis of the original winter case had some non-solvable contingencies, as described in the previous section. The final power factor analysis was performed after addition of the Beaver Co – Gray Co 345 kV line.

The final power factor requirements are shown in Table 4-2 below. These are only the minimum power factor ranges based on steady-state analysis. A project developer may install more capability than this if desired.

The full details for each contingency in summer and winter peak cases are given in Appendix C.

Table 4-2. Power Factor Requirements ¹

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement		Estimated Capacitor Requirement (Mvar)
				Lagging ²	Leading ³	
GEN-2010-001	300	Suzlon 2.1MW	Beaver Co. 345 (580500)	0.95	1.0	145

Notes:

1. For each plant, the table shows the minimum required power factor capability at the point of interconnection that must be designed and installed with the plant. The power factor capability at the POI includes the net effect of the generators, transformers, line impedances, and any reactive compensation devices installed on the plant side of the meter. Installing more capability than the minimum requirement is acceptable.
2. Lagging is when the generating plant is supplying reactive power to the transmission grid. In this situation, the alternating current sinusoid “lags” behind the alternating voltage sinusoid, meaning that the current peaks shortly after the voltage.
3. Leading is when the generating plant is taking reactive power from the transmission grid. In this situation, the alternating current sinusoid “leads” the alternating voltage sinusoid, meaning that the current peaks shortly before the voltage.

5. Conclusions

The DISIS-2010-002 Group 2 Definitive Impact Study evaluated the impacts of interconnecting the projects shown below.

Table 5-1. Interconnection Requests Evaluated in this Study

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2010-001	300	Suzlon 2.1MW	Beaver Co. 345 (580500)	580500	578545 578548

Steady-state stability problems were found during the power factor analysis for the following outages:

- Fault 43 on both of the Beaver Co. (G08-47) to Woodward 345kV lines
- Fault 46 on both of the Woodward to Medicine Lodge 345kV lines
- Fault 47 on the Tatonga to Northwest 345kV line

To fix these problems, a new line is needed from Beaver County (GEN-2008-047 and GEN-2010-001 POI), to Gray County (GEN-2007-040 POI). With this line in service, all steady-state and dynamic analyses are stable.

Final power factor and capacitor requirements for the Group 2 projects are listed in Table 4-2. GEN-2010-001 will need to add 145 Mvar of capacitors to meet the 95% lagging power factor requirement.

With the assumptions and upgrades described in this report, DISIS-2010-002 Group 2 should be able to connect without causing any stability problems on the SPP transmission grid.

Any change in system or wind farm models or assumptions could change these results.

Appendix A – Summer Peak Plots

See attachments.

Appendix B – Winter Peak Plots

See attachments.

Appendix C – Power Factor Details

See attachment.

Appendix D – Project Model Data

See attachment.

Appendix E – One-line Diagrams

See attachment.

K: Stability Study for Group 3

SPP DISIS-2010-002 Group 3
Definitive Impact Study
Restudy

Draft Report for
Southwest Power Pool

Prepared by:
Excel Engineering, Inc.

March 18, 2011

Principal Contributor:
William Quaintance, P.E.



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0. Certification

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of **Kansas**.

William Quaintance
Kansas License Number 20756

1. Background and Scope

The DISIS-2010-002 Group 3 Definitive Impact Restudy is a generation interconnection study performed by Excel Engineering, Inc. for its non-affiliated client, Southwest Power Pool (SPP). Its purpose is to study the impacts of interconnecting the projects shown in Table 1-1. The in-service date assumed for the generation addition was 2011. This restudy was needed due to the dropping out of projects GEN-2010-027 and GEN-2009-059 and the resultant changes in transmission plans.

Table 1-1. Interconnection Requests Evaluated in this Study

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2010-045	197.8	Siemens 2.3MW	Gray County 345kV (G07-040-POI) (531000)	531000	580054 580055
GEN-2010-049	49.6	GE 1.6MW	Pratt 115kV (539687)	539687	580004
GEN-2010-052	301.3	Siemens 2.3MW	Finney 345kV (523853)	523853	580019
GEN-2010-053	199.8	Vestas V90 1.8MW	Comanche 345kV (765341)	765341	580069

The prior-queued requests shown in Table 1-2 were included in this study and dispatched at 100% of rated capacity.

The study included stability analysis of each proposed interconnection request. Contingencies that resulted in a prior-queued project tripping off-line, if any, were re-run with the prior-queued project's voltage and frequency tripping disabled. A power factor analysis was performed for the wind farms in Table 1-1.

ATC (Available Transfer Capability) studies were not performed as part of this study. These studies will be required at the time transmission service is actually requested. Additional transmission upgrades may be required based on that analysis.

Study assumptions in general have been based on Excel's knowledge of the electric power system and on the specific information and data provided by SPP. The accuracy of the conclusions contained within this study is sensitive to the assumptions made with respect to generation additions and transmission improvements being contemplated. Changes in the assumptions of the timing of other generation additions or transmission improvements will affect this study's conclusions.

Table 1-2. Nearby Interconnection Requests Already in the Queue

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2001-039A	105	Clipper 2.5MW	FTDODGE3 (539671) – Greensburg 115kV (539664) POI - (579025)	579025	579028
GEN-2002-025A	150	GE 1.5 MW	Spearville 230kV (539695)	539695	562102
GEN-2004-014	154.5	GE 1.5 MW	Spearville 230kV (539695)	539695	562701
GEN-2005-012	249	Vestas V90 3.0MW	Spearville 345kV (531469)	531469	561805 561806
GEN-2006-006	205.5	GE 1.5 MW	Spearville 345kV (531469)	531469	562704
GEN-2006-021	100	Clipper 2.5MW	Tap Harper (539668) – Medicine Lodge (539674) 138kV. (Bus 539638)	539638	579142
GEN-2006-022	150	Clipper 2.5MW	Pratt 115kV (539687)	539687	579146
GEN-2007-038	200	Clipper 2.5MW	Spearville 345kV (531469)	531469	1381 1382
GEN-2007-040	200.1	Siemens 2.3MW	Gray County 345kV (G07-040-POI) (531000)	531000	531004
GEN-2008-018	405	GE 1.5 MW	Holcomb (531449) – Gray Co (531000) 345kV. (Bus 531010)	523853	1181 1182
GEN-2008-079	100.5	G.E. 1.5 MW	Tap Cudahy (539659) – Judson Large (539671) 115kV. (Bus 573029)	573029	573023
GEN-2008-124	200.1	Siemens 2.3MW	Spearville (531469) 345kV	531469	128 224
GEN-2009-062	115	GENROU	Hugoton 115kV (531481)	531481	575141
GEN-2010-009	165.6	Siemens 2.3MW	Gray County 345kV (G07-040-POI) (531000)	531000	575124
GEN-2010-015	200.1	Siemens 2.3MW	Spearville 345kV (531469)	531469	576300 576310
GEN-2010-016	199.8	Vestas V90 1.8MW	Tap Spearville (531469) – POSTROCK (530583) 345kV POI - (576704)	576704	576700

2. Executive Summary

The DISIS-2010-002 Group 3 Definitive Impact Study evaluated the impacts of interconnecting the Table 1-1 study projects to the SPP transmission system.

Stability problems were seen following a fault and outage of the Spearville-Clark or Clark-Medicine Lodge 345 kV double circuits. When tested in power flow, the solutions diverged. Three transmission options were tested to fix these problems, and two were found to be acceptable:

- Beaver-Clark 345 kV line – Not acceptable for Spearville-Clark double outage
- Beaver-Gray 345 kV line – Acceptable for all tested conditions
- Spearville-Mullergren-Circle-Reno 345 kV line – Acceptable for all tested conditions

As a result, either the Beaver-Gray 345 kV line or the Spearville-Mullergren-Circle-Reno 345 kV line must be built for the Group 3 projects to interconnect to the SPP system.

Power factor and capacitor requirements for the Group 3 projects are listed in Table 4-2.

With the assumptions and upgrades described in this report, DISIS-2010-002 Group 3 should be able to connect without causing any stability problems on the SPP transmission grid.

Any change in system or wind farm models or assumptions could change these results.

3. Study Development and Assumptions

3.1 Simulation Tools

The Siemens Power Technologies, Inc. PSS/E power system simulation program Version 30.3.3 was used in this study.

3.2 Models Used

SPP provided its latest stability database cases for both summer and winter peak seasons. The model included the study and prior-queued projects. Power flow one-line diagrams of the study projects are shown in Figure 3-1 through Figure 3-4.

Transmission lines and substation transformers are modeled explicitly in the power flow cases. The 34.5 kV collector systems and wind turbines are modeled as a single equivalent for each substation transformer. Steady-state and dynamic model data for the study plants are given in Appendix D.

A one-line diagram of the 345 kV system in the Group 3 area is shown in Appendix E.

No special modeling is required of line relays in these cases, except for the special modeling related to the wind-turbine tripping.

3.3 Monitored Facilities

All generators and transmission buses in Areas 520, 524, 525, 526, 531, 534, 536, 539, 541, 640, 645, 650, and 652 were monitored.

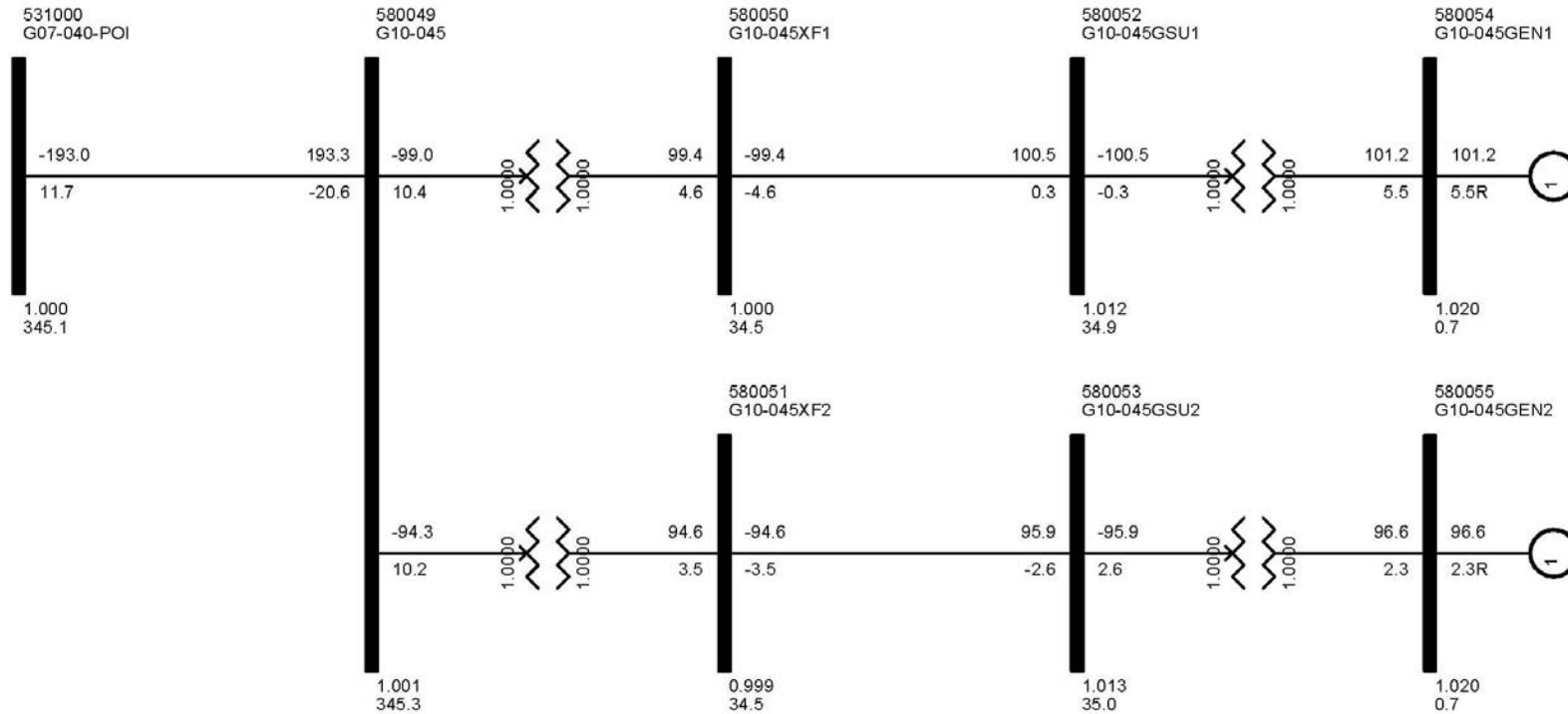


Figure 3-1. Power Flow One-line for GEN-2010-045

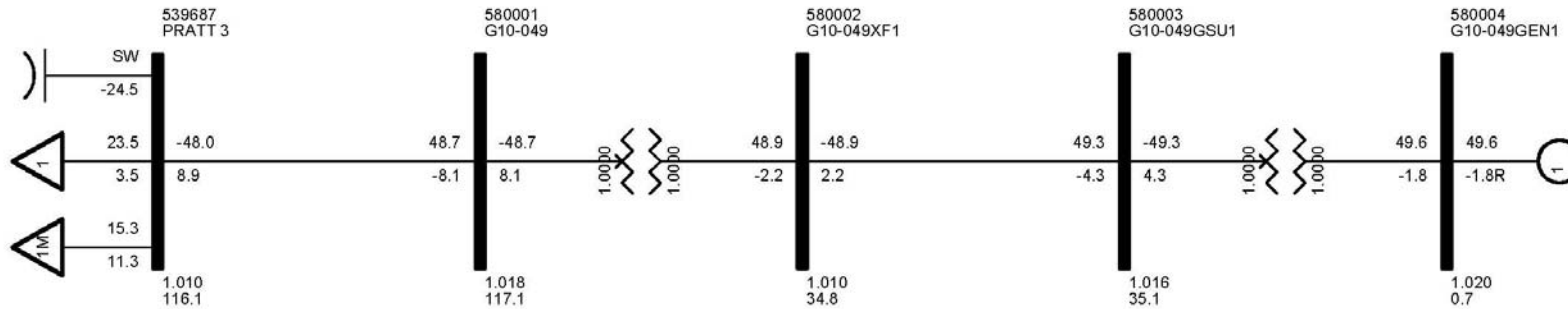


Figure 3-2. Power Flow One-line for GEN-2010-049

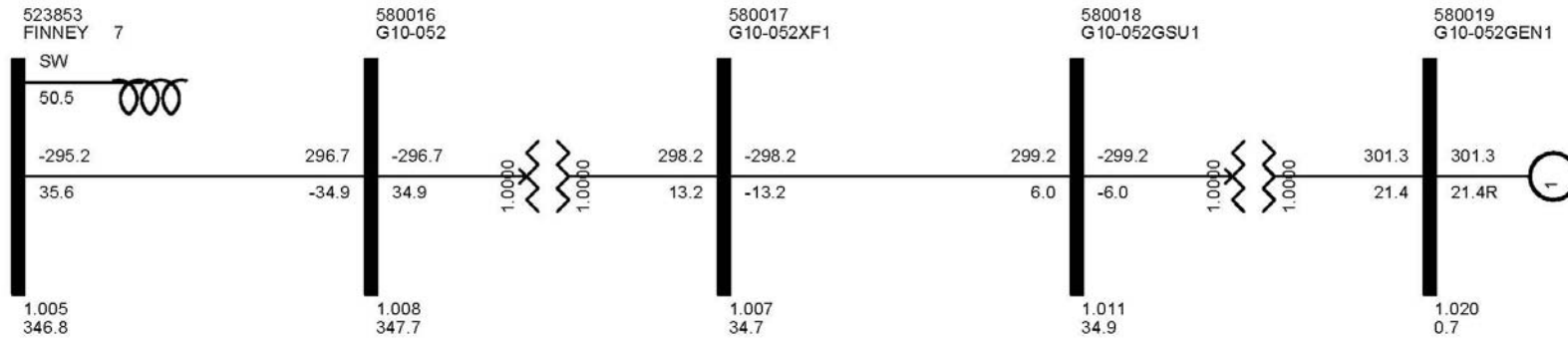


Figure 3-3. Power Flow One-line for GEN-2010-052

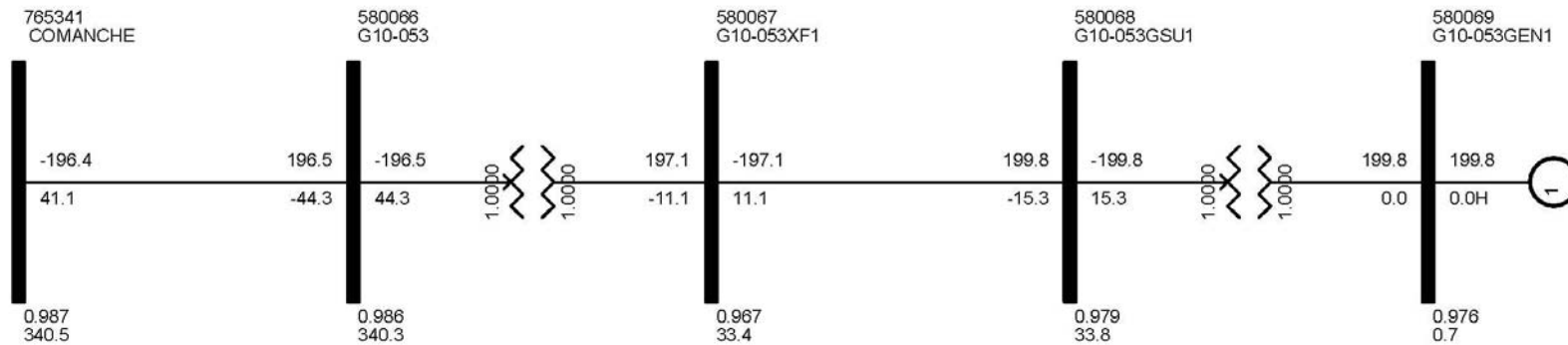


Figure 3-4. Power Flow One-line for GEN-2010-053

3.4 Performance Criteria

Any wind generators must comply with FERC Order 661A on low voltage ride through for wind farms. Therefore, the wind generators should not trip off line for faults for under voltage relay actuation. If a wind generator trips off line, an appropriately sized SVC or STATCOM device may need to be specified to keep the wind generator on-line for the fault. SPP was consulted to determine if the addition of an SVC or STATCOM is warranted for the specific condition.

Contingencies that resulted in a prior-queued project tripping off-line, if any, were re-run with the prior-queued project's voltage and frequency tripping disabled to check for stability issues.

3.5 Performance Evaluation Methods

A power factor analysis was performed for all study projects that are wind farms. The power factor analysis consisted of modeling a var generator in each wind farm holding a voltage schedule at the POI. The voltage schedule was set to the higher of the voltage with the wind farm off-line or 1.0 per unit.

If the required power factor at the POI is beyond the capability of the studied wind turbines, then capacitor banks would be considered. Factors used in sizing capacitor banks would include two requirements of FERC Order 661A: the ability of the wind farm to ride through low voltage with and without capacitor banks and the ability of the wind farm to recover to pre-fault voltage. If a wind generator trips on high voltage, a leading power factor may be required.

ATC studies were not performed as part of this study. These studies will be required at the time transmission service is actually requested. Additional transmission facilities may be required based on subsequent ATC analysis.

Stability analysis was performed for each proposed interconnection request. Faults were simulated on transmission lines at the POIs and on other nearby transmission equipment. The faults in Table 3-1 were run for each case (three phase and single phase as noted).

Table 3-1. Fault Definitions for DISIS-2010-002 Group 3

Cont. No.	Contingency Name	Contingency Description
1	FLT01-3PH	3 phase fault on the Finney (523853) to GEN-2003-013 (560029) 345kV line, near Finney. a. Apply fault at the Finney 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
2	FLT02-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
3	FLT03-3PH	3 phase fault on one of the Finney (523853) to Holcomb (531449) 345kV lines, near Finney. a. Apply fault at the Finney 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
4	FLT04-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
5	FLT05-3PH	3 phase fault on the Holcomb (531449) to Setab (531465) 345kV line, near Holcomb. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
6	FLT06-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
7	FLT07-3PH	3 phase fault on the GEN-2007-040 (531000) to GEN-2008-018 (531010) 345kV line, near GEN-2007-040. a. Apply fault at the GEN-2007-040 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
8	FLT08-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
9	FLT09-3PH	3 phase fault on the Holcomb 345kV (531449) to 115kV (531448) transformer, near the 345 kV bus. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
10	FLT10-3PH	3 phase fault on the Finney (523853) to Lamar (599950) 345kV line, near Finney. a. Apply fault at Finney 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
11	FLT11-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
12	FLT12-3PH	3 phase fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040. a. Apply fault at the GEN-2007-040 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
13	FLT13-1PH	Single phase fault and sequence like previous
14	FLT14-3PH	3 phase fault on both of the Spearville (531469) to Comanche (765341) 345kV lines, near Spearville. a. Apply fault at the Spearville 345kV bus. b. Clear fault after 5 cycles by tripping the faulted lines.
15	FLT15-1PH	Single phase fault on the lines in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted lines. c. Wait 20 cycles, and then re-close the lines in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the lines in (b) and remove fault.
16	FLT16-3PH	3 phase fault on the Spearville 345kV (531469) to 230kV (539695) transformer, near the 345 kV bus. a. Apply fault at the Spearville 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
17	FLT17-3PH	3 phase fault on the Spearville 230kV (539695) to 115kV (539694) transformer, near the 230 kV bus. a. Apply fault at the Spearville 230kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
18	FLT18-3PH	3 phase fault on the Spearville 345kV (531469) to 115kV (539694) transformer, near the 345 kV bus. a. Apply fault at the Spearville 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
19	FLT19-3PH	3 phase fault on the Spearville (539695) to Mullergren (539679) 230kV line, near Spearville. a. Apply fault at the Spearville 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
20	FLT20-1PH	Single phase fault and sequence like previous
21	FLT21-3PH	3 phase fault on the Mullergren (539679) to South Hays (530582) 230kV line, near Mullergren. a. Apply fault at the Mullergren 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
22	FLT22-1PH	Single phase fault and sequence like previous
23	FLT23-3PH	3 phase fault on the Mullergren (539679) to Circle (532871) 230kV line, near Mullergren. a. Apply fault at the Mullergren 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
24	FLT24-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
25	FLT25-3PH	3 phase fault on both Comanche (765341) to Medicine Lodge (765342) 345kV lines Ckt1, near Comanche. a. Apply fault at the Comanche 345kV bus. b. Clear fault after 5 cycles by tripping the faulted lines. c. Wait 20 cycles, and then re-close the lines in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the lines in (b) and remove fault.
26	FLT26-1PH	Single phase fault and sequence like previous
27	FLT27-3PH	3 phase fault on the GEN-2003-013 (560029) to Hitchland (523097) 345kV line, near GEN-2003-013. a. Apply fault at the GEN-2003-013 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
28	FLT28-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
29	FLT29-3PH	3 phase fault on both Woodward (515375) to GEN-2008-047 (580500) 345kV lines, near Woodward. a. Apply fault at the Woodward 345kV bus. b. Clear fault after 5 cycles by tripping the faulted lines.
30	FLT30-1PH	Single phase fault on the lines in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted lines. c. Wait 20 cycles, and then re-close the lines in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the lines in (b) and remove fault.
31	FLT31-3PH	3 phase fault on the Knoll (530558) to Post Rock (530584) 230kV line, near Knoll. a. Apply fault at the Knoll 230kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
32	FLT32-1PH	Single phase fault and sequence like previous
33	FLT33-3PH	3 phase fault on the Post Rock (530583) to Axtell (640065) 345kV line, near Post Rock. a. Apply fault at the Post Rock 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
34	FLT34-1PH	Single phase fault and sequence like previous
35	FLT35-3PH	3 phase fault on the Post Rock 345kV (530583) to 230kV (530584) transformer, near the 345 kV bus. a. Apply fault at the Post Rock 345kV bus. b. Clear fault after 5 cycles by tripping the faulted transformer.
36	FLT36-3PH	3 phase fault on the GEN-2001-039A (579025) to Fort Dodge (539671) 115kV line, near GEN-2001-039A. a. Apply fault at the GEN-2001-039A 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
37	FLT37-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
38	FLT38-3PH	3 phase fault on the GEN-2010-016 (576704) to Spearville (531469) 345kV line, near GEN-2010-016. a. Apply fault at GEN-2010-016 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
39	FLT39-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
40	FLT40-3PH	3 phase fault on the GEN-2008-079 (573029) to Cudahy (539659) 115kV line, near GEN-2008-079. a. Apply fault at the GEN-2008-079 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
41	FLT41-1PH	Single phase fault and sequence like previous
42	FLT42-3PH	3 phase fault on the Kismet (539646) to CMRIVTP (539652) 115kV line, near Kismet. a. Apply fault at the Kismet 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
43	FLT43-1PH	Single phase fault and sequence like previous
44	FLT44-3PH	3 phase fault on the CMRIVTP (539652) to E-Liberty (539672) 115kV line, near CMRIVTP. a. Apply fault at the CMRIVTP 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
45	FLT45-1PH	Single phase fault and sequence like previous
46	FLT46-3PH	3 phase fault on the Hugoton (531481) to Grant Tap (531483) 115kV line, near Hugoton. a. Apply fault at the Hugoton 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
47	FLT47-1PH	Single phase fault and sequence like previous
48	FLT48-3PH	3 phase fault on the Pratt (539687) to Ninnescah (539648) 115kV line, near Pratt. a. Apply fault at the Pratt 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
49	FLT49-1PH	Single phase fault and sequence like previous
50	FLT50-3PH	3 phase fault on the Pratt (539687) to Sawyer (539649) 115kV line, near Pratt. a. Apply fault at the Pratt 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
51	FLT51-1PH	Single phase fault and sequence like previous

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Cont. No.	Contingency Name	Contingency Description
52	FLT52-3PH	3 phase fault on the Medicine Lodge (539673) to Sun City (539697) 115kV line, near Medicine Lodge. a. Apply fault at the Medicine Lodge 115kV bus. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.
53	FLT53-1PH	Single phase fault and sequence like previous
54	FLT54-3PH	3 phase fault on the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb. a. Apply fault at the Holcomb 345kV bus. b. Clear fault after 5 cycles by tripping the faulted line.
55	FLT55-1PH	Single phase fault on the line in previous a. Apply single phase fault. b. Clear fault after 5 cycles by tripping the faulted line. c. Wait 20 cycles, and then re-close the line in (b) back into the fault. d. Leave fault on for 5 cycles, then trip the line in (b) and remove fault.

4. Results and Observations

4.1 Stability Analysis Results

Table 4-1 summarizes the results. Figure 4-1 through Figure 4-8 show representative summer peak season plots for faults at the POI's of the study projects. Complete sets of plots for both summer and winter peak seasons for each fault and each project are included in Appendices A and B.

In the initial fault simulations, fault 25, Clark – Medicine Lodge 345 kV double circuit, has poor stability performance. GEN-2001-039A (Figure 4-9) and GEN-2006-022 trip off-line in the Winter case and GEN-2001-039A and GEN-2006-032 trip off-line in the Summer case. The voltage settles to 86% at G10-16 POI 345 kV at the end of the Winter simulation. When tested in the power flow case, the solution blows up. Fault 14, the Spearville-Clark 345kV double circuit, also blows up during power flow solution.

Three transmission upgrade options were tested to fix these problems:

- Beaver-Clark 345 kV line
- Beaver-Gray 345 kV line
- Spearville-Mullergren-Circle-Reno 345 kV line

They were first tested in power flow. The Beaver-Clark 345 kV line option was not acceptable because the power flow solution still blows up following the Spearville-Clark 345kV double circuit. The other 2 upgrade options had acceptable power flow solutions for all contingencies.

The Beaver-Gray option and the Spearville-Mullergren-Circle-Reno were subsequently tested in dynamics. All fault simulations showed good results, with no wind generation tripping. Thus, either of these two upgrade options will ensure stability for the Group 3 plants.

Table 4-1. Summary of Stability Results

Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
1	FLT01-3PH	3 phase fault on the Finney (523853) to GEN-2003-013 (560029) 345kV line, near Finney.	OK	OK
2	FLT02-1PH	Single phase fault on the line in previous	OK	OK
3	FLT03-3PH	3 phase fault on one of the Finney (523853) to Holcomb (531449) 345kV lines, near Finney.	OK	OK
4	FLT04-1PH	Single phase fault on the line in previous	OK	OK
5	FLT05-3PH	3 phase fault on the Holcomb (531449) to Setab (531465) 345kV line, near Holcomb.	OK	OK
6	FLT06-1PH	Single phase fault on the line in previous	OK	OK
7	FLT07-3PH	3 phase fault on the GEN-2007-040 (531000) to GEN-2008-018 (531010) 345kV line, near GEN-2007-040.	OK	OK
8	FLT08-1PH	Single phase fault on the line in previous	OK	OK
9	FLT09-3PH	3 phase fault on the Holcomb 345kV (531449) to 115kV (531448) transformer, near the 345 kV bus.	OK	OK
10	FLT10-3PH	3 phase fault on the Finney (523853) to Lamar (599950) 345kV line, near Finney.	OK	OK
11	FLT11-1PH	Single phase fault and sequence like previous	OK	OK
12	FLT12-3PH	3 phase fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040.	OK	OK
13	FLT13-1PH	Single phase fault and sequence like previous	OK	OK
14	FLT14-3PH	3 phase fault on both of the Spearville (531469) to Comanche (765341) 345kV lines, near Spearville.	Unstable	Unstable
14-R2	FLT14-3PH	3 phase fault on one of the Spearville (531469) to Comanche (765341) 345kV lines, near Spearville. With Beaver-Clark 345 kV line	Unstable	Unstable
14-R2a	FLT14-3PH	3 phase fault on one of the Spearville (531469) to Comanche (765341) 345kV lines, near Spearville. With Beaver-Gray 345 kV line	OK	OK
14-R2b	FLT14-3PH	3 phase fault on one of the Spearville (531469) to Comanche (765341) 345kV lines, near Spearville. With Spearville-Mullergren-Circle-Reno 345 kV line	OK	OK
15	FLT15-1PH	Single phase fault on the line in previous	Unstable	Unstable
15-R2a	FLT15-1PH	Single phase fault on the line in previous. With Beaver-Gray 345 kV line	OK	OK
15-R2b	FLT15-1PH	Single phase fault on the line in previous. With Spearville-Mullergren-Circle-Reno 345 kV line	OK	OK
16	FLT16-3PH	3 phase fault on the Spearville 345kV (531469) to 230kV (539695) transformer, near the 345 kV bus.	OK	OK
17	FLT17-3PH	3 phase fault on the Spearville 230kV (539695) to 115kV (539694) transformer, near the 230 kV bus.	OK	OK

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Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
18	FLT18-3PH	3 phase fault on the Spearville 345kV (531469) to 115kV (539694) transformer, near the 345 kV bus.	OK	OK
19	FLT19-3PH	3 phase fault on the Spearville (539695) to Mullergren (539679) 230kV line, near Spearville.	OK	OK
20	FLT20-1PH	Single phase fault and sequence like previous	OK	OK
21	FLT21-3PH	3 phase fault on the Mullergren (539679) to South Hays (530582) 230kV line, near Mullergren.	OK	OK
22	FLT22-1PH	Single phase fault and sequence like previous	OK	OK
23	FLT23-3PH	3 phase fault on the Mullergren (539679) to Circle (532871) 230kV line, near Mullergren.	OK	OK
24	FLT24-1PH	Single phase fault and sequence like previous	OK	OK
25	FLT25-3PH	3 phase fault on both Comanche (765341) to Medicine Lodge (765342) 345kV lines Ckt1, near Comanche.	Unstable	Unstable
25-R2	FLT25-3PH	3 phase fault on the Comanche (765341) to Medicine Lodge (765342) 345kV line Ckt1, near Comanche. With Beaver-Clark 345 kV line	OK	OK
25-R2a	FLT25-3PH	3 phase fault on the Comanche (765341) to Medicine Lodge (765342) 345kV line Ckt1, near Comanche. With Beaver-Gray 345 kV line	OK	OK
25-R2b	FLT25-3PH	3 phase fault on the Comanche (765341) to Medicine Lodge (765342) 345kV line Ckt1, near Comanche. With Spearville-Mullergren-Circle-Reno 345 kV line	OK	OK
26	FLT26-1PH	Single phase fault and sequence like previous	Unstable	Unstable
26-R2a	FLT26-1PH	Single phase fault and sequence like previous. With Beaver-Gray 345 kV line	OK	OK
26-R2b	FLT26-1PH	Single phase fault and sequence like previous. With Spearville-Mullergren-Circle-Reno 345 kV line	OK	OK
27	FLT27-3PH	3 phase fault on the GEN-2003-013 (560029) to Hitchland (523097) 345kV line, near GEN-2003-013.	OK	OK
28	FLT28-1PH	Single phase fault on the line in previous	OK	OK
29	FLT29-3PH	3 phase fault on both Woodward (515375) to GEN-2008-047 (580500) 345kV lines, near Woodward.	OK	OK
30	FLT30-1PH	Single phase fault on the line in previous	OK	OK
31	FLT31-3PH	3 phase fault on the Knoll (530558) to Post Rock (530584) 230kV line, near Knoll.	OK	OK
32	FLT32-1PH	Single phase fault and sequence like previous	OK	OK
33	FLT33-3PH	3 phase fault on the Post Rock (530583) to Axtell (640065) 345kV line, near Post Rock.	OK	OK
34	FLT34-1PH	Single phase fault and sequence like previous	OK	OK
35	FLT35-3PH	3 phase fault on the Post Rock 345kV (530583) to 230kV (530558) transformer, near the 345 kV bus.	OK	OK

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Cont. No.	Contingency Name	Contingency Description	Summer Peak Results	Winter Peak Results
36	FLT36-3PH	3 phase fault on the GEN-2001-039A (579025) to Fort Dodge (539671) 115kV line, near GEN-2001-039A.	OK	OK
37	FLT37-1PH	Single phase fault and sequence like previous	OK	OK
38	FLT38-3PH	3 phase fault on the GEN-2010-016 (576704) to Spearville (531469) 345kV line, near GEN-2010-016.	OK	OK
39	FLT39-1PH	Single phase fault on the line in previous	OK	OK
40	FLT40-3PH	3 phase fault on the GEN-2008-079 (573029) to Cudahy (539659) 115kV line, near GEN-2008-079.	OK	OK
41	FLT41-1PH	Single phase fault and sequence like previous	OK	OK
42	FLT42-3PH	3 phase fault on the Kismet (539646) to CMRIVTP (539652) 115kV line, near Kismet.	OK	OK
43	FLT43-1PH	Single phase fault and sequence like previous	OK	OK
44	FLT44-3PH	3 phase fault on the CMRIVTP (539652) to E-Liberty (539672) 115kV line, near CMRIVTP.	OK	OK
45	FLT45-1PH	Single phase fault and sequence like previous	OK	OK
46	FLT46-3PH	3 phase fault on the Hugoton (531481) to Grant Tap (531483) 115kV line, near Hugoton.	OK	OK
47	FLT47-1PH	Single phase fault and sequence like previous	OK	OK
48	FLT48-3PH	3 phase fault on the Pratt (539687) to Ninnescah (539648) 115kV line, near Pratt.	OK	OK
49	FLT49-1PH	Single phase fault and sequence like previous	OK	OK
50	FLT50-3PH	3 phase fault on the Pratt (539687) to Sawyer (539649) 115kV line, near Pratt.	OK	OK
51	FLT51-1PH	Single phase fault and sequence like previous	OK	OK
52	FLT52-3PH	3 phase fault on the Medicine Lodge (539673) to Sun City (539697) 115kV line, near Medicine Lodge.	OK	OK
53	FLT53-1PH	Single phase fault and sequence like previous	OK	OK
54	FLT54-3PH	3 phase fault on the Holcomb (531449) to GEN-2008-018 (531010) 345kV line, near Holcomb.	OK	OK
55	FLT55-1PH	Single phase fault on the line in previous	OK	OK

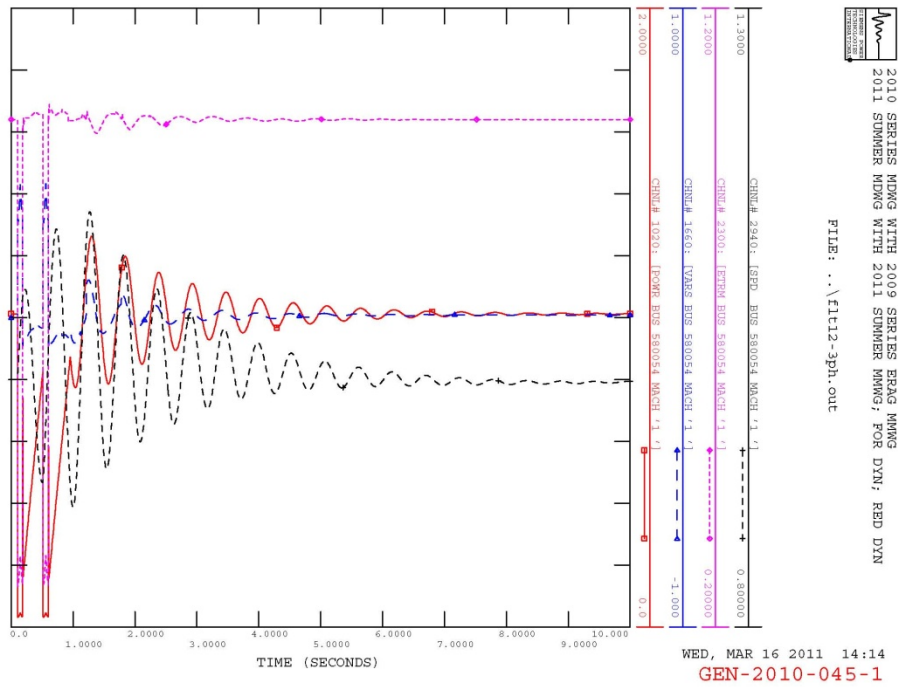


Figure 4-1. GEN-2010-045 Plot for Fault 12 – 3-Phase Fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040

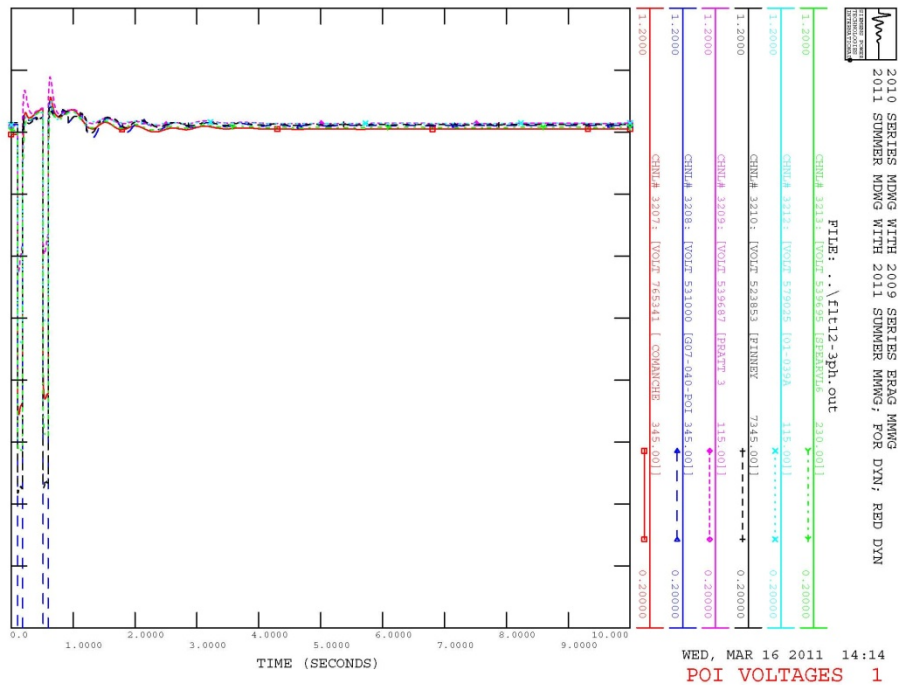


Figure 4-2. POI Voltages for Fault 12 – 3-Phase Fault on the GEN-2007-040 (531000) to Spearville (531469) 345kV line, near GEN-2007-040

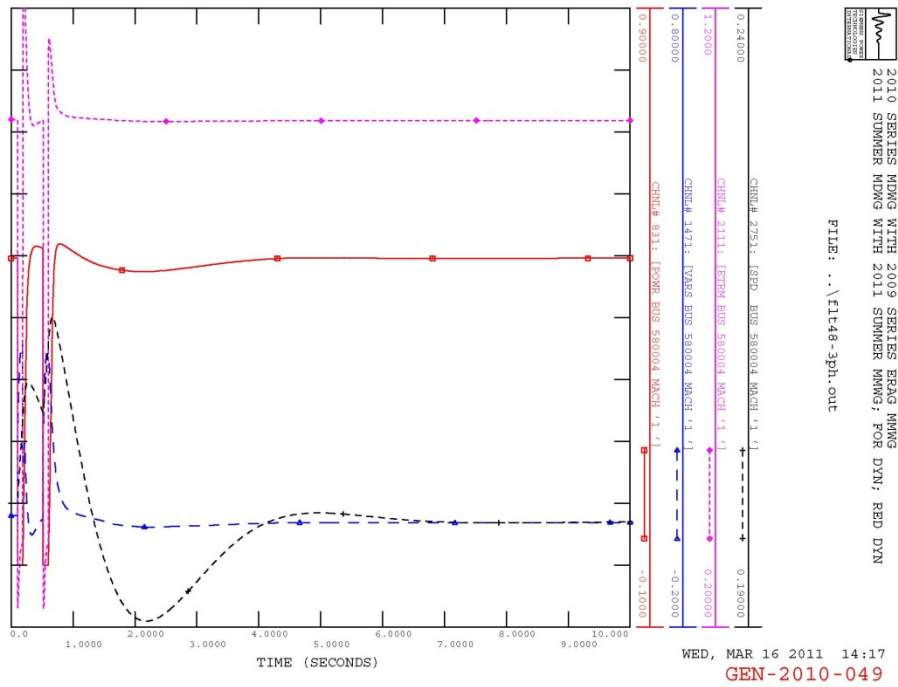


Figure 4-3. GEN-2010-049 Plot for Fault 48 – 3-Phase Fault on the Pratt (539687) to Ninnescah (539648) 115kV line, near Pratt

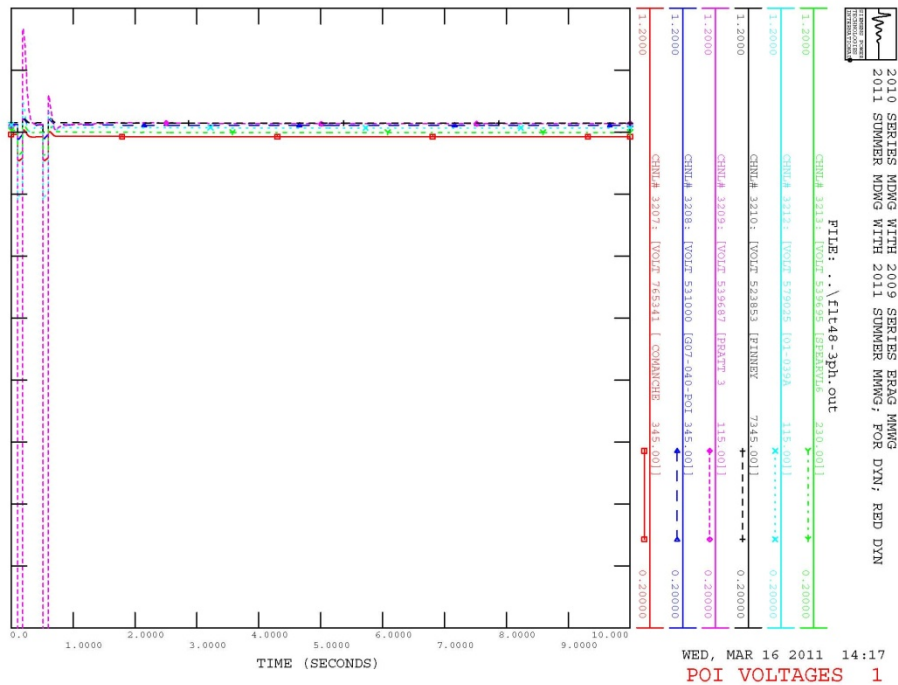


Figure 4-4. POI Voltages for Fault 48 – 3-Phase Fault on the Pratt (539687) to Ninnescah (539648) 115kV line, near Pratt

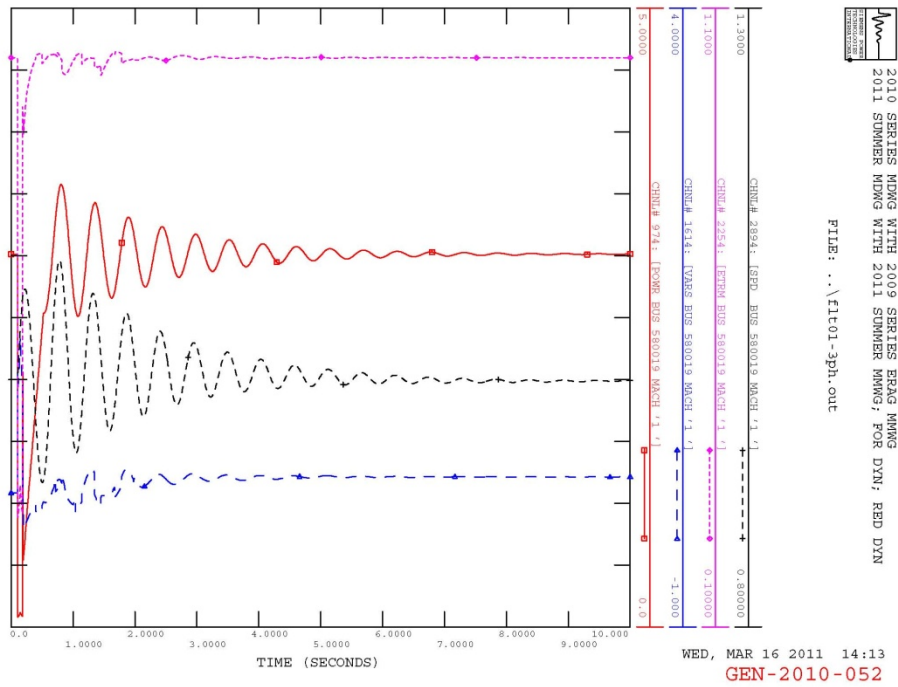


Figure 4-5. GEN-2010-052 Plot for Fault 01 – 3-Phase Fault on the Finney (523853) to GEN-2003-013 (560029) 345kV line, near Finney

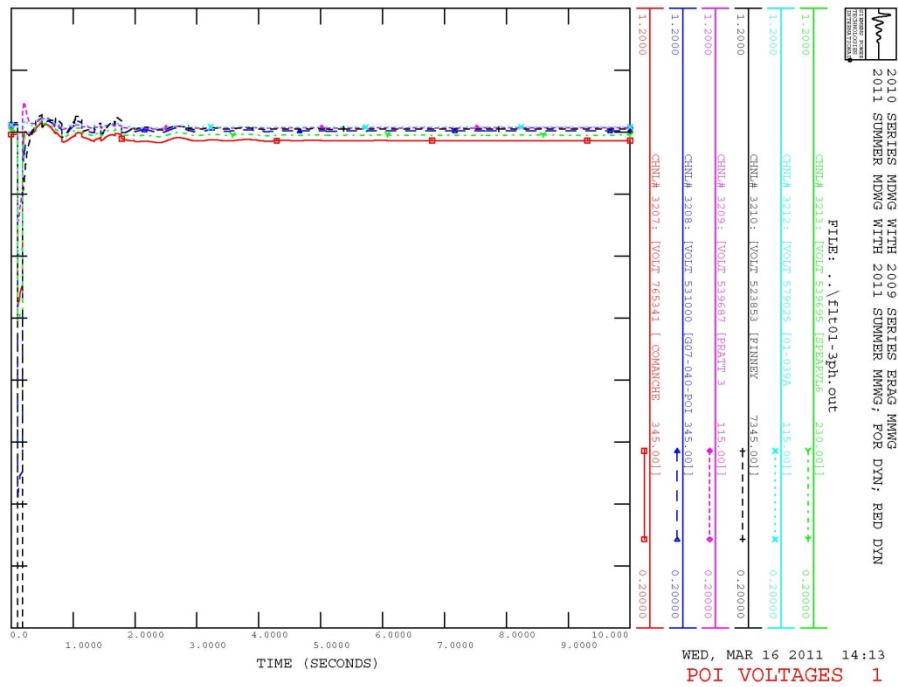


Figure 4-6. POI Voltages for Fault 01 – 3-Phase Fault on the Finney (523853) to GEN-2003-013 (560029) 345kV line, near Finney

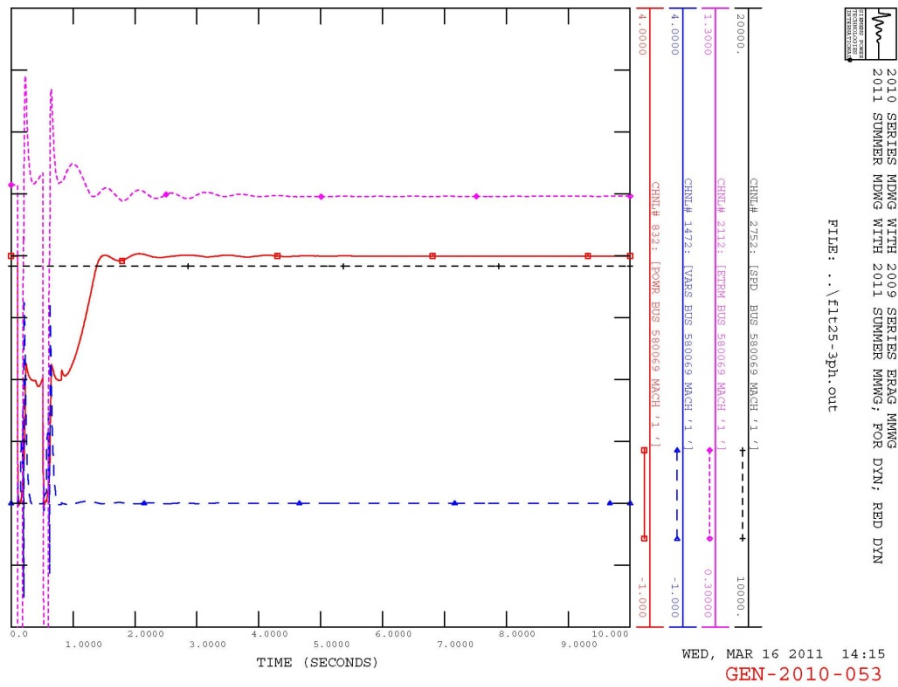


Figure 4-7. GEN-2010-053 Plot for Fault 25 – 3-Phase Fault on both Comanche (765341) to Medicine Lodge (765342) 345kV lines, near Comanche

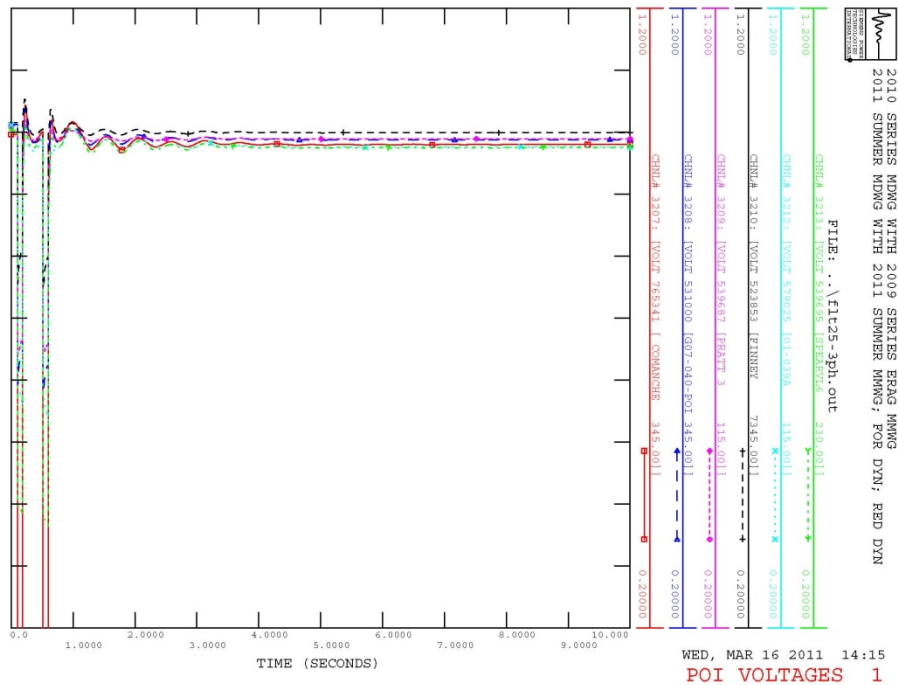


Figure 4-8. POI Voltages for Fault 25 – 3-Phase Fault on both Comanche (765341) to Medicine Lodge (765342) 345kV lines, near Comanche

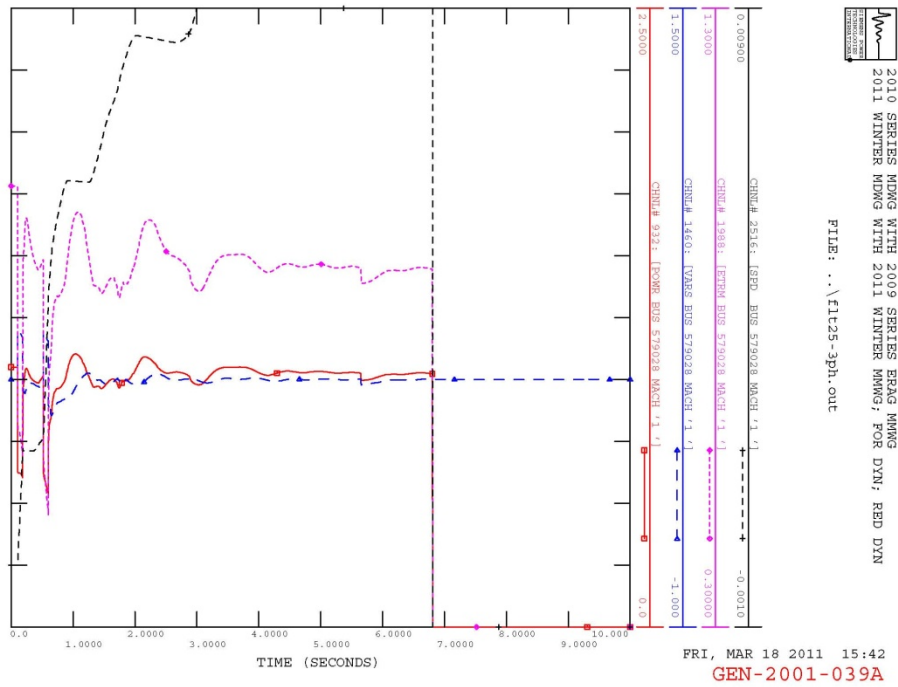


Figure 4-9. GEN-2001-039A Plot for Fault 25 – 3-Phase Fault on both Comanche (765341) to Medicine Lodge (765342) 345kV lines, near Comanche

4.2 Power Factor Requirements

All stability faults were tested as power flow contingencies to determine the power factor requirements for the wind farm study projects to maintain scheduled voltage at their respective points of interconnection (POI). The voltage schedules are set equal to the voltages at the POIs before the projects are added, with a minimum of 1.0 per unit. Fictitious reactive power sources were added to the study projects to maintain scheduled voltage during all studied contingencies. The MW and Mvar injections from the study projects at the POIs were recorded and the resulting power factors were calculated for all contingencies for summer peak and winter peak cases. The most leading and most lagging power factors determine the minimum power factor range capability that the study projects must install before commercial operation.

If more than one study project shared a single POI, the projects were grouped together and a common power factor requirement was determined for those study projects. This ensures that none of the study projects is required to provide more or less than its fair share of the reactive power requirements at a single POI. *Prior-queued* projects at the same POI, if any, were not grouped with the study projects because their interconnection requirements were determined in previous studies. The voltage schedules of prior-queued and study projects at the same POI were coordinated.

Per FERC and SPP Tariff requirements, if the power factor needed to maintain scheduled voltage is less than 0.95 lagging, then the requirement is limited to 0.95 lagging. The lower limit for leading power factor requirement is also 0.95. If a project never operated leading under any contingency, then the leading requirement is set to 1.0. The same applies on the lagging side.

Power factor analysis using the original requester data showed a need for 81 Mvar of capacitors at GEN-2010-027 and 23 Mvar at GEN-2010-052. However, after the modifications discussed previously, GEN-2010-027 needs no capacitors and GEN-2010-052 needs only 7 Mvar. GEN-2010-053 requires at least 83 Mvar of capacitors to meet its power factor requirement due to the lack of any reactive power capability in the Vestas V90 wind turbines. GEN-2010-045 needs at least 9 Mvar and GEN-2010-049 needs at least 2 Mvar.

The final power factor requirements are shown in Table 4-2 below. These are only the minimum power factor ranges based on steady-state analysis. A project developer may install more capability than this if desired.

The full details for each contingency in summer and winter peak cases are given in Appendix C.

Table 4-2. Power Factor Requirements ¹

Request	Size (MW)	Generator Model	Point of Interconnection	Final PF Requirement		Estimated Capacitor Requirement (Mvar)
				Lagging ₂	Leading ₃	
GEN-2010-045	197.8	Siemens 2.3MW	Gray County 345kV (G07-040-POI) (531000)	0.95	0.999	10
GEN-2010-049	49.6	GE 1.6MW	Pratt 115kV (539687)	0.95	0.933	5
GEN-2010-052	301.3	Siemens 2.3MW	Finney 345kV (523853)	0.95	0.967	8
GEN-2010-053	199.8	Vestas V90 1.8MW	Comanche 345kV (765341)	0.95	0.95	85

Notes:

1. For each plant, the table shows the minimum required power factor capability at the point of interconnection that must be designed and installed with the plant. The power factor capability at the POI includes the net effect of the generators, transformers, line impedances, and any reactive compensation devices installed on the plant side of the meter. Installing more capability than the minimum requirement is acceptable.
2. Lagging is when the generating plant is supplying reactive power to the transmission grid. In this situation, the alternating current sinusoid “lags” behind the alternating voltage sinusoid, meaning that the current peaks shortly after the voltage.
3. Leading is when the generating plant is taking reactive power from the transmission grid. In this situation, the alternating current sinusoid “leads” the alternating voltage sinusoid, meaning that the current peaks shortly before the voltage.

5. Conclusions

The DISIS-2010-002 Group 3 Definitive Impact Study evaluated the impacts of interconnecting each of the projects shown below.

Table 5-1. Interconnection Requests Evaluated in this Study

Request	Size	Wind Turbine Model	Point of Interconnection	POI Bus	Gen Buses
GEN-2010-045	197.8	Siemens 2.3MW	Gray County 345kV (G07-040-POI) (531000)	531000	580054 580055
GEN-2010-049	49.6	GE 1.6MW	Pratt 115kV (539687)	539687	580004
GEN-2010-052	301.3	Siemens 2.3MW	Finney 345kV (523853)	523853	580019
GEN-2010-053	199.8	Vestas V90 1.8MW	Comanche 345kV (765341)	765341	580069

Stability problems were seen following a fault and outage of the Spearville-Clark or Clark-Medicine Lodge 345 kV double circuits. When tested in power flow, the solutions diverged. Three transmission options were tested to fix these problems, and two were found to be acceptable:

- Beaver-Clark 345 kV line – Not acceptable for Spearville-Clark double outage
- Beaver-Gray 345 kV line – Acceptable for all tested conditions
- Spearville-Mullergren-Circle-Reno 345 kV line – Acceptable for all tested conditions

As a result, either the Beaver-Gray 345 kV line or the Spearville-Mullergren-Circle-Reno 345 kV line must be built for the Group 3 projects to interconnect to the SPP system.

Power factor and capacitor requirements for the Group 3 projects are listed in Table 4-2.

With the assumptions and upgrades described in this report, DISIS-2010-002 Group 3 should be able to connect without causing any stability problems on the SPP transmission grid.

Any change in system or wind farm models or assumptions could change these results.

Appendix A – Summer Peak Plots

A.1 Option 2a – Spearville-Mullergren-Circle-Reno 345 kV line

A.2 Option 2b – Gray County - Beaver County 345 kV line

See attachments.

Appendix B – Winter Peak Plots

B.1 Option 2a – Spearville-Mullergren-Circle-Reno 345 kV line

B.2 Option 2b – Gray County - Beaver County 345 kV line

See attachments.

Appendix C – Power Factor Details

See attachment.

Appendix D – Project Model Data

See attachment.

Appendix E – 345 kV Transmission One-line

See attachment.