Feasibility Cluster Study for Generator Interconnection Requests (FCS-2016-001)

March 2016

Generator Interconnection Studies

SPP Southwest Power Pool

Revision History

Date	Author	Change Description
03/16/2016	SPP	Report Issued (FCS-2016-001).

Executive Summary

Generator Interconnection customers have requested a Feasibility Study under the Generator Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study (FCS) window which closed December 31, 2015[1]. This Feasibility Cluster Study analyzes generation interconnection requests totaling approximately 430.4 MW which would be located within the transmission systems of Southwestern Public Service (SPS) and Nebraska Public Power District (NPPD). The generation interconnection requests have a proposed in-service dates[2]. The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by queue number, amount, requested interconnection service, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

Power flow analysis has indicated that for the power flow cases studied, 430.4 MW of nameplate generation may be interconnected with transmission system reinforcements within the AEPW, NPPD, SPS, and WERE transmission system. The need for reactive compensation in accordance with Order No. 661-A for wind farm interconnection requests will be evaluated in the Preliminary Interconnection System Impact Study (PISIS) and Definitive Interconnection System Impact Study (DISIS) based on the wind turbine manufacturer and type requested by the Customer. Dynamic stability studies performed as part of the PISIS and DISIS Cluster Studies will provide additional guidance as to whether required reactive compensation can be static or a portion must be dynamic (such as a SVC).

Two (2) Point of Interconnection (POI) assumption analyses were conducted for GEN-2015-099 primary and secondary POIs, and GEN-2015-101 primary and secondary POIs, and one POI analysis was conducted for GEN-2015-100. **Table 1** displays the five (5) Energy Resource Interconnection Service (ERIS) analyses that were performed. Interconnection Requests dispatching is explained in further deail in the Model Development Section. Please note, if the Interconnection Customers proceed into the Prelimiary Interconnection System Impact Study (PISIS) or Definitive Interconnection System Impact Study (DISIS), the Interconnection Customer can propose only one Point of Interconnection (POI).

[1] The Integrated System including Western Area Power Administration – Upper Great Plains Region, Basin Electric Power Cooperavtive, and Heartland Consumers Power District (Collectively the I.S, Parties) Feasibility study window closing was October 22, 2015.

[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.

Table 1: Five (5) ERIS Analysis Assumptions

Scenario Number	Scenario Description	Interconnection Requests	Point of Interconnection (POI)
Scenario #1	Group 6 GEN-2015-099 Primary POI	GEN-2015-099	Hobbs 115kV
Scenario #2	Group 6 GEN-2015-099 Secondary POI	GEN-2015-099	Maddox 115kV
Scenario #3	Group 9 GEN-2015-100 Primary POI	GEN-2015-100	Fairbury 115kV
Scenario #4	Group 6 GEN-2015-101 Primary POI	GEN-2015-101	Tap Plant X – Deaf Smith 230kV
Scenario #5	Group 6 GEN-2015-101 Secondary POI	GEN-2015-101	Tap Potter County - Newhart 230kV

The applicable analysis from the five (5) ERIS analysis assumption were also analyzed for Network Resource Interconnection Service (NRIS).

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

The total estimated minimum cost for interconnecting the studied generation interconnection requests for each analysis is listed in **Table 2**.

Table 2: Total estimated minmum cost for Interconnecting the Studied Generation Interconnection Request(s)

Analysis Number	Estimated Minimum Costs ($)
Scenario #1	$1,200,000
Scenario #2	$2,000,000
Scenario #3	$53,457,000
Scenario #4	$17,400,000
Scenario #5	$22,000,000

These costs are shown in Appendices E and F. The one-line diagrams in Appendix D should be consulted for details of the alternate POIs. These costs do not include the Interconnection Customer Interconnection Facilities as defined by the SPP Open Access Transmission Tariff (OATT). This cost does not include the possible need for reactive compensation or additional interconnection facilities or network upgrades that may be identified through additional analyses performed in the PISIS and DISIS.

The powerflow results listed in this report were obtained by analyzing the 430.4 MW of Feasibility Study Interconnection Requests in addition to all prior queued Interconnection Requests including 10,000MW studied in DISIS-2015-002. DISIS-2015-002 Interconnection Requests have been cost assigned $1,700,000 of potential Network Upgrades which are assumed in service in this analysis. If any Interconnection Requests are withdrawn from the highered queued studies including DISIS-2015-002, then potential upgrades tentatively assigned to those Interconnection Requests may be assigned to the Interconnection Requests in this FCS-2016-001 study once these Interconnection Requests execute a Definitive Interconnection System Impact Study Agreement.

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

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

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Introduction

Generator Interconnection customers have requested a Feasibility Study under the Generator Interconnection Procedures (GIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study (FCS) window which closed December 31, 2015[3]. This Feasibility Cluster Study analyzes generation interconnection requests totaling approximately 430.4 MW which would be located within the transmission systems of Southwestern Public Service (SPS) and Nebraska Public Power District (NPPD). The generation interconnection requests have various proposed in-service dates[4]. The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by queue number, amount, area, requested interconnection service, requested interconnection point, proposed interconnection point, and the requested in-service date.

Table 1 displays the five (5) Energy Resource Interconnection Service (ERIS) analysis that were performed. Interconnection Requests dispatching is explained in further detail in the Model Development Section. The applicable analysis from the five (5) ERIS analyses assumptions were also analyzed for Network Resource Interconnection Service (NRIS). Please note, if the Interconnection Customers proceed into the Preliminary Interconnection System Impact Study (PISIS) or Definitive Interconnection System Impact Study (DISIS), the Interconnection Customer can propose only one Point of Interconnection (POI).

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

[3] Please refer to footnote #1.

[4] The generator 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.

Model Development

Interconnection Requests Included in the Cluster

SPP has included all interconnection requests that submitted a Feasibility Study Agreement no later than December 31st, 2015[5] and were subsequently accepted by Southwest Power Pool under the terms of the Generator Interconnection Procedures (GIP) effective at the time of this study. The Interconnection Request(s) that are included in this study are listed in Appendix A.

Previously Queued Interconnection Requests

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

Development of Base Cases

The 2015 model series Integrated Transmission Planning Near-Term models (used in the 2016 ITPNT) including the 2016 Winter Peak (16WP), 2017 Spring (17G), 2017 Summer Peak (17SP), 2020 Light Load, Summer and Winter peak (20L,20SP,20WP), and 2025 Summer Peak (25SP) scenario 0 cases were used for this study. After the cases were developed, each of the control areas' resources were then re-dispatched to account for the new generation requests using current dispatch orders.

Base Case Upgrades

The following facilities are part of the SPP Transmission Expansion Plan or the Balanced Portfolio or recently approved Priority Projects. These facilities, have an approved Notice to Construct (NTC), or are in construction stages and were assumed to be in-service at the time of dispatch and added to the base case models. The FCS-2016-001 Interconnection Customers have not been assigned cost for the below listed projects. The FCS-2016-001 Interconnection Customers Generationr Facilities in-service dates may need to be delayed until the completion of the following upgrades. If for some reason, construction on these projects is discontinued, additional restudies will be needed to determine the interconnection needs of the Feasibility Study Interconnection Customers.

- 2012 Integrated Transmission Plan (2012 ITP10) Projects
  - Woodward-Tatonga-Mathewson-Cimarron 345kV transmission line, scheduled for 2021 in-service[6]
  - Chisholm – Gracemont 345kV transmission line, and Chisholm 345/230kV transformer circuit #1, scheduled for 3/1/2018 in-service[7]

[5] Please refer to footnote #1.

[6] SPP Notification to Construct (NTC) 200223

- 2015 Integrated Transmission Plan Near Term (2015 ITPNT) Projects
  - China Draw 115kV Reactive Power Support
    - 200Mvar Capacitive and 50Mvar Inductive Static Var Compensator (SVC)
  - Road Runner 115kV Reactive Power Support
    - 200Mvar Capacitive and 50Mvar Inductive Static Var Compensator (SVC)
  - Potash Junction – Intrepid – IMC #1 – Livingston Ridge 115kV rebuild
  - National Enrichment Plant – Targa – Cardinal 115kV circuit #1 rebuild
- Gentleman – Thedford (Cherry County) – Holt County 345kV circuit #1 scheduled for 2018 in-service[8]
- Hoskins – Neligh East 345/115 kV Project[9]
  - Neligh East 345/115 kV substation and transformer
  - Neligh East Area 115 kV upgrades to support new station
  - Hoskins – Neligh East 345 kV circuit #1
- High Priority Incremental Loads (HPILs) Projects[10]:
  - TUCO Interchange – Yoakum – Hobbs Interchange 345/230 kV Project
    - TUCO Interchange – Yoakum – Hobbs Interchange 345 kV circuit #1 and associated terminal equipment upgrades
    - Hobbs 345/230/13 kV transformer circuit #1
    - Yoakum 345/230/13 kV transformer circuit #1
  - Battle Axe – Road Runner 115 kV circuit #1
  - Chaves County – Price – CV Pines – Capitan 115 kV circuit #1
  - China Draw – Yeso Hills 115 kV circuit #1
  - Dollarhide – Toboso Flats 115 kV circuit #1
  - Hobbs Interchange – Kiowa 345 kV circuit #1
  - Kiowa – North Loving – China Draw 345/115 kV Projects
    - Kiowa – North Loving – China Draw circuit #1 and associated terminal equipment upgrades
    - China Draw 345/115/13 kV transformer circuit #1
    - North Loving 345/115/13 kV transformer circuit #1
  - Kiowa – Road Runner 345/230/115 kV Projects
    - Kiowa 345/230 kV transformer circuit #1
    - Road Runner 345/115/13 kV transformer circuit #1
  - Livingston Ridge – Sage Brush – Lagarto – Cardinal 115 kV circuit #1
  - North Loving – South Loving 115 kV circuit #1
  - Ponderosa – Ponderosa Tap 115 kV circuit #1
  - Potash 230/115/13kV Transformer circuit #1 replacement

[7] SPP Notification to Construct (NTC) 200240 and 200255
[8] SPP Notification to Construct (NTC) 200220
[9] SPP Regional Reliability 2012 ITP 10 Project Per SPP-NTC-200220
[10] Per Network Upgrades assigned in High Priority Incremental Loads (HPILs) study, Including Direct Assigned Upgrades, Projects in SPP-NTC-200256 and SPP-NTC-200283.

- Nebraska City – Mullin Creek – Sibley 345kV circuit #1 build, scheduled for 12/31/2016 in-service[11]
- Viola 345/138kV Project[12]
  - Clearwater – Viola 138kV circuit #1
  - Gill – Viola 138kV circuit #1
  - Sumner County – Viola 138kV circuit #1
  - Viola 345/138/13kV transformer circuit #1

Contingent Upgrades

The following facilities do not yet have approval. These facilities have been assigned to higher queued Interconnection Customers. These facilities have been included in the models for the FCS-2016-001 study and are assumed to be in service. This list may not be all inclusive. The FCS-2016-001 Interconnection Customers at this time do not have responsibility for these facilities but may later be assigned the cost of these facilities if higher queued customers terminate their GIA or withdraw from the interconnection queue. The FCS-2016-001 Interconnection Customer Generation Facilities in-service dates may need to be delayed until the completion of the following upgrade(s).

- Upgrades assigned to DISIS-2010-002 Interconnection Customers:
  - Twin Church – Dixon County 230 kV circuit #1, rerate (320 MVA)
  - Buckner – Spearville 345 kV, terminal equipment
- Upgrades assigned to DISIS-2011-001 Interconnection Customers:
  - Hoskins – Dixon County – Twin Church 230 kV circuit #1, conductor clearance increase
  - (NRIS only) Woodward District EHV Phase Shifting Transformer
- Upgrades assigned to DISIS-2012-002 Interconnection Customers:
  - Associated Electric Cooperatives Inc. (AECI) Fairfax 138/69 kV transformer, replacement
  - Lake Creek – Lone Wolf 69 kV circuit #1, reset CT
  - Remington – Fairfax 138 kV circuit #1, conductor clearance increase
- Upgrades assigned to DISIS-2013-002 Interconnection Customers:
  - Battle Creek – County Line – Neligh East 115kV circuit #1, rebuild
- Upgrades assigned to DISIS-2014-002 Interconnection Customers:
  - Arnold – Ransom 115kV circuit #1, terminal equipment replacement
  - Tolk – Plant X 230kV circuit #1 and circuit #2, re-conductor
  - Tuco 345/230/13kV Transformer circuit #1, replacement
- Upgrades assigned to DISIS-2015-001 Interconnection Customers:
  - Altus SW – Navajo – Snyder 69kV circuit #1, rebuild
  - Anadarko – Sequoyah – Cornville Tap 138kV circuit #1, rebuild
  - Beach – GEN-2010-048 Tap circuit #1, replace terminal equipment

[11] SPP Notification to Construct (NTC) 20097 and 20098
[12] SPP Notification to Construct (NTC) 200228 and 200296

- Cimarron River Tap – Kismet – Cudahy – Crooked Creek 115kV circuit #1, rebuild
- Cornville Tap – Naples Tap – Payne 138kV circuit #1, rebuild
- Greenburg – Shooting Star 115kV circuit #1, rebuild
- Kress Interchange – Swisher 115kV circuit #1, replace terminal equipment
- Nichols – Grapevine – Wheeler 230kV circuit #1, replace terminal equipment
- Oklaunion 345kV Reactive Power Support
  - Install two (2) -130Mvar Capacitor Bank(s) at Oklaunion
- Stateline – Sweetwater 230kV circuit #1, replace terminal equipment
- (NRIS Only) Bushland – Potter County 230kV circuit #1, replace terminal equipment
- (NRIS Only) Carlisle – LP-Doug 115kV circuit #1, replace terminal equipment
- (NRIS Only) Carlisle 230/115/13kV Transformer circuit #1, replacement
- (NRIS Only) Cox Interchange – Hale County 115kV circuit #1, rebuild
- (NRIS Only) Crawfish Draw (TUCO 2) 230/115/13kV Transformer circuit #1, build
- (NRIS Only) Kress Interchange – Swisher 115kV circuit #2, build
- (NRIS Only) Potter County Interchange 345/230/13kV Transformer circuit #2, build
- (NRIS Only) Renfrow – Renfrow 138kV circuit #1, rebuild
- (NRIS Only) Sundown 230/115/13kV Transformer circuit #1, replacement
- (NRIS Only) Crawfish Draw Substation 345/230kV
  - Build new 345/230kV substation along TUCO – Border 345kV and TUCO – Swisher 230kV. Tie in and Terminate TUCO 345kV, Border 345kV, TUCO 230kV, and Swisher 230kV at TUCO 2.
  - Build 345/230/13kV transformer circuit #1
- (NRIS Only) Crawfish Draw – TUCO Interchange 230kV circuit #1, replace terminal equipment
- (NRIS Only) TUCO Interchange – Jones 230kV circuit #1, replace terminal equipment
- (NRIS Only) Wolfforth – Terry County 115kV circuit #1, replace terminal equipment
- (NRIS Only) Wolfforth – 230/115/13kV Transformer circuit #1, replacement

- Upgrades assigned to DISIS-2015-002 Interconnection Customers (with the exception of Group 15 and Group 16):
  - Antelope 345/115/13kV Transformer circuit #2, build
  - Beaver County – Grapevine 345kV circuit #1, build
  - Belden – Rasmussen 230kV circuit #1, build
  - Belden 230/115/13kV Transformer circuit #1, build
  - Border – Chisholm 345kV circuit #2, build
  - Border 345kV Reactive Power Support
    - Install six (6) -50Mvar Capacitor Bank(s) and +250Mvar SVC at Border
  - Carlisle 115/69/13kV Transformer circuit#1, replacement
  - Chisholm Substation Upgrade 345kV
    - Tap and terminate Woodward – Border 345kV into Chisholm Substation
  - Chisholm – Elk City 230kV circuit #1, rebuild
  - Cimarron – Minco 345kV circuit #1, replace terminal equipment
  - Cleo Corner – Cleo Plant Tap 138kV circuit #1, replace terminal equipment
  - Cleveland – Cleveland 138kV circuit #Z1, replace bus tie terminal equipment
  - Cleveland – Silver City 138kV circuit #1, rebuild
  - Deaf Smith – GEN-2015-039 Tap 230kV circuit #1, replace terminal equipment

- Dixon County – Belden 230kV circuit #1, build
- Dixon County – Twin Church 345kV circuit #1, Voltage Conversion
  - Convert Dixon Co – Twin Church 230kV to 345kV
- Emporia Energy Center – Swissvale 345kV circuit #1, replace terminal equipment
- GEN-2014-057 – Lawton Eastside 345kV circuit #1, replace terminal equipment
- GEN-2014-057 – Sunnyside 345kV circuit #1, rebuild
- GEN-2014-059 – Ogallala 230kV circuit #2, build
- GEN-2015-085 Tap – Altus Junction 138kV circuit #1, build
- GEN-2015-085 Tap – Russell 138kV circuit #1, replace terminal equipment
- GEN-2015-095 Tap – Rose Valley 138kV circuit #1, rebuild
- Gerald Gentleman Station Flowgate Stability Limit Mitigation
- Grapevine Substation Upgrade 345kV
  - Build Grapevine 345kV Substation
  - Terminate Beaver Co – Grapevine into Grapevine Substation
  - Terminate Potter Co – Grapevine into Grapevine Substation
  - Terminate Grapevine – Chisholm into Grapevine Substation
- Grapevine – Chisholm 345kV circuit #1, build
- Harbine – Beatrice 115kV circuit #1, rebuild
- Holt County – Antelope 345kV circuit #1, build
- Noel SW – Rose Valley 138kV circuit #1, rebuild
- Norge – Southwest Station 138kV circuit #1, rebuild
- Northwest 138kV circuit breaker, replace
- Ogallala – Gerald Gentleman Station 230kV circuit #1, replace terminal equipment
- Oklaunion 345kV Reactive Power Support Incremental Upgrade
  - Install four (4) -50Mvar Capacitor Bank(s) and +300Mvar SVC at Oklaunion
- Albion – Petersburg – North Petersburg 115kV circuit #1, reconductor and replace terminal equipment for at least a 193MVA rating
- Potter County – Grapevine 345kV circuit #1, build
- Shamrock 115kV Capacitor Bank, add second step of 9.6Mvars
- Sidney – GEN-2014-059 Tap 230kV circuit #2, build
- Sidney 230/115/13kV Transformer circuit #1, replacement to at least 150MVA rating
- Smokey Hills – Summit 230kV circuit #1, rebuild
- Swissvale – West Gardner 345kV circuit #1, replace terminal equipment
- Tolk 345/230/13kV Transformer circuit #2, build
- Tolk – Potter County 345kV circuit #1, build
- Tolk – TUCO 2 345kV circuit #1, build
- TUCO 2 – Border 345kV circuit #2, build
- TUCO 2 – Yoakum 345kV Retermination
  - Reterminate TUCO terminal to TUCO 2 terminal by adding approximately 3 miles of 345kV (SPP-NTC-200283)
- Twin Church – Sioux City 345kV circuit #1 Voltage Conversion
  - Convert Twin Church – Sioux City 230kV circuit #1 to 345kV
- Woodward Interchange 230/115/13kV Transformer circuit #1 and #2, replacement
- (NRIS Only) Chappel – Colton 115kV cicuit #1, achieve at least 115MVA rating
- (NRIS Only) Chisholm – Sweetwater 230kV circuit #1, rebuild

- (NRIS Only) Colton – Sidney 115kV circuit #1, achieve at least 115MVA rating
- (NRIS Only) Columbus East 230/115/13kV Transformer circuit #1, replacement
- (NRIS Only) Holt County – Grand Island 345kV circuit #1, build
- (NRIS Only) Knoll – Post Rock 230kV circuit #2, build
- (NRIS Only) LP-Wadsworth 230/69/13kV Transformer circuit #1, replacement
- (NRIS Only) Milan Tap – Clearwater 138kV circuit #1, rebuild
- (NRIS Only) Mustang 230/115/13kV Transformer circuit #2, build
- (NRIS Only) Pittsburg – Seminole 345kV circuit #1, replace terminal equipment
- (NRIS Only) Sidney 345/230/13kV Transformer circuit #2, build
- (NRIS Only) South Hays 230/115/13kV Transformer circuit #1, replacement
- (NRIS Only) TUCO – New Deal – Stanton 345/115kV Project
  - Build TUCO – New Deal – Stanton 115kV circuit #1
  - Build New Deal 345/115kV Transformer circuit #1
- (NRIS Only) Tupelo – Tupelo Tap 138kV circuit #2, build
- (NRIS Only) Walkemeyer 345/115/13kV Transformer circuit #2, build

Potential Upgrades Not in the Base Cases

Any potential upgrade(s) that do not have a Notification to Construct (NTC) have not been included in the base case(s). These upgrade(s) 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 Request(s) listed in Appendix A are grouped together into two (2) active regional groups based on geographical and electrical impacts. These groupings are shown in Appendix C.

To determine interconnection impacts, five (5) different scenario assumption analyses of the spring, summer, and winter base case models are developed to accommodate the regional groupings.

Power Flow

For Variable Energy Resources (VER) (solar/wind) in each power flow case, Energy Resource Interconnection Service (ERIS), is evaluated for the generating plants within a geographical area of the interconnection request(s) for the VERs dispatched at 100% nameplate of maximum generation. The VERs in the remote areas are dispatched at 20% nameplate of maximum generation. These projects are dispatched across the SPP footprint using load factor ratios.

Peaking units are not dispatched in the 2017 spring, or in the “High VER” summer and winter peaks. To study peaking units’ impacts, the 2016 winter peak, 2017 summer peak, 2020 summer and winter peaks, and 2025 summer peak models are developed with peaking units dispatched at 100% of the nameplate rating and VERs dispatched at 20% of the nameplate rating. Each interconnection request is also modeled separately at 100% nameplate for certain analyses.

All generators (VER and peaking) that requested Network Resource Interconnection Service (NRIS) are dispatched in an additional analysis into the interconnecting Transmission Owner’s (T.O.) area

at 100% nameplate with Energy Resource Interconnection Service (ERIS) only requests at 80% nameplate. This method allows for identification of network constraints that are common between regional groupings to have affecting requests share the mitigating upgrade costs throughout the cluster.

Identification of Network Constraints

The initial set of network constraints were found by using PSS® MUST First Contingency Incremental Transfer Capability (FCITC) analysis on the entire cluster grouping dispatched at the various levels mentioned above. The Energy Resource Interconnection Service (ERIS) constraints were then screened to determine which of the generation interconnection requests had at least a 20% Distribution Factor (DF) upon outage based constraints (n-1) and 3% DF upon system intact constraints (n-0). Interconnection Requests that have requested Network Resource Interconnection Service (NRIS) were studied in the NRIS analysis to determine if any constraint measured at least a 3% DF. If so, these constraints were also considered for mitigation under NRIS. Other network constraints which do not require transmission reinforcements are shown in Appendix H.

Network constraints are found by using PSS® MUST First Contingency Incremental Transfer Capability (FCITC) analysi on the entire cluster grouping dispatched at the various levels previously mentioned. The ERIS constraints are then screened to determine which of the generation interconnection requests have at least a 20% Distribution Factor (DF) upon outage based constraints (n-1) and 3% DF upon system intact constraints (n-0) or on non-convergences case solutions during outage based constraints (n-1). In addition, stability issues are also considered for transmission reinforcement under ERIS. Interconnection Requests that requested Network Resource Interconnection Service (NRIS) are also studied in the NRIS analysis to determine if any constraint measured greater than or equal to a 3% DF. If so, these constraints are also considered for mitigation under NRIS. With a defined source and sink in a Transmission Service Request, this list of network constraints can be refined and expanded to account for all Network Upgrade requirements for firm transmission service.

Constraints that are identified and require transmission reinforcement are listed in Appendix G. These constraints met the criteria for analysis for Energy Resource Interconnection Service and Network Resource Interconnection Service (if requested).

Other network constraints not requiring transmission reinforcements are shown in Appendix H. With a defined source and sink in a Transmission Service Request, this list of network constraints can be refined and expanded to account for all Network Upgrade requirements for firm transmission service.

In no way does the list of constraints in Appendix G identify all potential constraints that guarantee operation for all periods of time. It should be noted that although this study analyzed many of the most probable contingencies, it is not an all-inclusive list and cannot account for every operational

situation. Because of this, it is likely that the Customer(s) may be required to reduce their generation output to 0 MW, also known as curtailment, under certain system conditions to allow system operators to maintain the reliability of the transmission network.

Identification of Electrically Isolated Groups and Requests

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

Determination of Cost Allocated Network Upgrades

Cost Allocated Network Upgrades of Variable Energy Resources (VER) (solar/wind) generation interconnection requests are determined using the 2017 spring model. Cost Allocated Network Upgrades of peaking units is determined using the 2020 summer peak model. A PSS/E and MUST sensitivity analysis is performed to determine the Distribution Factors (DF), a distribution factor with no contingency that each generation interconnection request has on each new upgrade. The impact each generation interconnection request has on each upgrade project is weighted by the size of each request. Finally the costs due by each request for a particular project are 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:

  Request X Impact Factor on Upgrade Project 1 = DF(%)(X) * MW(X) = X1

  Request Y Impact Factor on Upgrade Project 1 = DF(%)(Y) * MW(Y) = Y1

  Request Z Impact Factor on Upgrade Project 1 = DF(%)(Z) * 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/Compensation for Amounts Advanced for Network Upgrades

Interconnection Customer shall be entitled to either credits or potentially Long Term Congestion Rights (LTCR), otherwise known as compensation, in accordance with Attachment Z2 of the SPP Tariff for any Network Upgrades, including any tax gross-up or any other tax-related payments associated with the Network Upgrades, and not refunded to the Interconnection Customer.

Interconnection and Network Upgrade Facilities

The generator Interconnection Customers requested interconnection within the transmission systems of Southwestern Public Service (SPS) and Nebraska Public Power District (NPPD).

The requirement to interconnect the 430.4 MW of generation into the existing and proposed transmission systems in the affected areas of the SPP transmission footprint consist of the necessary cost allocated shared facilities listed in Appendices E and F. The summarized cost for each analysis are listed in **Table 3** below

Table 3: Interconnection Costs

Analysis Number	Estimated Minimum Costs ($)
Scenario #1	$1,200,000
Scenario #2	$2,000,000
Scenario #3	$53,457,000
Scenario #4	$17,400,000
Scenario #5	$22,000,000

Appendices E and F also include Interconnection Facilities specific to each generation interconnection request. GEN-2015-099 and GEN-2015-101 requested additional analyses for alternate Points of Interconnection (POIs). The one-line diagrams in Appendix D should be consulted for details of the alternate POIs. Separate cost allocations are included in this report for the alternate Points of Interconnection.

For an explanation of how required Network Upgrades and Interconnection Facilities were determined, refer to the section on “Identification of Network Constraints” above.

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

Power Flow Analysis

Power Flow Analysis Methodology

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

Power Flow Analysis

A power flow analysis is conducted for each Interconnection Customer's facility using modified versions of the 2016 winter, 2017 spring and summer, 2020 light load, summer and winter, and 2025 summer peaks. The output of the Interconnection Customer's facility is 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 Interconnection Service request (ERIS). Certain requests that are also pursuing Network Resource Interconnection Service (NRIS) have an additional analysis conducted for displacing resources in the interconnecting Transmission Owner's balancing area.

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

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

Cluster Group 6 (South Texas Panhandle/New Mexico)

In addition to the 6,404.05 MW of previously queued generation in the area, 310.4 MW of new interconnection service was studied. The Interconnection Requests in Group 6 of this Feasibility Study have lower queue priority than the Interconnection Requests in Group 6 of the DISIS-2014-002, DISIS-2015-001, and DISIS-2015-002 studies.

Any change in the status of Interconnection Requests in or any other higher queued DISIS study in cluding DISIS-2015-002 may cause the cost of the above Network Upgrades to become the cost responsibility of the Feasibility Cluster Study Customers. The related overloads are in Appendix H.

Scenario #1 Group 06 GEN-2015-099: No ERIS constraints were observed for GEN 2015-099 at Hobbs 115kV. New transmission circuit(s), rebuild(s), and/or terminal equipment upgrade(s) for mitigation are listed in Appendix E and F (Scenario #1). See also **Table 4** below.

Scenario #2 Group 06 GEN-2015-099: No ERIS constraints were observed for GEN 2015-099 at Maddox 115kV. New transmission circuit(s), rebuild(s), and/or terminal equipment upgrade(s) for mitigation are listed in Appendix E and F (Scenario #2). See also **Table 5** below.

Scenario #4 Group 06 GEN-2015-101: ERIS constraints were observed for GEN 2015-101 on the Tap for Plant X – Deaf Smith 230kV. The Bushland Interchage 230/115kV transformer, terminal equipment on the Coulter – Hillside 115kV line and at Deaf Smith 230kV will need to be replaced. NRIS constraints were observed for Deaf Smith – Panda 115kV and Lubbock-Holly Plant 230/69kV transformer circuit #1. Deaf Smith – Panda 115kV was identified in the 2015 ITPNT Needs Assessment for Regional Reliability with an in-service date of 4/1/2018 (SPP-NTC-200326). New transmission circuit(s), rebuild(s), and/or terminal equipment upgrade(s) for mitigation are listed in Appendix E and F (Scenario #4). See also **Table 6** below.

Scenario #5 Group 06 GEN-2015-101: ERIS constraints were observed for GEN 2015-101 on the Tap for Potter County – Newhart 230kV. The Potter 345/230kV transformer circuit #1 and #2 are overloading. A third transformer will be needed. NRIS constraints were observed for Lubbock-Holly Plant 230/69kV transformer circuit #1. New transmission circuit(s), rebuild(s), and/or terminal equipment upgrade(s) for mitigation are listed in Appendix E and F (Scenario #5). See also **Table 7** below.

The powerflow results listed below were obtained by analyzing the 310.4 MW of Feasibility Study Interconnection Requests in addition to all prior queued Group 6 Interconnection Requests including the generation in DISIS-2015-002. DISIS-2015-002 Interconnection Requests have been cost assigned $1,700,000 of potential Network Upgrades which are assumed in service in this analysis.

Table 4: Group 6 Power Flow Analysis (Analysis #1)

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

Table 5: Group 6 Power Flow Analysis (Analysis #2)

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

Table 6: Group 6 Power Flow Analysis (Analysis #4)

ERIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC% LOADING (%)	CONTINGENCY
BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.3	105.41	POTTER COUNTY INTERCHANGE - TOLK STATION 345KV CKT 1
BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	163.4	160.17	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	155.6	105.32	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1
DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1	476.2	100.08	P12:345:SPS:J15.1.XRDS.TOLK

NRIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC% LOADING (%)	CONTINGENCY
DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	95.8	101.16	BUSHLAND INTERCHANGE - DEAF SMITH 230KV CKT 1
LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	102.92	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1

Table 7: Group 6 Power Flow Analysis (Analysis #5)

ERIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC% LOADING (%)	CONTINGENCY
POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	559.0	101.39	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2
POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2	559.8	101.32	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1

NRIS Constraints			
MONITORED ELEMENT	RATE B (MVA)	TC% LOADING (%)	CONTINGENCY
LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	102.92	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1

Cluster Group 9 (Nebraska Area)

In addition to the 3,767.9 MW of previously queued generation in the area, 120 MW of new Interconnection Service was studied. The analysis is described below.

Scenario #3 Group 09 GEN-2015-100: ERIS Constraints were observed alone the Emporie Energy Center - Swissvle – West Gardner 345kV transmission circuits. The mitigation for Emporie Energy Center - Swissvle – West Gardner 345kV overloads is to upgrade terminal equipment to alleviate the overloads. Various NRIS constraints were observed along the Lang – Reading Lake – Osage Junction – Scranton – Four Corners – Carbondale 115kV , Mockingbird Hill – Stull Tap – Tecumseh

Hill 115kV, Emporia Energy Center – GEN-2015-050/51 Tap 345kV and Lawrence Energy Center – Swissvale 230kV transmission lines. New transmission circuit(s), rebuild(s), and/or terminal equipment upgrade(s) for mitigation are listed in Appendix E and F (Scenario #4).

Table 8: Group 9 Power Flow Analysis (Analysis #3)

ERIS Constraints			
MONITORED ELEMENT	**RATE B (MVA)**	**TC% LOADING (%)**	**CONTINGENCY**
BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	114.71	BEATRICE - HARBINE 115KV CKT 1
BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	112.98	BEATRICE - HARBINE 115KV CKT 1
FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	111.28	FAIRBURY - HARBINE 115KV CKT 1
FAIRBURY - HARBINE 115KV CKT 1	97.6	191.2	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	188.69	FAIRBURY - HARBINE 115KV CKT 1
MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	116.2	BEATRICE - HARBINE 115KV CKT 1
PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	123.13	FAIRBURY - HARBINE 115KV CKT 1

NRIS Constraints			
MONITORED ELEMENT	**RATE B (MVA)**	**TC% LOADING (%)**	**CONTINGENCY**
SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	104.52	HOYT - STRANGER CREEK 345KV CKT 1

Curtailment and System Reliability

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

Conclusion

The minimum cost of interconnecting 430.4 MW of new interconnection requests included in this Feasibility Cluster Study are listed in Appendices E and F, which include the Allocated Network Upgrades and Transmission Owner Interconnection Facilities. GEN-2015-099 and GEN-2015-101 requested additional analysis for alternate Points of Interconnection (POIs). Five (5) Point of Interconnection (POI) were conducted for all the possible configurations. The constraints identified for each of these configurations can be found in Appendix G and H.

If the Interconnection Customers proceed into the Preliminary Interconnection System Impact Study (PISIS) or Definitive Interconnection System Impact Study (DISIS), the Interconnection Customer can propose only one Point of Interconnection (POI). The total estimated minimum cost for interconnecting the studied generation interconnection request is given in **Table 11** below.

Table 11. Interconnection Costs

Analysis Number	Estimated Minimum Costs ($)
Scenario #1	$1,200,000
Scenario #2	$2,000,000
Scenario #3	$53,457,000
Scenario #4	$17,400,000
Scenario #5	$22,000,000

If the Interconnection Customers proceed into the Preliminary Interconnection System Impact Study (PISIS) or Definitive Interconnection System Impact Study (DISIS), the Interconnection Customer can propose only one Point of Interconnection (POI

The one-line diagrams in Appendix D should be consulted for details of the alternate POIs. Separate cost allocations are included in this report for the alternate Points of Interconnection. These costs include the cost of upgrades of other transmission facilities listed in Appendix H which are Network Constraints.

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

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

Appendix

A: Generator Interconnection Requests Considered for Study

See next page.

A: Generation Interconnection Requests Considered for Study

Request	Amount	Service	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date	In Service Date Delayed Until no earlier than*
GEN-2015-099	70.40	ER	SPS	Hobbs 115kV/Maddox115kV	Hobbs 115kV/Maddox115kV		TBD
GEN-2015-100	120.00	ER/NR	NPPD	Fairbury 115kV	Fairbury 115kV		TBD
GEN-2015-101	240.00	ER/NR	SPS	Tap Plant X - Deaf Smith 230kV/Tap Potter County - Newhart 230kV	Tap Plant X - Deaf Smith 230kV/Tap Potter County - Newhart 230kV		TBD
Total:	**430.40**						

*In-Service Date for each request is to be determined after the Interconnection Facility Study is completed.

B: Prior Queued Interconnection Requests

See next page.

B: Prior Queued Interconnection Requests

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
ASGI-2010-006	150.00	AECI	Remington 138kV	AECI queue Affected Study
ASGI-2010-010	42.20	SPS	Lovington 115kV	Lea County Affected Study
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV	Lea County Affected Study
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV	Lea County Affected Study
ASGI-2011-001	27.30	SPS	Lovington 115kV	On-Line
ASGI-2011-002	20.00	SPS	Herring 115kV	On-Line
ASGI-2011-003	10.00	SPS	Hendricks 69kV	On-Line
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV	Under Study (DISIS-2011-002)
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV	Under Study (DISIS-2012-002)
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV	Under Study (DISIS-2012-001)
ASGI-2013-001	11.50	SPS	PanTex South 115kV	Under Study (DISIS-2013-001)
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV	Under Study (DISIS-2013-001)
ASGI-2013-003	18.40	SPS	FE Clovis 115kV	Under Study (DISIS-2013-001)
ASGI-2013-004	36.60	SUNCMKEC	Morris 115kV	Under Study (DISIS-2013-002)
ASGI-2013-005	1.65	SPS	FE Clovis 115kV	Under Study (DISIS-2013-002)
ASGI-2013-006	2.00	SPS	SP-Erskine 115kV	
ASGI-2014-001	2.50	SPS	SP-Erskine 115kV	Under Study (DISIS-2014-001)
ASGI-2014-002	49.60	SPS	Tap Tucumcari - Santa Rosa 115kV	Under Study (DISIS-2014-001)
ASGI-2014-005	10.00	SPS	Strata 69kV	Under Study (DISIS-2014-002)
ASGI-2014-008	10.00	SPS	South Loving 69kV	Under Study (DISIS-2014-002)
ASGI-2014-009	10.00	SPS	Wood Draw 115kV	Under Study (DISIS-2014-002)
ASGI-2014-010	10.00	SPS	Ochoa 115kV	Under Study (DISIS-2014-002)
ASGI-2014-012	10.00	SPS	Cooper Ranch 115kV	Under Study (DISIS-2014-002)
ASGI-2014-014	56.40	GRDA	Ferguson 69kV	Under Study (DISIS-2014-002)
ASGI-2015-001	6.13	SUNCMKEC	Ninnescah 115kV	Under Study (DISIS-2015-001)
ASGI-2015-002	2.00	SPS	SP-Yuma 69kV	Under Study (DISIS-2015-001)
ASGI-2015-004	56.36	GRDA	Coffeyville City 69kV	Under Study (DISIS-2015-001)
ASGI-2015-006	9.00	SWPA	Tupelo 138kV	Under Study (DISIS-2015-002)
G255	100.00	XEL	Yankee 115kV	MISO Queued Request
G359	150.00	MDU	MDU 230 kV system near Ellendale	MISO Queued Request
G380	150.00	OTP	Rugby 115kV	MISO Queued Request
G408	12.00	XEL	Tap McHenry - Souris 115kV	MISO Queued Request
G502	50.60	MP	Milton Young 230kV	MISO Queued Request
G645	50.00	OTP	Ladish 115kV	MISO Queued Request
G723	10.00	MDU	Haskett 115kV	MISO Queued Request
G752	150.00	MDU	Tap Bison - Hettinger 230kV	MISO Queued Request
G788	49.00	GRE	Ladish 115kV	MISO Queued Request
G830	99.00	GRE	GRE McHenry 115kV	MISO Queued Request
GEN-2001-014	96.00	WFEC	Ft Supply 138kV	On-Line
GEN-2001-026	74.30	WFEC	Washita 138kV	On-Line
GEN-2001-033	180.00	SPS	San Juan Tap 230kV	On-Line at 120MW
GEN-2001-036	80.00	SPS	Norton 115kV	On-Line
GEN-2001-037	100.00	OKGE	FPL Moreland Tap 138kV	On-Line
GEN-2001-039A	105.00	SUNCMKEC	Shooting Star Tap 115kV	On-Line
GEN-2001-039M	100.00	SUNCMKEC	Central Plains Tap 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2002-004	200.00	WERE	Latham 345kV	On-Line at 150MW
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV	On-Line
GEN-2002-008	240.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2002-008IS	40.50	WAPA	Edgeley 115kV [Pomona 115kV]	Commercial Operation
GEN-2002-009	80.00	SPS	Hansford 115kV	On-Line
GEN-2002-022	240.00	SPS	Bushland 230kV	On-Line
GEN-2002-023N	0.80	NPPD	Harmony 115kV	On-Line
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV	On-Line
GEN-2003-004	100.00	WFEC	Washita 138kV	On-Line
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV	On-Line
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV	On-Line
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV	On-Line
GEN-2003-020	160.00	SPS	Martin 115kV	On-Line
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV	On-Line
GEN-2003-022	120.00	AEPW	Weatherford 138kV	On-Line
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV	On-Line at 100MW
GEN-2004-020	27.00	AEPW	Weatherford 138kV	On-Line
GEN-2004-023	20.60	WFEC	Washita 138kV	On-Line
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV	On-Line
GEN-2005-003	30.60	WFEC	Washita 138kV	On-Line
GEN-2005-003IS	100.00	WAPA	Nelson 115kV	Commercial Operation
GEN-2005-008	120.00	OKGE	Woodward 138kV	On-Line
GEN-2005-008IS	50.00	WAPA	Hilken 230kV [Ecklund 230kV]	Commercial Operation
GEN-2005-012	250.00	SUNCMKEC	Ironwood 345kV	On-Line at 160MW
GEN-2005-013	201.00	WERE	Caney River 345kV	On-Line
GEN-2006-001IS	10.00	XEL	Marshall 115kV	Commercial Operation
GEN-2006-002	101.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-002IS	51.00	WAPA	Wessington Springs 230kV	Commercial Operation
GEN-2006-006IS	10.00	XEL	Marshall 115kV	Commercial Operation
GEN-2006-015IS	50.00	WAPA	Hilken 230kV [Ecklund 230kV]	Commercial Operation
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV	On-Line
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV	On-Line
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV	On-Line
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV	On-Line
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV	On-Line
GEN-2006-026	502.00	SPS	Hobbs 230kV & Hobbs 115kV	On-Line
GEN-2006-031	75.00	MIDW	Knoll 115kV	On-Line
GEN-2006-035	225.00	AEPW	Sweetwater 230kV	On-Line at 132MW
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV	On-Line
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV	On-Line
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV	On-Line
GEN-2006-043	99.00	AEPW	Sweetwater 230kV	On-Line
GEN-2006-044	370.00	SPS	Hitchland 345kV	On-Line at 120MW
GEN-2006-044N	40.50	NPPD	North Petersburg 115kV	On-Line
GEN-2006-046	131.00	OKGE	Dewey 138kV	On-Line
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV	On-Line
GEN-2007-013IS	50.00	WAPA	Wessington Springs 230kV	Commercial Operation
GEN-2007-014IS	100.00	WAPA	Wessington Springs 230kV	Commercial Operation
GEN-2007-017IS	166.00	WAPA	Ft Thompson-Grand Island 345kV	On Schedule
GEN-2007-018IS	234.00	WAPA	Ft Thompson-Grand Island 345kV	On Schedule

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2007-020IS	16.00	WAPA	Nelson 115kV	Commercial Operation
GEN-2007-021	201.00	OKGE	Tatonga 345kV	On-Line
GEN-2007-023IS	50.00	WAPA	Formit-Summit 115kV	On Suspension
GEN-2007-025	300.00	WERE	Viola 345kV	On-Line
GEN-2007-027IS	99.00	WAPA	Bismarck-Garrison 230kV #1	On Suspension
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV	On-Line at 132MW
GEN-2007-043	200.00	OKGE	Minco 345kV	On-Line
GEN-2007-044	300.00	OKGE	Tatonga 345kV	On-Line at 199MW
GEN-2007-046	200.00	SPS	Hitchland 115kV	On Schedule for 2015
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV	On-Line at 150MW
GEN-2007-052	150.00	WFEC	Anadarko 138kV	On-Line
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV	On Schedule for 2016 and 2017
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV	On-Line
GEN-2008-008IS	5.00	WAPA	Nelson 115kV	Commercial Operation
GEN-2008-013	300.00	OKGE	Hunter 345kV	On-Line at 235MW
GEN-2008-018	250.00	SPS	Finney 345kV	On-Line
GEN-2008-021	42.00	WERE	Wolf Creek 345kV	On-Line
GEN-2008-022	300.00	SPS	Crossroads 345kV	On-Line
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV	On-Line
GEN-2008-037	101.00	WFEC	Slick Hills 138kV	On-Line
GEN-2008-044	197.80	OKGE	Tatonga 345kV	On-Line
GEN-2008-047	300.00	OKGE	Beaver County 345kV	On-Line
GEN-2008-051	322.00	SPS	Potter County 345kV	On-Line at 161MW
GEN-2008-079	99.20	SUNCMKEC	Crooked Creek 115kV	On-Line
GEN-2008-086N02	201.00	NPPD	Meadow Grove 230kV	On-Line
GEN-2008-092	200.60	MIDW	Post Rock 230kV	On-Line
GEN-2008-098	100.80	WERE	Waverly 345kV	On-Line
GEN-2008-119O	60.00	OPPD	S1399 161kV	On-Line
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV	On Schedule for 2016
GEN-2008-129	80.00	KCPL	Pleasant Hill 161kV	On-Line
GEN-2009-001IS	200.00	WAPA	Groton-Watertown 345kV	On Schedule
GEN-2009-006IS	90.00	WAPA	Mission 115kV	On Suspension
GEN-2009-007IS	100.00	WAPA	Mission 115kV	On Suspension
GEN-2009-008	199.50	MIDW	South Hays 230kV	On-Line
GEN-2009-018IS	100.00	WAPA	Groton 115kV	Commercial Operation
GEN-2009-020	48.30	MIDW	Walnut Creek 69kV	On-Line
GEN-2009-020AIS	150.00	WAPA	Tripp Junction 115kV	Commercial Operation
GEN-2009-025	59.80	OKGE	Nardins 69kV	On-Line
GEN-2009-026IS	110.00	WAPA	Dickenson-Heskett 230kV	On Schedule
GEN-2009-040	73.80	WERE	Marshall 115kV	On Schedule for 2016
GEN-2010-001	300.00	OKGE	Beaver County 345kV	On-Line
GEN-2010-001IS	99.00	WAPA	Bismarck-Glenham 230kV	On Schedule
GEN-2010-003	100.80	WERE	Waverly 345kV	On-Line
GEN-2010-003IS	34.00	WAPA	Wessington Springs 230kV	Commercial Operation
GEN-2010-005	299.20	WERE	Viola 345kV	On-Line at 170MW
GEN-2010-006	205.00	SPS	Jones 230kV	On-Line
GEN-2010-007IS	172.50	WAPA	Antelope Valley 345kV	On Suspension
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV	On-Line
GEN-2010-011	29.70	OKGE	Tatonga 345kV	On-Line
GEN-2010-014	358.80	SPS	Hitchland 345kV	On Suspension

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2010-036	4.60	WERE	6th Street 115kV	On-Line
GEN-2010-040	300.00	OKGE	Cimarron 345kV	On-Line
GEN-2010-041	10.50	OPPD	S1399 161kV	On Schedule for 2015
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV	On Schedule for 2017
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV	On Schedule for 2016
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV	FACILITY STUDY STAGE
GEN-2010-051	200.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV	On Suspension
GEN-2010-055	4.50	AEPW	Wekiwa 138kV	On-Line
GEN-2010-057	201.00	MIDW	Rice County 230kV	On-Line
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV	On Schedule for 2016
GEN-2011-010	100.80	OKGE	Minco 345kV	On-Line
GEN-2011-011	50.00	KCPL	Iatan 345kV	On-Line
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2011-014 Tap) 345kV	On Schedule for 2016
GEN-2011-016	200.10	SUNCMKEC	Ironwood 345kV	On Schedule for 2017
GEN-2011-018	73.60	NPPD	Steele City 115kV	On-Line
GEN-2011-019	299.00	OKGE	Woodward 345kV	On Suspension
GEN-2011-020	299.00	OKGE	Woodward 345kV	On Suspension
GEN-2011-022	299.00	SPS	Hitchland 345kV	On Schedule for 2016 (150MW) and 2017 (149MW)
GEN-2011-025	80.00	SPS	Tap Floyd County - Crosby County 115kV	On Schedule for 2016
GEN-2011-027	120.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV	On Suspension
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV	On-Line
GEN-2011-040	111.00	OKGE	Carter County 138kV	On-Line
GEN-2011-045	205.00	SPS	Jones 230kV	On-Line
GEN-2011-046	27.00	SPS	Lopez 115kV	On-Line
GEN-2011-048	175.00	SPS	Mustang 230kV	On-Line
GEN-2011-049	250.70	OKGE	Border 345kV	On Schedule for 2016
GEN-2011-050	109.80	AEPW	Santa Fe Tap 138kV	On Schedule for 2016
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV (GEN-2011-051 Tap)	On Schedule for 2017
GEN-2011-054	300.00	OKGE	Cimarron 345kV	On-Line
GEN-2011-056	3.60	NPPD	Jeffrey 115kV	On-Line
GEN-2011-056A	3.60	NPPD	John 1 115kV	On-Line
GEN-2011-056B	4.50	NPPD	John 2 115kV	On-Line
GEN-2011-057	150.40	WERE	Creswell 138kV	On-Line
GEN-2012-001	61.20	SPS	Cirrus Tap 230kV	On-Line
GEN-2012-004	41.40	OKGE	Carter County 138kV	On-Line
GEN-2012-006IS	125.01	WAPA	Williston-Ch. Creek 230kV	On Schedule
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV	On-Line
GEN-2012-009IS	99.00	WAPA	Tap Fort Randall - Lake Platte 230kV	On Suspension
GEN-2012-012IS	75.00	WAPA	Wolf Point-Circle 115kV	On Suspension
GEN-2012-014IS	99.50	WAPA	Groton 115kV	On Schedule
GEN-2012-020	478.00	SPS	TUCO 230kV	On Schedule for 2016
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV	On-Line
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV	On Schedule for 2016
GEN-2012-027	136.00	AEPW	Shidler 138kV	On Suspension
GEN-2012-028	74.80	WFEC	Gotebo 69kV	On-Line
GEN-2012-032	300.00	OKGE	Open Sky 345kV	On-Line
GEN-2012-033	98.80	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV	On-Line
GEN-2012-034	7.00	SPS	Mustang 230kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2012-035	7.00	SPS	Mustang 230kV	On-Line
GEN-2012-036	7.00	SPS	Mustang 230kV	On-Line
GEN-2012-037	203.00	SPS	TUCO 345kV	On-Line
GEN-2012-041	121.50	OKGE	Ranch Road 345kV	On-Line
GEN-2013-001IS	90.00	WAPA	Summit-Watertown 115kV	On Suspension
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2	On Schedule for 2016
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV	On-Line
GEN-2013-008	1.20	NPPD	Steele City 115kV	On-Line
GEN-2013-009IS	19.50	WAPA	Redfield NW 115kV	Commercial Operation
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock (North of GEN-2011-017 Tap) 345kV	IA Pending
GEN-2013-011	30.00	AEPW	Turk 138kV	On-Line
GEN-2013-012	147.00	OKGE	Redbud 345kV	On-Line
GEN-2013-014	25.50	NPPD	Tap Pauline - Hildreth (Rosemont) 115kV	On Suspension
GEN-2013-016	203.00	SPS	TUCO 345kV	On Schedule for 2017
GEN-2013-019	73.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2	On Schedule for 2016
GEN-2013-022	25.00	SPS	Norton 115kV	On Schedule for 2016
GEN-2013-027	150.00	SPS	Tap Tolk - Yoakum 230kV	IA Pending
GEN-2013-028	559.50	GRDA	Tap N Tulsa - GRDA 1 345kV	On Schedule for 2017
GEN-2013-029	300.00	OKGE	Renfrow 345kV	On Schedule for 2016 (150MW) and 2016 (150MW)
GEN-2013-030	300.00	OKGE	Beaver County 345kV	On Schedule for 2016 (200MW) and 2017 (100MW)
GEN-2013-032	204.00	NPPD	Antelope 115kV	On Schedule for 2017
GEN-2013-033	28.00	MIDW	Knoll 115kV	On Schedule for 2016
GEN-2014-001	200.60	WERE	Tap Wichita - Emporia Energy Center (GEN-2014-001 Tap) 345kV	On Suspension
GEN-2014-001IS	103.70	WAPA	Newell-Maurine 115kV	FACILITY STUDY STAGE
GEN-2014-002	10.50	OKGE	Tatonga 345kV (GEN-2007-021 POI)	On Schedule for 2015
GEN-2014-003	15.80	OKGE	Tatonga 345kV (GEN-2007-044 POI)	On Schedule for 2015
GEN-2014-003IS	91.00	WAPA	Culbertson 115kV	On Schedule
GEN-2014-004	4.00	NPPD	Steele City 115kV (GEN-2011-018 POI)	On-Line
GEN-2014-004IS	384.20	WAPA	Charlie Creek 345kV	FACILITY STUDY STAGE
GEN-2014-005	5.70	OKGE	Minco 345kV (GEN-2011-010 POI)	On-Line
GEN-2014-006IS	125.00	WAPA	Williston 115kV	On Schedule
GEN-2014-010IS	150.00	WAPA	Neset 115kV	On Schedule
GEN-2014-012	225.00	SPS	Tap Hobbs Interchange - Andrews 230kV	On Schedule for 2018
GEN-2014-013	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV	On-Line
GEN-2014-014IS	151.50	WAPA	Belfield-Rhame 230kV	On Schedule
GEN-2014-020	100.00	AEPW	Tuttle 138kV	On Schedule for 2017
GEN-2014-021	300.00	KCPL	Tap Nebraska City - Mullin Creek 345kV	On Schedule for 2016
GEN-2014-025	2.40	MIDW	Walnut Creek 69kV	On-Line
GEN-2014-028	35.00	EMDE	Riverton 161kV	On Schedule for 2016
GEN-2014-031	35.80	NPPD	Meadow Grove 230kV	On Schedule for 2016
GEN-2014-032	10.20	NPPD	Meadow Grove 230kV	IA Pending
GEN-2014-033	70.00	SPS	Chaves County 115kV	On Schedule for 2016
GEN-2014-034	70.00	SPS	Chaves County 115kV	On Schedule for 2016
GEN-2014-035	30.00	SPS	Chaves County 115kV	On Schedule for 2018
GEN-2014-037	200.00	SPS	Tap Hitchland - Beaver County Dbl Ckt (Optima) 345kV	DISIS STAGE

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2014-038	200.00	SPS	Tap Hitchland - Potter County 345kV	DISIS STAGE
GEN-2014-039	73.40	NPPD	Friend 115kV	On Schedule for 2017
GEN-2014-040	320.40	SPS	Castro 115kV	On Schedule for 2016
GEN-2014-041	120.80	SUNCMKEC	Arnold 115kV	On Schedule for 2017
GEN-2014-046	125.40	SPS	Chaves County 115kV	DISIS STAGE
GEN-2014-047	40.00	SPS	Crossroads 345kV	IA Pending
GEN-2014-056	250.00	OKGE	Minco 345kV	On Schedule for 2016
GEN-2014-057	250.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV	On Schedule for 2016
GEN-2014-064	248.40	OKGE	Otter 138kV	On Schedule for 2016
GEN-2014-074	152.00	SPS	Tap TUCO Interchange - Oklaunion (GEN-2014-074 Tap) 345kV	FACILITY STUDY STAGE
GEN-2015-001	200.00	OKGE	Ranch Road 345kV	On Schedule for 2016
GEN-2015-004	52.90	OKGE	Border 345kV	FACILITY STUDY STAGE
GEN-2015-005	200.10	KCPL	Tap Nebraska City - Sibley 345kV	FACILITY STUDY STAGE
GEN-2015-007	160.00	NPPD	Hoskins 345kV	FACILITY STUDY STAGE
GEN-2015-013	120.00	WFEC	Synder 138kV	FACILITY STUDY STAGE
GEN-2015-014	150.00	SPS	Tap Cochran - Lehman 115kV	FACILITY STUDY STAGE
GEN-2015-015	154.60	OKGE	Tap Medford Tap - Coyote 138kV	FACILITY STUDY STAGE
GEN-2015-016	200.00	KCPL	Tap Marmaton - Centerville 161kV	FACILITY STUDY STAGE
GEN-2015-018	80.00	SPS	Tap Curry County - Bailey 115kV	DISIS STAGE
GEN-2015-020	100.00	SPS	Oasis 115kV	DISIS STAGE
GEN-2015-021	20.00	SUNCMKEC	Johnson Corner 115kV	FACILITY STUDY STAGE
GEN-2015-022	112.00	SPS	Swisher 115kV	FACILITY STUDY STAGE
GEN-2015-023	300.70	NPPD	Holt County 345kV	FACILITY STUDY STAGE
GEN-2015-024	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT	FACILITY STUDY STAGE
GEN-2015-025	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT	FACILITY STUDY STAGE
GEN-2015-027	4.90	SUNCMKEC	Crooked Creek 115kV	FACILITY STUDY STAGE
GEN-2015-028	3.00	OKGE	Nardins 69kV	FACILITY STUDY STAGE
GEN-2015-029	161.00	OKGE	Tatonga 345kV	FACILITY STUDY STAGE
GEN-2015-030	200.10	OKGE	Sooner 345kV	IA Pending
GEN-2015-031	300.00	SPS	Tap Amarillo South - Swisher 230kV	DISIS STAGE
GEN-2015-033	152.00	SPS	Tap TUCO Interchange - Oklaunion (GEN-2014-074 Tap) 345kV	DISIS STAGE
GEN-2015-034	200.00	OKGE	Ranch Road 345kV	DISIS STAGE
GEN-2015-036	303.60	OKGE	Johnston County 345kV	DISIS STAGE
GEN-2015-038	303.60	OKGE	Cimarron 345kV	DISIS STAGE
GEN-2015-039	50.00	SPS	Tap Deaf Smith - Plant X 230kV	DISIS STAGE
GEN-2015-040	50.10	SPS	Mustang 230kV	DISIS STAGE
GEN-2015-041	5.00	SPS	TUCO Interchange 345kV	DISIS STAGE
GEN-2015-042	320.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV	DISIS STAGE
GEN-2015-043	20.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT	DISIS STAGE
GEN-2015-044	20.00	OKGE	Minco 345kV	DISIS STAGE
GEN-2015-045	20.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV	DISIS STAGE
GEN-2015-046	300.00	WAPA	Tande 345kV	DISIS STAGE
GEN-2015-047	300.00	OKGE	Sooner 345kV	DISIS STAGE
GEN-2015-048	200.00	OKGE	Cleo Corner 138kV	DISIS STAGE
GEN-2015-052	300.00	WERE	Tap Open Sky - Rose Hill 345kV	DISIS STAGE
GEN-2015-053	50.00	NPPD	Antelope 115kV	DISIS STAGE
GEN-2015-055	40.00	WFEC	Erick 138kV	DISIS STAGE
GEN-2015-056	101.20	SPS	Crossroads 345kV	DISIS STAGE

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2015-057	100.00	OKGE	Minco 345kV	DISIS STAGE
GEN-2015-058	50.00	SPS	Atoka 115kV	DISIS STAGE
GEN-2015-059	6.30	OKGE	Minco 345kV	DISIS STAGE
GEN-2015-060	250.50	OKGE	Woodward EHV 138kV	DISIS STAGE
GEN-2015-061	200.00	SUNCMKEC	Tap Mingo - Setab 345kV	DISIS STAGE
GEN-2015-062	4.50	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV	DISIS STAGE
GEN-2015-063	300.00	OKGE	Tap Woodring - Mathewson 345kV	DISIS STAGE
GEN-2015-064	197.80	SUNCMKEC	Mingo 115kV	DISIS STAGE
GEN-2015-065	202.40	SUNCMKEC	Mingo 345kV	DISIS STAGE
GEN-2015-066	248.40	OKGE	Tap Cleveland - Sooner 345kV	DISIS STAGE
GEN-2015-067	150.00	OKGE	Sooner 138kV	DISIS STAGE
GEN-2015-068	300.00	SPS	TUCO Interchange 345kV	DISIS STAGE
GEN-2015-069	300.00	WERE	Union Ridge 230kV	DISIS STAGE
GEN-2015-071	200.00	AEPW	Chisholm 345kV	DISIS STAGE
GEN-2015-072	20.90	MIDW	South Hays 230kV	DISIS STAGE
GEN-2015-073	200.10	WERE	Emporia Energy Center 345kV	DISIS STAGE
GEN-2015-074	174.00	WERE	Tap Hoyt - Jeffrey Energy Center 345kV	DISIS STAGE
GEN-2015-075	51.48	SPS	Carlisle 69kV	DISIS STAGE
GEN-2015-076	158.40	NPPD	Belden 115kV	DISIS STAGE
GEN-2015-077	80.00	SPS	Tap Terry - Clauene 115kV	DISIS STAGE
GEN-2015-078	50.10	SPS	Mustang 115kV	DISIS STAGE
GEN-2015-079	129.20	SPS	Tap Yoakum - Hobbs Interchange 230kV	DISIS STAGE
GEN-2015-080	129.20	SPS	Tap Yoakum - Hobbs Interchange 230kV	DISIS STAGE
GEN-2015-081	180.00	OKGE	Tap Woodward - Tatonga (GEN-2011-051 Tap) 345kV	DISIS STAGE
GEN-2015-082	200.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2011-014 Tap) 345kV	DISIS STAGE
GEN-2015-083	125.00	WERE	Belle Plain 138kV	DISIS STAGE
GEN-2015-084	51.30	AEPW	Hollis 138kV	DISIS STAGE
GEN-2015-085	122.40	AEPW	Tap Lake Pauline - Russell 138kV	DISIS STAGE
GEN-2015-087	76.00	NPPD	Tap Fairbury - Hebron 115kV	DISIS STAGE
GEN-2015-088	300.00	NPPD	Tap Moore - Pauline 345kV	DISIS STAGE
GEN-2015-090	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT	DISIS STAGE
GEN-2015-091	101.20	WAPA	Daglum 230kV	DISIS STAGE
GEN-2015-092	250.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV	DISIS STAGE
GEN-2015-093	250.00	OKGE	Tap Lawton East Side - Gracemont 345kV	DISIS STAGE
GEN-2015-095	172.00	WFEC	Tap Rose Valley - Mooreland 138kV	DISIS STAGE
GEN-2015-096	150.00	WAPA	Tap Belfied - Rhame 230kV	DISIS STAGE
GEN-2015-097	100.00	WAPA	Groton 115kV	DISIS STAGE
GEN-2015-098	100.00	WAPA	Mingusville 230kV	DISIS STAGE
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV	On-Line
J003	20.00	MDU	Baker 115kV	MISO Queued Request
J249	180.00	MDU	MDU Tatanka 230kV	MISO Queued Request
J262	100.00	OTP	Jamestown 345	MISO Queued Request
J263	100.00	OTP	Jamestown 345	MISO Queued Request
J316	150.00	MDU	MDU 230 kV Tatanka-Ellendale line	MISO Queued Request
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV	On-Line
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV	On-Line
NPPD Distributed (Buffalo County Solar)	10.00	NPPD	Kearney Northeast	On-Line
NPPD Distributed (Burt County Wind)	12.00	NPPD	Tekamah & Oakland 115kV	On-Line

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV	On-Line
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV	On-Line
NPPD Distributed (North Platte - Lexington)	54.00	NPPD	Multiple: Jeffrey 115kV, John_1 115kV, John_2 115kV	On-Line
NPPD Distributed (Ord)	11.90	NPPD	Ord 115kV	On-Line
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV	On-Line
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV	On-Line
SPS Distributed (Etter)	20.00	SPS	Etter 115kV	On-Line
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV	On-Line
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV	On-Line
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV	On-Line
SPS Distributed (Monument)	10.00	SPS	Monument 115kV	On-Line
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV	On-Line
SPS Distributed (Ocotillo)	10.00	SPS	S_Jal 115kV	On-Line
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV	On-Line
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV	On-Line
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV	On-Line
SPS Distributed (Yuma)	2.57	SPS	SP-Yuma 69kV	On-Line
Total:	**43,064.6**			

C: Study Groupings

See next page.

C. Study Groups

GROUP 1: WOODWARD AREA			
Request	**Capacity**	**Area**	**Proposed Point of Interconnection**
GEN-2001-014	96.00	WFEC	Ft Supply 138kV
GEN-2001-037	100.00	OKGE	FPL Moreland Tap 138kV
GEN-2005-008	120.00	OKGE	Woodward 138kV
GEN-2006-024S	19.80	WFEC	Buffalo Bear Tap 69kV
GEN-2006-046	131.00	OKGE	Dewey 138kV
GEN-2007-021	201.00	OKGE	Tatonga 345kV
GEN-2007-043	200.00	OKGE	Minco 345kV
GEN-2007-044	300.00	OKGE	Tatonga 345kV
GEN-2007-050	170.00	OKGE	Woodward EHV 138kV
GEN-2007-062	765.00	OKGE	Woodward EHV 345kV
GEN-2008-003	101.00	OKGE	Woodward EHV 138kV
GEN-2008-044	197.80	OKGE	Tatonga 345kV
GEN-2010-011	29.70	OKGE	Tatonga 345kV
GEN-2010-040	300.00	OKGE	Cimarron 345kV
GEN-2011-010	100.80	OKGE	Minco 345kV
GEN-2011-019	299.00	OKGE	Woodward 345kV
GEN-2011-020	299.00	OKGE	Woodward 345kV
GEN-2011-051	104.40	OKGE	Tap Woodward - Tatonga 345kV (GEN-2011-051 Tap)
GEN-2011-054	300.00	OKGE	Cimarron 345kV
GEN-2014-002	10.50	OKGE	Tatonga 345kV (GEN-2007-021 POI)
GEN-2014-003	15.80	OKGE	Tatonga 345kV (GEN-2007-044 POI)
GEN-2014-005	5.70	OKGE	Minco 345kV (GEN-2011-010 POI)
GEN-2014-020	100.00	AEPW	Tuttle 138kV
GEN-2014-056	250.00	OKGE	Minco 345kV
GEN-2015-029	161.00	OKGE	Tatonga 345kV
GEN-2015-038	303.60	OKGE	Cimarron 345kV
GEN-2015-044	20.00	OKGE	Minco 345kV
GEN-2015-048	200.00	OKGE	Cleo Corner 138kV
GEN-2015-057	100.00	OKGE	Minco 345kV
GEN-2015-059	6.30	OKGE	Minco 345kV
GEN-2015-060	250.50	OKGE	Woodward EHV 138kV
GEN-2015-081	180.00	OKGE	Tap Woodward - Tatonga (GEN-2011-051 Tap) 345kV
GEN-2015-093	250.00	OKGE	Tap Lawton East Side - Gracemont 345kV
GEN-2015-095	172.00	WFEC	Tap Rose Valley - Mooreland 138kV
PRIOR QUEUED SUBTOTAL	**5,859.90**		
AREA TOTAL	**5,859.90**		

GROUP 2: HITCHLAND AREA			
Request	**Capacity**	**Area**	**Proposed Point of Interconnection**
ASGI-2011-002	20.00	SPS	Herring 115kV
ASGI-2013-001	11.50	SPS	PanTex South 115kV
GEN-2002-008	240.00	SPS	Hitchland 345kV
GEN-2002-009	80.00	SPS	Hansford 115kV
GEN-2002-022	240.00	SPS	Bushland 230kV
GEN-2003-020	160.00	SPS	Martin 115kV
GEN-2006-020S	18.90	SPS	DWS Frisco 115kV
GEN-2006-044	370.00	SPS	Hitchland 345kV
GEN-2007-046	200.00	SPS	Hitchland 115kV
GEN-2008-047	300.00	OKGE	Beaver County 345kV
GEN-2008-051	322.00	SPS	Potter County 345kV
GEN-2010-001	300.00	OKGE	Beaver County 345kV
GEN-2010-014	358.80	SPS	Hitchland 345kV
GEN-2011-014	201.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2011-014 Tap) 345kV
GEN-2011-022	299.00	SPS	Hitchland 345kV
GEN-2013-030	300.00	OKGE	Beaver County 345kV
GEN-2014-037	200.00	SPS	Tap Hitchland - Beaver County Dbl Ckt (Optima) 345kV
GEN-2014-038	200.00	SPS	Tap Hitchland - Potter County 345kV
GEN-2015-082	200.00	OKGE	Tap Hitchland - Woodward Dbl Ckt (GEN-2011-014 Tap) 345kV
Llano Estacado (White Deer)	80.00	SPS	Llano Wind 115kV
SPS Distributed (Dumas 19th St)	20.00	SPS	Dumas 19th Street 115kV
SPS Distributed (Etter)	20.00	SPS	Etter 115kV
SPS Distributed (Moore E)	25.00	SPS	Moore East 115kV
SPS Distributed (Sherman)	20.00	SPS	Sherman 115kV
SPS Distributed (Spearman)	10.00	SPS	Spearman 69kV
SPS Distributed (TC-Texas County)	20.00	SPS	Texas County 115kV
PRIOR QUEUED SUBTOTAL	**4,216.20**		
AREA TOTAL	**4,216.20**		

GROUP 3: SPEARVILLE AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2012-006	22.50	SUNCMKEC	Tap Hugoton - Rolla 69kV
ASGI-2015-001	6.13	SUNCMKEC	Ninnescah 115kV
GEN-2001-039A	105.00	SUNCMKEC	Shooting Star Tap 115kV
GEN-2002-025A	150.00	SUNCMKEC	Spearville 230kV
GEN-2004-014	154.50	SUNCMKEC	Spearville 230kV
GEN-2005-012	250.00	SUNCMKEC	Ironwood 345kV
GEN-2006-021	101.00	SUNCMKEC	Flat Ridge Tap 138kV
GEN-2007-040	200.00	SUNCMKEC	Buckner 345kV
GEN-2008-018	250.00	SPS	Finney 345kV
GEN-2008-079	99.20	SUNCMKEC	Crooked Creek 115kV
GEN-2008-124	200.10	SUNCMKEC	Ironwood 345kV
GEN-2010-009	165.60	SUNCMKEC	Buckner 345kV
GEN-2010-045	197.80	SUNCMKEC	Buckner 345kV
GEN-2011-008	600.00	SUNCMKEC	Clark County 345kV
GEN-2011-016	200.10	SUNCMKEC	Ironwood 345kV
GEN-2012-007	120.00	SUNCMKEC	Rubart 115kV
GEN-2012-024	180.00	SUNCMKEC	Clark County 345kV
GEN-2013-010	99.00	SUNCMKEC	Tap Spearville - Post Rock (North of GEN-2011-017 Tap) 345kV
GEN-2015-021	20.00	SUNCMKEC	Johnson Corner 115kV
GEN-2015-027	4.90	SUNCMKEC	Crooked Creek 115kV
Gray County Wind (Montezuma)	110.00	SUNCMKEC	Gray County Tap 115kV
PRIOR QUEUED SUBTOTAL	**3,235.83**		
AREA TOTAL	**3,235.83**		

GROUP 4: NORTHWEST KANSAS AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2013-004	36.60	SUNCMKEC	Morris 115kV
GEN-2001-039M	100.00	SUNCMKEC	Central Plains Tap 115kV
GEN-2003-006A	200.00	SUNCMKEC	Elm Creek 230kV
GEN-2003-019	250.00	MIDW	Smoky Hills Tap 230kV
GEN-2006-031	75.00	MIDW	Knoll 115kV
GEN-2008-092	200.60	MIDW	Post Rock 230kV
GEN-2009-008	199.50	MIDW	South Hays 230kV
GEN-2009-020	48.30	MIDW	Walnut Creek 69kV
GEN-2010-048	70.00	MIDW	Tap Beach Station - Redline 115kV
GEN-2010-057	201.00	MIDW	Rice County 230kV
GEN-2013-033	28.00	MIDW	Knoll 115kV
GEN-2014-025	2.40	MIDW	Walnut Creek 69kV
GEN-2014-041	120.80	SUNCMKEC	Arnold 115kV
GEN-2015-061	200.00	SUNCMKEC	Tap Mingo - Setab 345kV
GEN-2015-064	197.80	SUNCMKEC	Mingo 115kV
GEN-2015-065	202.40	SUNCMKEC	Mingo 345kV
GEN-2015-072	20.90	MIDW	South Hays 230kV
PRIOR QUEUED SUBTOTAL	**2,153.30**		
AREA TOTAL	**2,153.30**		

GROUP 6: SOUTH TEXAS PANHANDLE/NEW MEXICO AREA			
Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2010-010	42.20	SPS	Lovington 115kV
ASGI-2010-020	30.00	SPS	Tap LE-Tatum - LE-Crossroads 69kV
ASGI-2010-021	15.00	SPS	Tap LE-Saunders Tap - LE-Anderson 69kV
ASGI-2011-001	27.30	SPS	Lovington 115kV
ASGI-2011-003	10.00	SPS	Hendricks 69kV
ASGI-2011-004	20.00	SPS	Pleasant Hill 69kV
ASGI-2012-002	18.15	SPS	FE-Clovis Interchange 115kV
ASGI-2013-002	18.40	SPS	FE Tucumcari 115kV
ASGI-2013-003	18.40	SPS	FE Clovis 115kV
ASGI-2013-005	1.65	SPS	FE Clovis 115kV
ASGI-2013-006	2.00	SPS	SP-Erskine 115kV
ASGI-2014-001	2.50	SPS	SP-Erskine 115kV
ASGI-2014-002	49.60	SPS	Tap Tucumcari - Santa Rosa 115kV
ASGI-2014-005	10.00	SPS	Strata 69kV
ASGI-2014-008	10.00	SPS	South Loving 69kV
ASGI-2014-009	10.00	SPS	Wood Draw 115kV
ASGI-2014-010	10.00	SPS	Ochoa 115kV
ASGI-2014-012	10.00	SPS	Cooper Ranch 115kV
ASGI-2015-002	2.00	SPS	SP-Yuma 69kV
GEN-2001-033	180.00	SPS	San Juan Tap 230kV
GEN-2001-036	80.00	SPS	Norton 115kV
GEN-2006-018	170.00	SPS	TUCO Interchange 230kV
GEN-2006-026	502.00	SPS	Hobbs 230kV & Hobbs 115kV
GEN-2008-022	300.00	SPS	Crossroads 345kV
GEN-2010-006	205.00	SPS	Jones 230kV
GEN-2010-046	56.00	SPS	TUCO Interchange 230kV
GEN-2011-025	80.00	SPS	Tap Floyd County - Crosby County 115kV
GEN-2011-045	205.00	SPS	Jones 230kV
GEN-2011-046	27.00	SPS	Lopez 115kV
GEN-2011-048	175.00	SPS	Mustang 230kV
GEN-2012-001	61.20	SPS	Cirrus Tap 230kV
GEN-2012-020	478.00	SPS	TUCO 230kV
GEN-2012-034	7.00	SPS	Mustang 230kV
GEN-2012-035	7.00	SPS	Mustang 230kV
GEN-2012-036	7.00	SPS	Mustang 230kV
GEN-2012-037	203.00	SPS	TUCO 345kV
GEN-2013-016	203.00	SPS	TUCO 345kV
GEN-2013-022	25.00	SPS	Norton 115kV
GEN-2013-027	150.00	SPS	Tap Tolk - Yoakum 230kV
GEN-2014-012	225.00	SPS	Tap Hobbs Interchange - Andrews 230kV
GEN-2014-033	70.00	SPS	Chaves County 115kV
GEN-2014-034	70.00	SPS	Chaves County 115kV
GEN-2014-035	30.00	SPS	Chaves County 115kV
GEN-2014-040	320.40	SPS	Castro 115kV
GEN-2014-046	125.40	SPS	Chaves County 115kV
GEN-2014-047	40.00	SPS	Crossroads 345kV
GEN-2014-074	152.00	SPS	Tap TUCO Interchange - Oklaunion (GEN-2014-074 Tap) 345kV
GEN-2015-014	150.00	SPS	Tap Cochran - Lehman 115kV
GEN-2015-018	80.00	SPS	Tap Curry County - Bailey 115kV

GEN-2015-020	100.00	SPS	Oasis 115kV
GEN-2015-022	112.00	SPS	Swisher 115kV
GEN-2015-031	300.00	SPS	Tap Amarillo South - Swisher 230kV
GEN-2015-033	152.00	SPS	Tap TUCO Interchange - Oklaunion (GEN-2014-074 Tap) 345kV
GEN-2015-039	50.00	SPS	Tap Deaf Smith - Plant X 230kV
GEN-2015-040	50.10	SPS	Mustang 230kV
GEN-2015-041	5.00	SPS	TUCO Interchange 345kV
GEN-2015-056	101.20	SPS	Crossroads 345kV
GEN-2015-058	50.00	SPS	Atoka 115kV
GEN-2015-068	300.00	SPS	TUCO Interchange 345kV
GEN-2015-075	51.48	SPS	Carlisle 69kV
GEN-2015-077	80.00	SPS	Tap Terry - Clauene 115kV
GEN-2015-078	50.10	SPS	Mustang 115kV
GEN-2015-079	129.20	SPS	Tap Yoakum - Hobbs Interchange 230kV
GEN-2015-080	129.20	SPS	Tap Yoakum - Hobbs Interchange 230kV
SPS Distributed (Hopi)	10.00	SPS	Hopi 115kV
SPS Distributed (Jal)	10.00	SPS	S Jal 115kV
SPS Distributed (Lea Road)	10.00	SPS	Lea Road 115kV
SPS Distributed (Monument)	10.00	SPS	Monument 115kV
SPS Distributed (Ocotillo)	10.00	SPS	S_Jal 115kV
SPS Distributed (Yuma)	2.57	SPS	SP-Yuma 69kV
PRIOR QUEUED SUBTOTAL	**6,404.05**		
GEN-2015-099	70.40	SPS	Hobbs 115kV/Maddox 115kV
GEN-2015-101	240.00	SPS	Tap Plant X - Deaf Smith 230kV/Tap Potter County - Newhart 230kV
CURRENT CLUSTER SUBTOTAL	**310.40**		
AREA TOTAL	**6,714.45**		

GROUP 7: SOUTHWEST OKLAHOMA AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2001-026	74.30	WFEC	Washita 138kV
GEN-2002-005	120.00	WFEC	Red Hills Tap 138kV
GEN-2003-004	100.00	WFEC	Washita 138kV
GEN-2003-005	100.00	WFEC	Anadarko - Paradise (Blue Canyon) 138kV
GEN-2003-022	120.00	AEPW	Weatherford 138kV
GEN-2004-020	27.00	AEPW	Weatherford 138kV
GEN-2004-023	20.60	WFEC	Washita 138kV
GEN-2005-003	30.60	WFEC	Washita 138kV
GEN-2006-002	101.00	AEPW	Sweetwater 230kV
GEN-2006-035	225.00	AEPW	Sweetwater 230kV
GEN-2006-043	99.00	AEPW	Sweetwater 230kV
GEN-2007-052	150.00	WFEC	Anadarko 138kV
GEN-2008-023	150.00	AEPW	Hobart Junction 138kV
GEN-2008-037	101.00	WFEC	Slick Hills 138kV
GEN-2011-037	7.00	WFEC	Blue Canyon 5 138kV
GEN-2011-049	250.70	OKGE	Border 345kV
GEN-2012-028	74.80	WFEC	Gotebo 69kV
GEN-2015-004	52.90	OKGE	Border 345kV
GEN-2015-013	120.00	WFEC	Synder 138kV
GEN-2015-055	40.00	WFEC	Erick 138kV
GEN-2015-071	200.00	AEPW	Chisholm 345kV
GEN-2015-084	51.30	AEPW	Hollis 138kV
GEN-2015-085	122.40	AEPW	Tap Lake Pauline - Russell 138kV
PRIOR QUEUED SUBTOTAL	**2,337.60**		
AREA TOTAL	**2,337.60**		

GROUP 8: NORTH OKLAHOMA/SOUTH CENTRAL KANSAS AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2010-006	150.00	AECI	Remington 138kV
ASGI-2014-014	56.40	GRDA	Ferguson 69kV
ASGI-2015-004	56.36	GRDA	Coffeyville City 69kV
GEN-2002-004	200.00	WERE	Latham 345kV
GEN-2005-013	201.00	WERE	Caney River 345kV
GEN-2007-025	300.00	WERE	Viola 345kV
GEN-2008-013	300.00	OKGE	Hunter 345kV
GEN-2008-021	42.00	WERE	Wolf Creek 345kV
GEN-2008-098	100.80	WERE	Waverly 345kV
GEN-2009-025	59.80	OKGE	Nardins 69kV
GEN-2010-003	100.80	WERE	Waverly 345kV
GEN-2010-005	299.20	WERE	Viola 345kV
GEN-2010-055	4.50	AEPW	Wekiwa 138kV
GEN-2011-057	150.40	WERE	Creswell 138kV
GEN-2012-027	136.00	AEPW	Shidler 138kV
GEN-2012-032	300.00	OKGE	Open Sky 345kV
GEN-2012-033	98.80	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV
GEN-2012-041	121.50	OKGE	Ranch Road 345kV
GEN-2013-012	147.00	OKGE	Redbud 345kV
GEN-2013-028	559.50	GRDA	Tap N Tulsa - GRDA 1 345kV
GEN-2013-029	300.00	OKGE	Renfrow 345kV
GEN-2014-001	200.60	WERE	Tap Wichita - Emporia Energy Center (GEN-2014-001 Tap) 345kV

GEN-2014-028	35.00	EMDE	Riverton 161kV
GEN-2014-064	248.40	OKGE	Otter 138kV
GEN-2015-001	200.00	OKGE	Ranch Road 345kV
GEN-2015-015	154.60	OKGE	Tap Medford Tap - Coyote 138kV
GEN-2015-016	200.00	KCPL	Tap Marmaton - Centerville 161kV
GEN-2015-024	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT
GEN-2015-025	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT
GEN-2015-028	3.00	OKGE	Nardins 69kV
GEN-2015-030	200.10	OKGE	Sooner 345kV
GEN-2015-034	200.00	OKGE	Ranch Road 345kV
GEN-2015-043	20.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT
GEN-2015-047	300.00	OKGE	Sooner 345kV
GEN-2015-052	300.00	WERE	Tap Open Sky - Rose Hill 345kV
GEN-2015-062	4.50	OKGE	Tap and Tie South 4th - Bunch Creek & Enid Tap - Fairmont (GEN-2012-033T) 138kV
GEN-2015-063	300.00	OKGE	Tap Woodring - Mathewson 345kV
GEN-2015-066	248.40	OKGE	Tap Cleveland - Sooner 345kV
GEN-2015-067	150.00	OKGE	Sooner 138kV
GEN-2015-069	300.00	WERE	Union Ridge 230kV
GEN-2015-073	200.10	WERE	Emporia Energy Center 345kV
GEN-2015-083	125.00	WERE	Belle Plain 138kV
GEN-2015-090	220.00	WERE	Tap Thistle - Wichita 345kV Dbl CKT
PRIOR QUEUED SUBTOTAL	**7,733.76**		
AREA TOTAL	**7,733.76**		

GROUP 9: NEBRASKA AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2002-023N	0.80	NPPD	Harmony 115kV
GEN-2003-021N	75.00	NPPD	Ainsworth Wind Tap 115kV
GEN-2004-023N	75.00	NPPD	Columbus Co 115kV
GEN-2006-020N	42.00	NPPD	Bloomfield 115kV
GEN-2006-037N1	75.00	NPPD	Broken Bow 115kV
GEN-2006-038N005	80.00	NPPD	Broken Bow 115kV
GEN-2006-038N019	80.00	NPPD	Petersburg North 115kV
GEN-2006-044N	40.50	NPPD	North Petersburg 115kV
GEN-2007-011N08	81.00	NPPD	Bloomfield 115kV
GEN-2007-017IS	166.00	WAPA	Ft Thompson-Grand Island 345kV
GEN-2007-018IS	234.00	WAPA	Ft Thompson-Grand Island 345kV
GEN-2008-086N02	201.00	NPPD	Meadow Grove 230kV
GEN-2008-119O	60.00	OPPD	S1399 161kV
GEN-2009-040	73.80	WERE	Marshall 115kV
GEN-2010-041	10.50	OPPD	S1399 161kV
GEN-2010-051	200.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV
GEN-2011-018	73.60	NPPD	Steele City 115kV
GEN-2011-027	120.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV
GEN-2011-056	3.60	NPPD	Jeffrey 115kV
GEN-2011-056A	3.60	NPPD	John 1 115kV
GEN-2011-056B	4.50	NPPD	John 2 115kV
GEN-2012-021	4.80	LES	Terry Bundy Generating Station 115kV
GEN-2013-002	50.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2
GEN-2013-008	1.20	NPPD	Steele City 115kV
GEN-2013-014	25.50	NPPD	Tap Pauline - Hildreth (Rosemont) 115kV
GEN-2013-019	73.60	LES	Tap Sheldon - Folsom & Pleasant Hill (GEN-2013-002 Tap) 115kV CKT 2
GEN-2013-032	204.00	NPPD	Antelope 115kV

GEN-2014-004	4.00	NPPD	Steele City 115kV (GEN-2011-018 POI)
GEN-2014-013	73.50	NPPD	Meadow Grove (GEN-2008-086N2 Sub) 230kV
GEN-2014-031	35.80	NPPD	Meadow Grove 230kV
GEN-2014-032	10.20	NPPD	Meadow Grove 230kV
GEN-2014-039	73.40	NPPD	Friend 115kV
GEN-2015-007	160.00	NPPD	Hoskins 345kV
GEN-2015-023	300.70	NPPD	Holt County 345kV
GEN-2015-042	320.00	NPPD	Tap Hoskins - Twin Church (Dixon County) 230kV
GEN-2015-053	50.00	NPPD	Antelope 115kV
GEN-2015-076	158.40	NPPD	Belden 115kV
GEN-2015-087	76.00	NPPD	Tap Fairbury - Hebron 115kV
GEN-2015-088	300.00	NPPD	Tap Moore - Pauline 345kV
NPPD Distributed (Broken Bow)	8.30	NPPD	Broken Bow 115kV
NPPD Distributed (Buffalo County Solar)	10.00	NPPD	Kearney Northeast
NPPD Distributed (Burt County Wind)	12.00	NPPD	Tekamah & Oakland 115kV
NPPD Distributed (Burwell)	3.00	NPPD	Ord 115kV
NPPD Distributed (Columbus Hydro)	45.00	NPPD	Columbus 115kV
NPPD Distributed (North Platte - Lexington)	54.00	NPPD	Multiple: Jeffrey 115kV, John_1 115kV, John_2 115kV
NPPD Distributed (Ord)	11.90	NPPD	Ord 115kV
NPPD Distributed (Stuart)	2.10	NPPD	Ainsworth 115kV
PRIOR QUEUED SUBTOTAL	**3,767.90**		
GEN-2015-100	120.00	NPPD	Fairbury 115kV
CURRENT CLUSTER SUBTOTAL	**120.00**		
AREA TOTAL	**3,887.90**		

GROUP 10: SOUTHEAST OKLAHOMA/NORTHEAST TEXAS AREA

Request	Capacity	Area	Proposed Point of Interconnection
AREA TOTAL	**0.00**		

GROUP 12: NORTHWEST ARKANSAS AREA

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

GROUP 13: NORTHWEST MISSOURI AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2008-129	80.00	KCPL	Pleasant Hill 161kV
GEN-2010-036	4.60	WERE	6th Street 115kV
GEN-2011-011	50.00	KCPL	Iatan 345kV
GEN-2014-021	300.00	KCPL	Tap Nebraska City - Mullin Creek 345kV
GEN-2015-005	200.10	KCPL	Tap Nebraska City - Sibley 345kV
GEN-2015-074	174.00	WERE	Tap Hoyt - Jeffrey Energy Center 345kV
PRIOR QUEUED SUBTOTAL	**808.70**		
AREA TOTAL	**808.70**		

GROUP 14: SOUTH CENTRAL OKLAHOMA AREA

Request	Capacity	Area	Proposed Point of Interconnection
ASGI-2015-006	9.00	SWPA	Tupelo 138kV
GEN-2011-040	111.00	OKGE	Carter County 138kV
GEN-2011-050	109.80	AEPW	Santa Fe Tap 138kV
GEN-2012-004	41.40	OKGE	Carter County 138kV
GEN-2013-007	100.30	OKGE	Tap Prices Falls - Carter 138kV
GEN-2014-057	250.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV
GEN-2015-036	303.60	OKGE	Johnston County 345kV
GEN-2015-045	20.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV
GEN-2015-092	250.00	AEPW	Tap Lawton - Sunnyside (Terry Road) 345kV
PRIOR QUEUED SUBTOTAL	**1,195.10**		
AREA TOTAL	**1,195.10**		

GROUP 15: E-SOUTH DAKOTA AREA

Request	Capacity	Area	Proposed Point of Interconnection
G255	100.00	XEL	Yankee 115kV
GEN-2006-001IS	10.00	XEL	Marshall 115kV
GEN-2006-006IS	10.00	XEL	Marshall 115kV
GEN-2007-013IS	50.00	WAPA	Wessington Springs 230kV
GEN-2007-014IS	100.00	WAPA	Wessington Springs 230kV
GEN-2007-023IS	50.00	WAPA	Formit-Summit 115kV
GEN-2009-001IS	200.00	WAPA	Groton-Watertown 345kV
GEN-2009-018IS	100.00	WAPA	Groton 115kV
GEN-2010-001IS	99.00	WAPA	Bismarck-Glenham 230kV
GEN-2010-003IS	34.00	WAPA	Wessington Springs 230kV
GEN-2012-014IS	99.50	WAPA	Groton 115kV
GEN-2013-001IS	90.00	WAPA	Summit-Watertown 115kV
GEN-2013-009IS	19.50	WAPA	Redfield NW 115kV
GEN-2014-001IS	103.70	WAPA	Newell-Maurine 115kV
GEN-2015-097	100.00	WAPA	Groton 115kV
PRIOR QUEUED SUBTOTAL	**1,165.70**		
AREA TOTAL	**1,165.70**		

GROUP 16: W-NORTH DAKOTA AREA

Request	Capacity	Area	Proposed Point of Interconnection

G359	150.00	MDU	MDU 230 kV system near Ellendale
G380	150.00	OTP	Rugby 115kV
G408	12.00	XEL	Tap McHenry - Souris 115kV
G502	50.60	MP	Milton Young 230kV
G645	50.00	OTP	Ladish 115kV
G723	10.00	MDU	Haskett 115kV
G752	150.00	MDU	Tap Bison - Hettinger 230kV
G788	49.00	GRE	Ladish 115kV
G830	99.00	GRE	GRE McHenry 115kV
GEN-2005-008IS	50.00	WAPA	Hilken 230kV [Ecklund 230kV]
GEN-2006-015IS	50.00	WAPA	Hilken 230kV [Ecklund 230kV]
GEN-2007-027IS	99.00	WAPA	Bismarck-Garrison 230kV #1
GEN-2009-026IS	110.00	WAPA	Dickenson-Heskett 230kV
GEN-2010-007IS	172.50	WAPA	Antelope Valley 345kV
GEN-2012-006IS	125.01	WAPA	Williston-Ch. Creek 230kV
GEN-2012-012IS	75.00	WAPA	Wolf Point-Circle 115kV
GEN-2014-003IS	91.00	WAPA	Culbertson 115kV
GEN-2014-004IS	384.20	WAPA	Charlie Creek 345kV
GEN-2014-006IS	125.00	WAPA	Williston 115kV
GEN-2014-010IS	150.00	WAPA	Neset 115kV
GEN-2014-014IS	151.50	WAPA	Belfield-Rhame 230kV
GEN-2015-046	300.00	WAPA	Tande 345kV
GEN-2015-091	101.20	WAPA	Daglum 230kV
GEN-2015-096	150.00	WAPA	Tap Belfied - Rhame 230kV
GEN-2015-098	100.00	WAPA	Mingusville 230kV
J003	20.00	MDU	Baker 115kV
J249	180.00	MDU	MDU Tatanka 230kV
J262	100.00	OTP	Jamestown 345
J263	100.00	OTP	Jamestown 345
J316	150.00	MDU	MDU 230 kV Tatanka-Ellendale line
PRIOR QUEUED SUBTOTAL	**3,505.01**		
AREA TOTAL	**0.00**		

GROUP 17: W-SOUTH DAKOTA AREA

Request	Capacity	Area	Proposed Point of Interconnection
GEN-2006-002IS	51.00	WAPA	Wessington Springs 230kV
GEN-2009-006IS	90.00	WAPA	Mission 115kV
GEN-2009-007IS	100.00	WAPA	Mission 115kV
GEN-2009-020AIS	150.00	WAPA	Tripp Junction 115kV
GEN-2012-009IS	99.00	WAPA	Tap Fort Randall - Lake Platte 230kV
PRIOR QUEUED SUBTOTAL	**490.00**		
AREA TOTAL	**0.00**		

GROUP 18: E-NORTH DAKOTA AREA

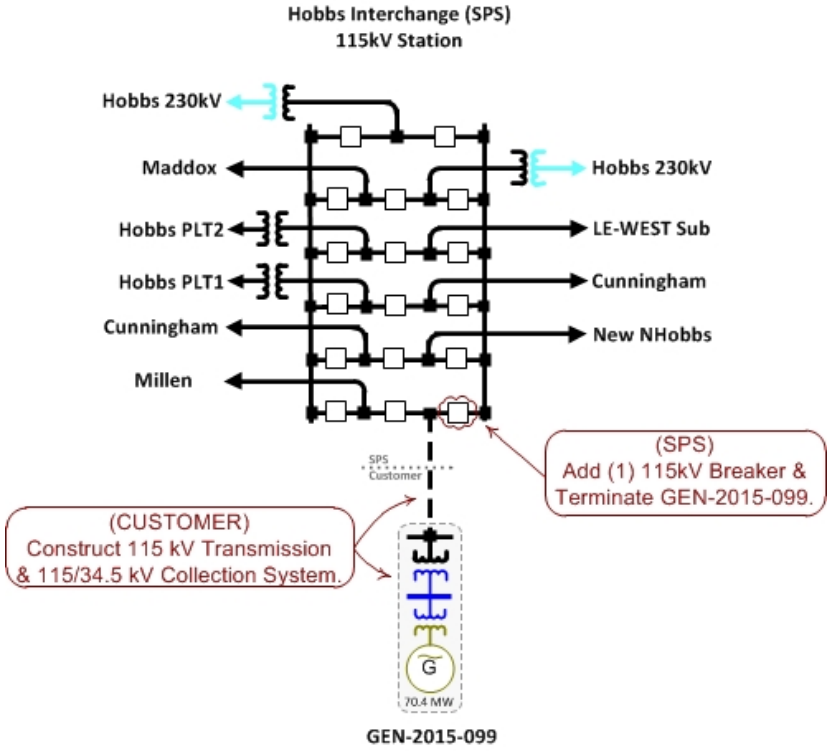
Request	Capacity	Area	Proposed Point of Interconnection
GEN-2002-008IS	40.50	WAPA	Edgeley 115kV [Pomona 115kV]
GEN-2005-003IS	100.00	WAPA	Nelson 115kV
GEN-2007-020IS	16.00	WAPA	Nelson 115kV
GEN-2008-008IS	5.00	WAPA	Nelson 115kV
PRIOR QUEUED SUBTOTAL	**161.50**		
AREA TOTAL	**0.00**		

CLUSTER TOTAL (CURRENT STUDY)	**430.4**	**MW**
PQ TOTAL (PRIOR QUEUED)	**43,064.6**	**MW**
CLUSTER TOTAL (INCLUDING PRIOR QUEUED)	**43,495.0**	**MW**

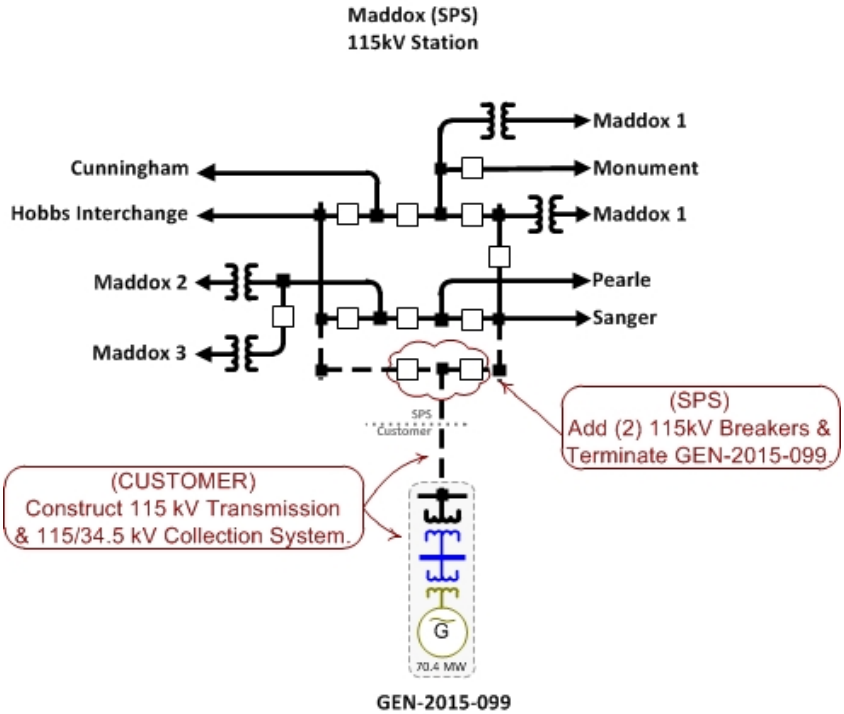
D: Proposed Point of Interconnection One line Diagrams

See next page.

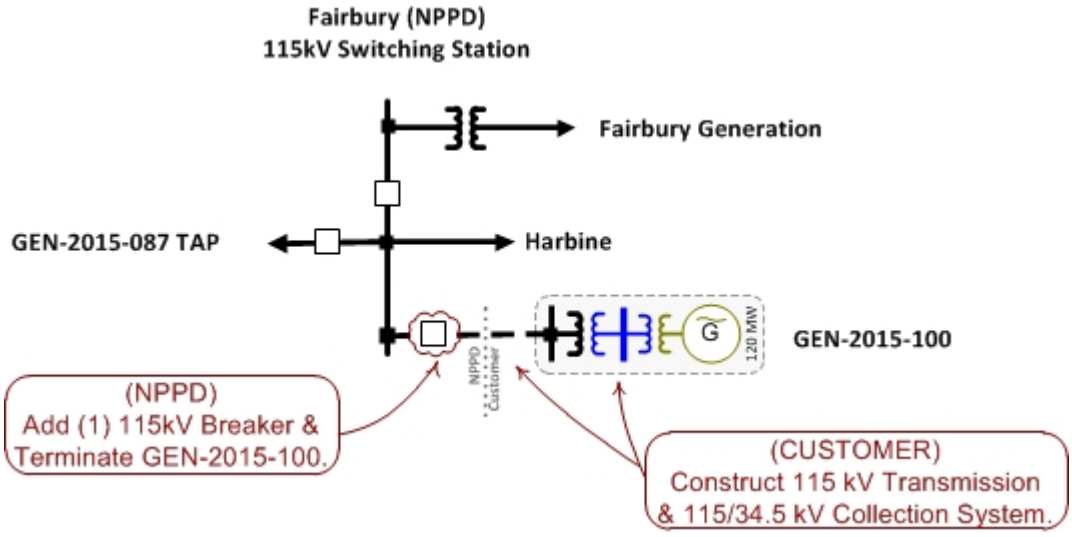
GEN-2015-099 (Hobbs 115kV)
Estimated Interconnection Costs: $1,200,000



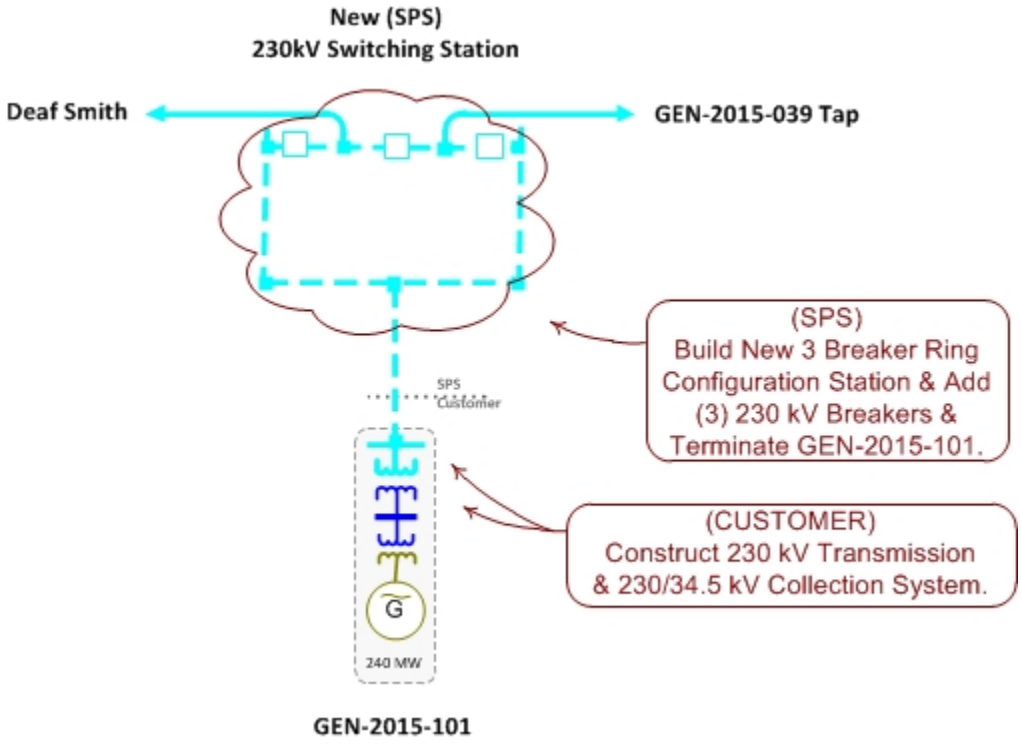
GEN-2015-099 (Maddox 115kV)
Estimated Interconnection Costs: $2,000,000



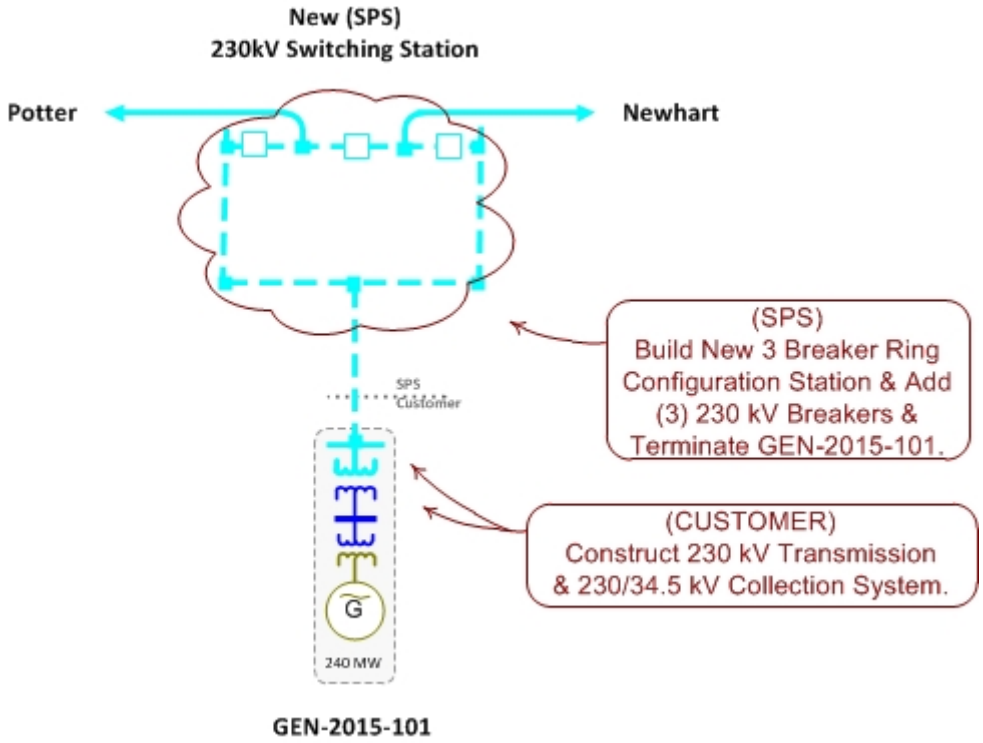
GEN-2015-100 (Fairbury 115kV)
Estimated Interconnection Costs: $1,000,000



GEN-2015-101 (Tap Deaf Smith – Plant X 230kV)
Estimated Interconnection Costs: $6,000,000



GEN-2015-101 (Tap Potter - Newhart 230kV)
Estimated Interconnection Costs: $6,000,000



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

Important Note:

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

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

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

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

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

Appendix E. Cost Allocation Per Request
GEN 2015-099, POI-1
(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2015-099-1			
GEN-2015-099-1 Interconnection Costs See One-Line Diagram.	Current Study	$1,200,000	$1,200,000
Amoco Wasson - Oxy Tap 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		$200,000
Beaver County - Grapevine 345kV CKT 1 Build approximately 75 miles of new 345kV from Beaver County - Grapevine	Previously Allocated		$75,000,000
Border - Chisholm 345kV CKT 2 Build approximately 25 miles of second circuit 345kV from Border - Chisholm	Previously Allocated		$25,000,000
Border 345kV Reactive Power Support Install (6)-50Mvar Capacitor Bank(s) and +250Mvar SVC at Border Substation	Previously Allocated		$30,000,000
Chisholm - Elk City 230kV CKT 1 Rebuild approximately 15 miles of 230kV from Chisholm - Elk City.	Previously Allocated		$15,000,000
Chisholm Substation Upgrade 345kV Expand planned Chisholm Substation to tap and terminate Woodward - Border 345kV into the Chisholm Substation	Previously Allocated		$12,000,000
Cimarron - Draper Lake 345kV CKT 1 Replace terminal equipment to at least 2000A assigned in 2015 ITP10 per SPP-NTC-200329	Previously Allocated		$1,500,000
Cimarron - Minco 345kV CKT 1 Replace 1600 amp switches.	Previously Allocated		$1,000,000
Deaf Smith - GEN-2015-039 Tap 230kV CKT 1 Replace terminal equipment	Previously Allocated		$1,000,000
Grapevine - Chisholm 345kV CKT 1 Build approximately 75 miles of new 345kV from Grapevine - Chisholm	Previously Allocated		$75,000,000
Grapevine - Nichols 230kV CKT 1 Replace terminal equipment	Previously Allocated		$400,000
Grapevine Substation Upgrade 345kV Build Grapevine Substation and terminate Beaver Co - Grapevine, Potter Co - Grapevine, Grapevine - Chisholm 345kV into the Grapevine Substation	Previously Allocated		$12,000,000
Oklaunion 345kV Reactive Power Install (2)-130Mvar Capacitor Bank(s) at Oklaunion.	Previously Allocated		$10,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Oklaunion 345kV Reactive Power Support Incremental Upgrade Install (4)-50Mvar Capacitor Bank(s) and +300Mvar SVC at Oklaunion	Previously Allocated		$40,000,000
Potter County - Grapevine 345kV CKT 1 Build approximately 65 miles of new 345kV from Potter County - Grapevine	Previously Allocated		$65,000,000
Shamrock 115kV Capacitor Bank Add 2nd step of 9.6Mvars to Shamrock 115kV Capacitor Bank(s)	Previously Allocated		$500,000
Stateline - Sweetwater 230kV CKT 1 Rebuild approximately 5 miles of 230kV.	Previously Allocated		$6,000,000
Tolk - Plant X 230kV CKT 1 & 2 Rebuild circuit 1 and 2 betweek Tolk - Plant X 230kV to 1200 amps each.	Previously Allocated		$9,921,693
Tolk - Potter County 345kV CKT 1 Build approximately 115 miles of 345kV from Tolk - Potter County	Previously Allocated		$105,000,000
Tolk 345/230/13kV Transformer CKT 2 Build second 345/230/13kV transformer at Tolk	Previously Allocated		$15,000,000
TUCO 2 - Border 345kV CKT 2 Build approximately 194 miles of second circuit 345kV from TUCO 2 - Border	Previously Allocated		$194,000,000
TUCO 2 - Yoakum 345kV Retermination Incremental Upgrade for SPP-NTC-200283 to reterminate TUCO terminal to TUCO 2 terminal by adding approximately 3 miles of 345kV	Previously Allocated		$5,000,000
TUCO 2 (Crawfish Draw) Substation Upgrade 345/230kV Tap Border-TUCO approximately 2 miles from TUCO and build TUCO 2 (Crawfish Draw) 345kV substation and add 345/230/13.2kV transformer and tie on TUCO-Swisher 230kV.	Previously Allocated		$24,764,205
TUCO 345/230/13.2kV CKT 1 Replace existing TUCO 345/230/13.2kV Transformer circuit #1 with 700MVA.	Previously Allocated		$3,347,036
	Current Study Total	$1,200,000	
	TOTAL CURRENT STUDY COSTS:	**$1,200,000**	

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

Appendix E. Cost Allocation Per Request
GEN 2015-099, POI-2

(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2015-099-2			
GEN-2015-099-2 Interconnection Costs See One-Line Diagram.	Current Study	$2,000,000	$2,000,000
Amoco Wasson - Oxy Tap 230kV CKT 1 Replace line traps at both terminals	Previously Allocated		$200,000
Beaver County - Grapevine 345kV CKT 1 Build approximately 75 miles of new 345kV from Beaver County - Grapevine	Previously Allocated		$75,000,000
Border - Chisholm 345kV CKT 2 Build approximately 25 miles of second circuit 345kV from Border - Chisholm	Previously Allocated		$25,000,000
Border 345kV Reactive Power Support Install (6)-50Mvar Capacitor Bank(s) and +250Mvar SVC at Border Substation	Previously Allocated		$30,000,000
Chisholm - Elk City 230kV CKT 1 Rebuild approximately 15 miles of 230kV from Chisholm - Elk City.	Previously Allocated		$15,000,000
Chisholm Substation Upgrade 345kV Expand planned Chisholm Substation to tap and terminate Woodward - Border 345kV into the Chisholm Substation	Previously Allocated		$12,000,000
Cimarron - Draper Lake 345kV CKT 1 Replace terminal equipment to at least 2000A assigned in 2015 ITP10 per SPP-NTC-200329	Previously Allocated		$1,500,000
Cimarron - Minco 345kV CKT 1 Replace 1600 amp switches.	Previously Allocated		$1,000,000
Deaf Smith - GEN-2015-039 Tap 230kV CKT 1 Replace terminal equipment	Previously Allocated		$1,000,000
Grapevine - Chisholm 345kV CKT 1 Build approximately 75 miles of new 345kV from Grapevine - Chisholm	Previously Allocated		$75,000,000
Grapevine - Nichols 230kV CKT 1 Replace terminal equipment	Previously Allocated		$400,000
Grapevine Substation Upgrade 345kV Build Grapevine Substation and terminate Beaver Co - Grapevine, Potter Co - Grapevine, Grapevine - Chisholm 345kV into the Grapevine Substation	Previously Allocated		$12,000,000
Oklaunion 345kV Reactive Power Install (2)-130Mvar Capacitor Bank(s) at Oklaunion.	Previously Allocated		$10,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Oklaunion 345kV Reactive Power Support Incremental Upgrade Install (4)-50Mvar Capacitor Bank(s) and +300Mvar SVC at Oklaunion	Previously Allocated		$40,000,000
Potter County - Grapevine 345kV CKT 1 Build approximately 65 miles of new 345kV from Potter County - Grapevine	Previously Allocated		$65,000,000
Shamrock 115kV Capacitor Bank Add 2nd step of 9.6Mvars to Shamrock 115kV Capacitor Bank(s)	Previously Allocated		$500,000
Stateline - Sweetwater 230kV CKT 1 Rebuild approximately 5 miles of 230kV.	Previously Allocated		$6,000,000
Tolk - Plant X 230kV CKT 1 & 2 Rebuild circuit 1 and 2 betweek Tolk - Plant X 230kV to 1200 amps each.	Previously Allocated		$9,921,693
Tolk - Potter County 345kV CKT 1 Build approximately 115 miles of 345kV from Tolk - Potter County	Previously Allocated		$105,000,000
Tolk 345/230/13kV Transformer CKT 2 Build second 345/230/13kV transformer at Tolk	Previously Allocated		$15,000,000
TUCO 2 - Border 345kV CKT 2 Build approximately 194 miles of second circuit 345kV from TUCO 2 - Border	Previously Allocated		$194,000,000
TUCO 2 - Yoakum 345kV Retermination Incremental Upgrade for SPP-NTC-200283 to reterminate TUCO terminal to TUCO 2 terminal by adding approximately 3 miles of 345kV	Previously Allocated		$5,000,000
TUCO 2 (Crawfish Draw) Substation Upgrade 345/230kV Tap Border-TUCO approximately 2 miles from TUCO and build TUCO 2 (Crawfish Draw) 345kV substation and add 345/230/13.2kV transformer and tie on TUCO-Swisher 230kV.	Previously Allocated		$24,764,205
TUCO 345/230/13.2kV CKT 1 Replace existing TUCO 345/230/13.2kV Transformer circuit #1 with 700MVA.	Previously Allocated		$3,347,036
	Current Study Total	$2,000,000	
	TOTAL CURRENT STUDY COSTS:	**$2,000,000**	

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

Appendix E. Cost Allocation Per Request
GEN 2015-100

(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2015-100			
Bailey - Seneca 115kV CKT 1 Rebuild approximately 6 miles of 115kV.	Current Study	$5,000,000	$5,000,000
Fairbury - GEN-2015-087T 115kV CKT 1 Rebuild approximately 17 miles of 115kV.	Current Study	$15,369,300	$15,369,300
Fairbury - Harbine 115kV CKT 1 Rebuild approximately 10 miles of 115kV.	Current Study	$8,838,000	$8,838,000
GEN-2015-087T - Hebron 115kV CKT 1 Rebuild approximately 5 miles of 115kV.	Current Study	$4,520,700	$4,520,700
GEN-2015-100 Interconnection Costs See One-Line Diagram.	Current Study	$1,000,000	$1,000,000
Marshal - Smittyville 115kV CKT 1 Rebuild approximately 2 miles of 115kV.	Current Study	$1,953,000	$1,953,000
Pauline - Rosemont 115kV CKT 1 Rebuild approximately 10 miles of 115kV.	Current Study	$9,576,000	$9,576,000
Smittyville - Bailey 115kV CKT 1 Rebuild approximately 8 miles of 115kV.	Current Study	$7,200,000	$7,200,000
Battle Creek - County Line 115kV CKT 1 Rebuild approximately 11 miles of 115kV from Battle Creek to County Line.	Previously Allocated		$4,000,000
Belden - Rasmussen 230kV CKT 1 Build approximately 25 miles of new 230kV	Previously Allocated		$25,000,000
Belden 230/115/13kV Transformer CKT 1 Build Belden 230kV yard and install Belden 230/115/13kV Transformer circuit #1	Previously Allocated		$10,000,000
Columbus East 230/115/13kV Transformer CKT 1 NRIS only rquired upgrade: Replace Columbus East 230/115/13kV Transformer circuit #1	Previously Allocated		$10,000,000
County Line - Neligh East 115kV CKT 1 Rebuild approximately 12 miles of 115kV from County Line to Neligh East.	Previously Allocated		$8,050,000
Dixon County - Belden 230kV CKT 1 Build approximately 50 miles of new 230kV	Previously Allocated		$50,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Dixon County 345/230/13kV Transformer CKT 1 Build Dixon County 345kV yard and install 345/230/13kV Transformer circuit #1	Previously Allocated		$15,000,000
Holt County - Antelope 345kV CKT 1 Build approximately 30 miles of new 345kV	Previously Allocated		$36,000,000
Hoskins - Neligh 345/115kV Projects Per SPP 2014 ITP NT and NTC 200253 for 6/1/2016 in-service.	Previously Allocated		$98,697,720
Sidney 230/115/13kV Transformer CKT 1 Replace Sidney 230/115/13kV Transformer circuit #1 to at least 150MVA	Previously Allocated		$3,276,500
Swissvale - West Gardner 345kV CKT 1 Replacement terminal equipment to at least 1600 amps	Previously Allocated		$1,000,000
	Current Study Total	$53,457,000	
	TOTAL CURRENT STUDY COSTS:	**$53,457,000**	

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

Appendix E. Cost Allocation Per Request
GEN 2015-101, POI-1

(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2015-101-1			
Bushland 230/115/13.2kV CKT 1 Replace Bushland 230/115/13.2kV Transformer circuit #1 with 250 MVA.	Current Study	$4,000,000	$4,000,000
Coulter - Hillside 115kV CKT 1 Replace Terminal Equipment at Coulter Substation.	Current Study	$400,000	$400,000
Deaf Smith - Plant X 230kV CKT 1 Replace wave trap at Deaf Smith	Current Study	$1,000,000	$1,000,000
GEN-2015-101-1 Interconnection Costs See One-Line Diagram.	Current Study	$6,000,000	$6,000,000
Lubbock - Holly Plant 230/69/13.5kV CKT 2 NRIS only required upgrade: Add Lubbock - Holly Plant 230/69/13.5kV Transformer circuit #2.	Current Study	$6,000,000	$6,000,000
Beaver County - Grapevine 345kV CKT 1 Build approximately 75 miles of new 345kV from Beaver County - Grapevine	Previously Allocated		$75,000,000
Border - Chisholm 345kV CKT 2 Build approximately 25 miles of second circuit 345kV from Border - Chisholm	Previously Allocated		$25,000,000
Border 345kV Reactive Power Support Install (6)-50Mvar Capacitor Bank(s) and +250Mvar SVC at Border Substation	Previously Allocated		$30,000,000
Bushland - Potter County 230kV CKT 1 NRIS only required upgrade: Replace line traps at both terminals	Previously Allocated		$400,000
Carlisle - LP-Doug 115kV CKT 1 NRIS only required upgrade: Replace line traps	Previously Allocated		$400,000
Carlisle 230/115/13kV Transformer CKT 1 NRIS only required upgrade: Replace existing Carlisle 230/115/13kV Transformer circuit #1 with 250 MVA.	Previously Allocated		$4,192,913
Chisholm - Elk City 230kV CKT 1 Rebuild approximately 15 miles of 230kV from Chisholm - Elk City.	Previously Allocated		$15,000,000
Chisholm Substation Upgrade 345kV Expand planned Chisholm Substation to tap and terminate Woodward - Border 345kV into the Chisholm Substation	Previously Allocated		$12,000,000
Cimarron - Draper Lake 345kV CKT 1 Replace terminal equipment to at least 2000A assigned in 2015 ITP10 per SPP-NTC-200329	Previously Allocated		$1,500,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Cimarron - Minco 345kV CKT 1 Replace 1600 amp switches.	Previously Allocated		$1,000,000
Cox Interchange - Hale County 115kV CKT 1 NRIS only required upgrade: Rebuild approximately 20 miles of 115kV from Hale Co to Cox Co	Previously Allocated		$15,000,000
Elk City 230/138/13kV Transformer CKT 1 Replace terminal equipment for Elk City Transformer to achieve transformer limit of 450MVA.	Previously Allocated		$15,000,000
Grapevine - Chisholm 345kV CKT 1 Build approximately 75 miles of new 345kV from Grapevine - Chisholm	Previously Allocated		$75,000,000
Grapevine - Nichols 230kV CKT 1 Replace terminal equipment	Previously Allocated		$400,000
Grapevine Substation Upgrade 345kV Build Grapevine Substation and terminate Beaver Co - Grapevine, Potter Co - Grapevine, Grapevine - Chisholm 345kV into the Grapevine Substation	Previously Allocated		$12,000,000
LP-Wadsworth 230/69/13kV Transformer CKT 1 NRIS only required upgrade: Replace existing LP-Wadsworth 230/69kV Transformer	Previously Allocated		$6,000,000
Mustang 230/115/13.2KV Transformer CKT 2 NRIS only required upgrade: Build second Mustang 230/115 Transformer	Previously Allocated		$6,000,000
Oklaunion 345kV Reactive Power Install (2)-130Mvar Capacitor Bank(s) at Oklaunion.	Previously Allocated		$10,000,000
Oklaunion 345kV Reactive Power Support Incremental Upgrade Install (4)-50Mvar Capacitor Bank(s) and +300Mvar SVC at Oklaunion	Previously Allocated		$40,000,000
Potash Junction 230kV Reactive Power Support Build Potash Junction 100Mvar Capacitor bank per 2015 ITPNT.	Previously Allocated		$6,465,875
Potter County - Grapevine 345kV CKT 1 Build approximately 65 miles of new 345kV from Potter County - Grapevine	Previously Allocated		$65,000,000
Shamrock 115kV Capacitor Bank Add 2nd step of 9.6Mvars to Shamrock 115kV Capacitor Bank(s)	Previously Allocated		$500,000
Stateline - Sweetwater 230kV CKT 1 Rebuild approximately 5 miles of 230kV.	Previously Allocated		$6,000,000
Sundown Interchange 230/115/13.8kV Transformer CKT 1 NRIS only required upgrade: Replace existing Sundown Interchange Transformer circuit #1 with 250 MVA.	Previously Allocated		$6,020,434
Tolk - Potter County 345kV CKT 1 Build approximately 115 miles of 345kV from Tolk - Potter County	Previously Allocated		$105,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Tolk 345/230/13kV Transformer CKT 2 Build second 345/230/13kV transformer at Tolk	Previously Allocated		$15,000,000
TUCO 2 - Border 345kV CKT 2 Build approximately 194 miles of second circuit 345kV from TUCO 2 - Border	Previously Allocated		$194,000,000
TUCO 2 - Yoakum 345kV Retermination Incremental Upgrade for SPP-NTC-200283 to reterminate TUCO terminal to TUCO 2 terminal by adding approximately 3 miles of 345kV	Previously Allocated		$5,000,000
TUCO 2 (Crawfish Draw) Substation Upgrade 345/230kV Tap Border-TUCO approximately 2 miles from TUCO and build TUCO 2 (Crawfish Draw) 345kV substation and add 345/230/13.2kV transformer and tie on TUCO-Swisher 230kV.	Previously Allocated		$24,764,205
TUCO 230/115kV CKT 1 Transformer NRIS only required upgrade: Replace TUCO 230/115kV transformer per SPP-2012-AG3-AFS9 SPP-NTC-200297	Previously Allocated		$3,800,415
TUCO 345/230/13.2kV CKT 1 Replace existing TUCO 345/230/13.2kV Transformer circuit #1 with 700MVA.	Previously Allocated		$3,347,036
Wolfforth Interchange 230/115/13.2kV Transformer CKT 1 NRIS only required upgrade: Replace existing Wolfforth Interchange Transformer circuit #1 with 250 MVA.	Previously Allocated		$6,020,434
	Current Study Total	$17,400,000	
	TOTAL CURRENT STUDY COSTS:	**$17,400,000**	

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

Appendix E. Cost Allocation Per Request
GEN 2015-101, POI-2
(Including Previously Allocated Network Upgrades*)

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
GEN-2015-101-2			
GEN-2015-101-2 Interconnection Costs See One-Line Diagram.	Current Study	$6,000,000	$6,000,000
Lubbock - Holly Plant 230/69/13.5kV CKT 2 Add Lubbock - Holly Plant 230/69/13.5kV Transformer circuit #2.	Current Study	$6,000,000	$6,000,000
Potter 345/230/13.2kV CKT 3 Add Potter 345/230/13.2kV Transformer circuit #3.	Current Study	$10,000,000	$10,000,000
Beaver County - Grapevine 345kV CKT 1 Build approximately 75 miles of new 345kV from Beaver County - Grapevine	Previously Allocated		$75,000,000
Border - Chisholm 345kV CKT 2 Build approximately 25 miles of second circuit 345kV from Border - Chisholm	Previously Allocated		$25,000,000
Border 345kV Reactive Power Support Install (6)-50Mvar Capacitor Bank(s) and +250Mvar SVC at Border Substation	Previously Allocated		$30,000,000
Carlisle - LP-Doug 115kV CKT 1 NRIS only required upgrade: Replace line traps	Previously Allocated		$400,000
Carlisle 230/115/13kV Transformer CKT 1 NRIS only required upgrade: Replace existing Carlisle 230/115/13kV Transformer circuit #1 with 250 MVA.	Previously Allocated		$4,192,913
Chisholm - Elk City 230kV CKT 1 Rebuild approximately 15 miles of 230kV from Chisholm - Elk City.	Previously Allocated		$15,000,000
Chisholm Substation Upgrade 345kV Expand planned Chisholm Substation to tap and terminate Woodward - Border 345kV into the Chisholm Substation	Previously Allocated		$12,000,000
Cimarron - Draper Lake 345kV CKT 1 Replace terminal equipment to at least 2000A assigned in 2015 ITP10 per SPP-NTC-200329	Previously Allocated		$1,500,000
Cimarron - Minco 345kV CKT 1 Replace 1600 amp switches.	Previously Allocated		$1,000,000
Cox Interchange - Hale County 115kV CKT 1 NRIS only required upgrade: Rebuild approximately 20 miles of 115kV from Hale Co to Cox Co	Previously Allocated		$15,000,000
Elk City 230/138/13kV Transformer CKT 1 Replace terminal equipment for Elk City Transformer to achieve transformer limit of 450MVA.	Previously Allocated		$15,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
Grapevine - Chisholm 345kV CKT 1 Build approximately 75 miles of new 345kV from Grapevine - Chisholm	Previously Allocated		$75,000,000
Grapevine - Nichols 230kV CKT 1 Replace terminal equipment	Previously Allocated		$400,000
Grapevine Substation Upgrade 345kV Build Grapevine Substation and terminate Beaver Co - Grapevine, Potter Co - Grapevine, Grapevine - Chisholm 345kV into the Grapevine Substation	Previously Allocated		$12,000,000
Kress Interchange - Swisher 115kV CKT 1 Replace terminal equipment	Previously Allocated		$500,000
LP-Wadsworth 230/69/13kV Transformer CKT 1 NRIS only required upgrade: Replace existing LP-Wadsworth 230/69kV Transformer	Previously Allocated		$6,000,000
Oklaunion 345kV Reactive Power Install (2)-130Mvar Capacitor Bank(s) at Oklaunion.	Previously Allocated		$10,000,000
Oklaunion 345kV Reactive Power Support Incremental Upgrade Install (4)-50Mvar Capacitor Bank(s) and +300Mvar SVC at Oklaunion	Previously Allocated		$40,000,000
Potash Junction 230/115 kV Ckt 1 Per HPILs SPP-NTC-200282 (Total Project E&C Cost Shown)	Previously Allocated		$3,508,346
Potash Junction 230kV Reactive Power Support Build Potash Junction 100Mvar Capacitor bank per 2015 ITPNT.	Previously Allocated		$6,465,875
Potter County - Grapevine 345kV CKT 1 Build approximately 65 miles of new 345kV from Potter County - Grapevine	Previously Allocated		$65,000,000
Shamrock 115kV Capacitor Bank Add 2nd step of 9.6Mvars to Shamrock 115kV Capacitor Bank(s)	Previously Allocated		$500,000
Stateline - Sweetwater 230kV CKT 1 Rebuild approximately 5 miles of 230kV.	Previously Allocated		$6,000,000
Sundown Interchange 230/115/13.8kV Transformer CKT 1 NRIS only required upgrade: Replace existing Sundown Interchange Transformer circuit #1 with 250 MVA.	Previously Allocated		$6,020,434
Tolk 345/230/13kV Transformer CKT 2 Build second 345/230/13kV transformer at Tolk	Previously Allocated		$15,000,000
TUCO 2 - Border 345kV CKT 2 Build approximately 194 miles of second circuit 345kV from TUCO 2 - Border	Previously Allocated		$194,000,000
TUCO 2 - Yoakum 345kV Retermination Incremental Upgrade for SPP-NTC-200283 to reterminate TUCO terminal to TUCO 2 terminal by adding approximately 3 miles of 345kV	Previously Allocated		$5,000,000

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

Interconnection Request and Upgrades	Upgrade Type	Allocated Cost	Upgrade Cost
TUCO 2 (Crawfish Draw) Substation Upgrade 345/230kV Tap Border-TUCO approximately 2 miles from TUCO and build TUCO 2 (Crawfish Draw) 345kV substation and add 345/230/13.2kV transformer and tie on TUCO-Swisher 230kV.	Previously Allocated		$24,764,205
TUCO 230/115kV CKT 1 Transformer NRIS only required upgrade: Replace TUCO 230/115kV transformer per SPP-2012-AG3-AFS9 SPP-NTC-200297	Previously Allocated		$3,800,415
TUCO 345/230/13.2kV CKT 1 Replace existing TUCO 345/230/13.2kV Transformer circuit #1 with 700MVA.	Previously Allocated		$3,347,036
	Current Study Total	$22,000,000	
	TOTAL CURRENT STUDY COSTS:	**$22,000,000**	

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

F: Cost Allocation per Proposed Study Network Upgrade

Important Note:

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

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

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

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

Appendix F. Cost Allocation by Upgrade
GEN 2015-099, POI-1

GEN-2015-099-1 Interconnection Costs		**$1,200,000**
See One-Line Diagram.		
	GEN-2015-099-1	$1,200,000
	Total Allocated Costs	**$1,200,000**

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

Appendix F. Cost Allocation by Upgrade
GEN 2015-099, POI-2

GEN-2015-099-2 Interconnection Costs		**$2,000,000**
See One-Line Diagram.		
	GEN-2015-099-2	$2,000,000
	Total Allocated Costs	**$2,000,000**

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

Appendix F. Cost Allocation by Upgrade
GEN 2015-100

Bailey - Seneca 115kV CKT 1			**$5,000,000**
Rebuild approximately 6 miles of 115kV.			
	GEN-2015-100	$5,000,000	
	Total Allocated Costs	**$5,000,000**	
Fairbury - GEN-2015-087T 115kV CKT 1			**$15,369,300**
Rebuild approximately 17 miles of 115kV.			
	GEN-2015-100	$15,369,300	
	Total Allocated Costs	**$15,369,300**	
Fairbury - Harbine 115kV CKT 1			**$8,838,000**
Rebuild approximately 10 miles of 115kV.			
	GEN-2015-100	$8,838,000	
	Total Allocated Costs	**$8,838,000**	
GEN-2015-087T - Hebron 115kV CKT 1			**$4,520,700**
Rebuild approximately 5 miles of 115kV.			
	GEN-2015-100	$4,520,700	
	Total Allocated Costs	**$4,520,700**	
GEN-2015-100 Interconnection Costs			**$1,000,000**
See One-Line Diagram.			
	GEN-2015-100	$1,000,000	
	Total Allocated Costs	**$1,000,000**	
Marshal - Smittyville 115kV CKT 1			**$1,953,000**
Rebuild approximately 2 miles of 115kV.			
	GEN-2015-100	$1,953,000	
	Total Allocated Costs	**$1,953,000**	
Pauline - Rosemont 115kV CKT 1			**$9,576,000**
Rebuild approximately 10 miles of 115kV.			
	GEN-2015-100	$9,576,000	
	Total Allocated Costs	**$9,576,000**	

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

Smittyville - Bailey 115kV CKT 1		**$7,200,000**
Rebuild approximately 8 miles of 115kV.		
	GEN-2015-100	$7,200,000
	Total Allocated Costs	**$7,200,000**

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

Appendix F. Cost Allocation by Upgrade
GEN 2015-101, POI-1

Bushland 230/115/13.2kV CKT 1			**$4,000,000**
Replace Bushland 230/115/13.2kV Transformer circuit #1 with 250 MVA.			
	GEN-2015-101-1	$4,000,000	
	Total Allocated Costs	**$4,000,000**	
Coulter - Hillside 115kV CKT 1			**$400,000**
Replace Terminal Equipment at Coulter Substation.			
	GEN-2015-101-1	$400,000	
	Total Allocated Costs	**$400,000**	
Deaf Smith - Plant X 230kV CKT 1			**$1,000,000**
Replace wave trap at Deaf Smith			
	GEN-2015-101-1	$1,000,000	
	Total Allocated Costs	**$1,000,000**	
GEN-2015-101-1 Interconnection Costs			**$6,000,000**
See One-Line Diagram.			
	GEN-2015-101-1	$6,000,000	
	Total Allocated Costs	**$6,000,000**	
Lubbock - Holly Plant 230/69/13.5kV CKT 2			**$6,000,000**
NRIS only required upgrade: Add Lubbock - Holly Plant 230/69/13.5kV Transformer circuit #2.			
	GEN-2015-101-1	$6,000,000	
	Total Allocated Costs	**$6,000,000**	

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

Appendix F. Cost Allocation by Upgrade
GEN 2015-101, POI-2

GEN-2015-101-2 Interconnection Costs			**$6,000,000**
See One-Line Diagram.			
	GEN-2015-101-2	$6,000,000	
	Total Allocated Costs	**$6,000,000**	
Lubbock - Holly Plant 230/69/13.5kV CKT 2			**$6,000,000**
Add Lubbock - Holly Plant 230/69/13.5kV Transformer circuit #2.			
	GEN-2015-101-2	$6,000,000	
	Total Allocated Costs	**$6,000,000**	
Potter 345/230/13.2kV CKT 3			**$10,000,000**
Add Potter 345/230/13.2kV Transformer circuit #3.			
	GEN-2015-101-2	$10,000,000	
	Total Allocated Costs	**$10,000,000**	

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

G: FCITC Analysis Constraints Requiring Transmission Reinforcement

See next page.

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.20578	114.7053	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20536	112.5063	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.20574	111.6932	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.20568	108.4973	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12093	106.7234	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12093	106.7234	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12093	106.7234	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.11912	105.3212	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.11912	105.3212	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.11912	105.3212	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.20321	104.978	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.2049	104.8273	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12093	104.7432	CLIFTON - GREENLEAF 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.07906	103.9463	KELLY - S1399 5 161KV CKT 1
20L	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12093	102.9831	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.11912	102.1026	CLIFTON - GREENLEAF 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	0.20578	112.9785	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.20536	111.5522	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.20574	109.6072	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.20568	106.6315	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12093	105.746	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12093	105.746	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12093	105.746	P12:115:WERE:KNOB-MKEC_115::
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.2049	103.8456	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12093	103.7614	CLIFTON - GREENLEAF 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.11912	103.4459	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.11912	103.4459	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.11912	103.4459	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.20321	103.1016	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.07906	102.8525	KELLY - S1399 5 161KV CKT 1
20L	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12093	101.9974	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.11912	100.2165	CLIFTON - GREENLEAF 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.3	0.99474	122.6105	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.6	0.99459	122.2336	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	0.99936	122.2109	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.9	0.99938	121.9612	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.8	0.99926	121.7791	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.9	0.99456	121.7569	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.2	0.99447	121.5886	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.4	0.99498	121.5447	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.4	0.99956	121.5447	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.3	0.99979	121.4649	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.8	0.99486	121.1538	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.9	0.99959	121.1325	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	99	0.99957	121.1111	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.9	0.99497	121.0313	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.8	0.99926	116.2691	FAIRBURY - HARBINE 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.9	0.99456	115.2678	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	0.99936	111.2827	FAIRBURY - HARBINE 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.9	0.99938	110.6492	FAIRBURY - HARBINE 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.3	0.99979	108.2144	FAIRBURY - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.2	0.99447	106.9617	FAIRBURY - HARBINE 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.6	0.99459	105.7898	FAIRBURY - HARBINE 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.3	0.99474	105.2095	FAIRBURY - HARBINE 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.4	0.99956	102.2837	FAIRBURY - HARBINE 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	99	0.99957	102.0691	FAIRBURY - HARBINE 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.9	0.99959	101.7703	FAIRBURY - HARBINE 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.99926	191.2	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.99456	190.3346	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.99936	186.8821	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.99938	186.0918	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.99979	184.9535	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.99447	183.6626	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.99459	181.2251	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.99474	180.6895	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.99956	179.9249	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.99957	178.6861	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.99959	178.2151	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.68164	177.8656	PAULINE - ROSEMONT 115.00 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.99498	176.0306	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.99497	174.4861	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.99486	174.3444	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.78154	167.9147	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.68103	167.2054	PAULINE - ROSEMONT 115.00 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.67224	166.328	PAULINE - ROSEMONT 115.00 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.68147	165.2735	PAULINE - ROSEMONT 115.00 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.68136	164.2041	PAULINE - ROSEMONT 115.00 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.78154	162.5869	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.77288	162.3166	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.67341	159.8447	PAULINE - ROSEMONT 115.00 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.78151	158.3996	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.78131	157.4663	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.78146	157.4541	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.77288	156.9996	CARLTON JUNCTION - GENEVA 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.77421	155.0002	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.77327	153.593	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	153.4471	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	153.4471	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63402	152.8508	G15088_T 345.00 - MOORE 345KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	152.7299	G15088_T 345.00 - MOORE 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.77267	152.7014	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.78131	152.528	CARLTON JUNCTION - GENEVA 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.78151	151.7261	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63577	151.5291	MCCOOL - MOORE 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.78146	151.2041	CARLTON JUNCTION - GENEVA 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.77421	150.0569	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63817	149.5701	CRETE - FRIEND 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.78163	148.0863	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.68168	147.6797	PAULINE - ROSEMONT 115.00 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.77327	147.2144	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	147.1415	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	147.1415	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63652	146.9082	AXTELL - POST ROCK 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62237	146.7121	G15088_T 345.00 - MOORE 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	146.528	G15088_T 345.00 - MOORE 345KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6229	146.4485	G15088_T 345.00 - MOORE 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62193	146.0119	G15088_T 345.00 - MOORE 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.77267	146.0004	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63511	144.6857	CLIFTON - CONCORDIA 115kV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63997	144.6685	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63997	144.6685	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62293	144.6335	MCCOOL - MOORE 345KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.6606	144.2336	GENEVA - MCCOOL 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	143.7135	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	143.5086	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62246	143.5002	MCCOOL - MOORE 345KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62343	143.0161	MCCOOL - MOORE 345KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	142.9613	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	142.9613	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	142.7556	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.78165	142.549	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63813	142.4955	CRETE - SHELDON 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62724	142.1971	CRETE - FRIEND 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	142.1237	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	142.1237	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63402	141.9902	G15088_T 345.00 - PAULINE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.68167	141.9392	PAULINE - ROSEMONT 115.00 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	141.9175	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	141.8304	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	141.8304	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63387	141.4419	G15088_T 345.00 - MOORE 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.77259	141.2302	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	141.1117	G15088_T 345.00 - MOORE 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	140.6017	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	140.6017	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63375	140.2152	G15088_T 345.00 - MOORE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	139.8844	G15088_T 345.00 - MOORE 345KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.67256	139.7193	PAULINE - ROSEMONT 115.00 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62776	139.4354	CRETE - FRIEND 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	139.3745	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	139.3745	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.77304	138.9835	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62678	138.9831	CRETE - FRIEND 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.67198	138.8017	PAULINE - ROSEMONT 115.00 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.65005	138.7587	GENEVA - MCCOOL 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62307	138.7202	AXTELL - POST ROCK 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	138.6543	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63554	138.5676	MCCOOL - MOORE 345KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	138.2407	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	138.2105	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	138.2105	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	138.0008	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63387	137.7709	BASE CASE
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	137.5926	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63798	137.4308	CRETE - FRIEND 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62828	137.3145	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62828	137.3145	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6332	137.2263	G15088_T 345.00 - MOORE 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62207	136.9615	P12:345:SUNC-NPPD:MINGO-REDWILLOW::531451-640325(1)
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63539	136.5234	MCCOOL - MOORE 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	136.4053	P12:345:SUNC-NPPD:MINGO-REDWILLOW::531451-640325(1)
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	136.2008	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.77291	136.1727	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62482	136.1261	G15088_T 345.00 - MOORE 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62237	135.9759	G15088_T 345.00 - PAULINE 345KV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	135.7051	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6229	135.5432	G15088_T 345.00 - PAULINE 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63786	135.4951	CRETE - FRIEND 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62193	135.0841	G15088_T 345.00 - PAULINE 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63473	133.9173	MCCOOL - MOORE 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63734	133.5193	CRETE - FRIEND 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.78207	133.5182	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.78163	133.1224	CARLTON JUNCTION - GENEVA 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	133.0501	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62342	133.0354	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.65997	132.5066	GENEVA - MCCOOL 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63619	132.4875	AXTELL - POST ROCK 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62259	132.2792	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	132.1889	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	132.1455	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62571	132.1166	MCCOOL - MOORE 345KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62901	132.1125	CRETE - FRIEND 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62745	132.0926	CRETE - SHELDON 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.66047	131.9881	GENEVA - MCCOOL 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	131.9741	AXTELL - POST ROCK 345KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	131.9501	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62351	131.9148	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	131.7688	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63483	131.6012	CLIFTON - CONCORDIA 115kV CKT 1
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62337	131.5996	BASE CASE
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62648	131.4202	CRETE - SHELDON 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63977	131.2858	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63977	131.2858	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62269	131.2606	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.66036	131.1918	GENEVA - MCCOOL 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.65209	131.0513	GENEVA - MCCOOL 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	131.0272	HEBRON (HEBRON T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.61467	130.9263	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.61467	130.9263	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	130.868	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	130.5607	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63387	130.5589	G15088_T 345.00 - PAULINE 345KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63794	130.3417	CRETE - SHELDON 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	130.268	HEBRON (HEBRON T1) 115/34.5/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	130.268	P14:035:NPPD:HEBRON 9:CAP
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63598	130.2434	AXTELL - POST ROCK 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62678	130.2202	P12:115:NPPD:1259A:CRETE__7:GENEVA 7:BTB
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6391	129.93	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6391	129.93	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63543	129.6827	AXTELL - POST ROCK 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	129.6008	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63375	129.457	G15088_T 345.00 - PAULINE 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	129.3951	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63467	129.3652	CLIFTON - CONCORDIA 115kV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.68223	128.8582	PAULINE - ROSEMONT 115.00 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63963	128.7455	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63359	128.7201	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63727	128.6753	CRETE - SHELDON 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62382	127.8379	BASE CASE
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.63047	127.7615	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.63047	127.7615	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	127.7214	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	127.7214	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63417	127.4696	CLIFTON - CONCORDIA 115kV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	127.3969	PAULINE (PAULINE T1) 345/115/13.8KV TRANSFORMER CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	127.1909	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62501	127.1897	AXTELL - POST ROCK 345KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62856	127.0105	CRETE - SHELDON 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	126.999	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.623	126.9691	BASE CASE
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.78165	126.6306	CARLTON JUNCTION - GENEVA 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	126.3727	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	126.3727	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	126.2694	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.77259	126.2508	CARLTON JUNCTION - GENEVA 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.4	0.63369	126.122	BASE CASE
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	126.045	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62158	125.0926	G15088_T 345.00 - MOORE 345KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63394	125.0493	G15088_T 345.00 - MOORE 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63356	124.9254	BASE CASE
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	124.3505	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	124.2141	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	124.2141	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.77304	124.1724	CARLTON JUNCTION - GENEVA 115KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	124.112	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	123.7978	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.6331	123.6337	BASE CASE
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62234	122.5544	G15088_T 345.00 - MOORE 345KV CKT 1
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	122.4536	BASE CASE
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62198	121.3198	MCCOOL - MOORE 345KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63565	121.2363	MCCOOL - MOORE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	121.0825	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	121.0825	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	120.6894	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	120.6894	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63813	120.6146	CRETE - FRIEND 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	120.4853	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.6718	120.4711	PAULINE - ROSEMONT 115.00 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	120.3682	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.77291	120.3563	CARLTON JUNCTION - GENEVA 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	120.1616	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62647	120.0169	CRETE - FRIEND 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63643	119.9913	AXTELL - POST ROCK 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.67227	118.9708	PAULINE - ROSEMONT 115.00 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.78207	118.8692	CARLTON JUNCTION - GENEVA 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63501	118.4739	CLIFTON - CONCORDIA 115kV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	117.9174	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62273	117.9036	MCCOOL - MOORE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	117.849	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	117.711	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	117.4014	CARLTON JUNCTION (CARLN.JCT T2) 115/69/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62204	117.2906	G15088_T 345.00 - MOORE 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.6718	117.2686	P12:115:NPPD:1173:SUPEROR7:HEBRN N7:BTB
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62721	117.227	CRETE - FRIEND 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.6718	117.062	HEBRON - NORTH HEBRON 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.6223	116.8141	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	116.662	CARLTON JUNCTION (CARLN.JCT T2) 115/69/13.8KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	116.5759	GENEVA (GENEVA T2) 115/69/13.8KV TRANSFORMER CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	116.5759	P14:069:NPPD:GENEVA 8:CAP
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63394	116.5029	G15088_T 345.00 - MOORE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.67208	115.969	PAULINE - ROSEMONT 115.00 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63431	115.9104	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	115.8355	GENEVA (GENEVA T2) 115/69/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	115.8355	P14:069:NPPD:GENEVA 8:CAP
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63394	115.7614	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.67227	115.4978	P12:115:NPPD:1173:SUPEROR7:HEBRN N7:BTB
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.61356	115.4207	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.61356	115.4207	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.67227	115.3957	HEBRON - NORTH HEBRON 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63632	114.8555	AXTELL - POST ROCK 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62296	114.561	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	114.5103	CARLTON JUNCTION (CARLN.JCT T2) 115/69/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	113.6932	GENEVA (GENEVA T2) 115/69/13.8KV TRANSFORMER CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	113.6932	P14:069:NPPD:GENEVA 8:CAP
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63495	113.5653	CLIFTON - CONCORDIA 115kV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.6142	113.2829	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62689	113.0886	CRETE - FRIEND 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.67208	112.9078	P12:115:NPPD:1173:SUPEROR7:HEBRN N7:BTB
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63812	112.831	CRETE - FRIEND 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.67208	112.7037	HEBRON - NORTH HEBRON 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62235	112.6347	MCCOOL - MOORE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63562	112.4229	MCCOOL - MOORE 345KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.9	0.63385	111.9319	BASE CASE
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	111.3886	MCCOOL - MOORE 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	111.3016	CARLTON JUNCTION (CARLN.JCT T2) 115/69/13.8KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62274	111.1868	BASE CASE
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	111.1845	CARLTON JUNCTION (CARLN.JCT T2) 115/69/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	111.1845	MARSHAL3 115.00 115/34.5KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62269	110.8396	ANTELOPE 3345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	110.4853	GENEVA (GENEVA T2) 115/69/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	110.4853	P14:069:NPPD:GENEVA 8:CAP
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	110.3682	GENEVA (GENEVA T2) 115/69/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	110.3682	P14:069:NPPD:GENEVA 8:CAP
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63428	110.218	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62278	109.9322	AXTELL - POST ROCK 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.61393	109.7669	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.61393	109.7669	MOORE (MOORE T1) 345/115/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63448	109.4261	G15061_T 345.00 - SETAB 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62338	109.1988	BASE CASE
25SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.62313	105.6894	BASE CASE
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.63451	105.5353	S.FLATS.PLT7115.00 - STEELE CITY 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.63451	105.5353	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98	0.63384	105.4702	BASE CASE
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.63451	104.8232	S.FLATS.PLT7115.00 (STL.FLTS GSU) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.99957	102.7959	FAIRBURY - G15087_T 115.00 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.63451	102.2112	FAIRBURY (FAIRBURY T1) 115/34.5/13.8KV TRANSFORMER CKT 1
20SP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	98.3	0.63464	102.0924	G15088_T 345.00 - MOORE 345KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.99957	198.8752	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.99497	197.449	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
25SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.2	0.99959	197.2505	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.99486	197.2449	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99956	195.45	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99498	195.2477	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99979	194.9444	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99938	194.9444	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
16WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99936	194.8433	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99447	194.8433	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99456	194.5399	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
16WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99474	194.3377	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99459	194.3377	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99926	194.1355	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99926	188.6868	FAIRBURY - HARBINE 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99456	188.2176	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99936	184.0477	FAIRBURY - HARBINE 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99938	183.6457	FAIRBURY - HARBINE 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99979	181.7743	FAIRBURY - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99447	180.3199	FAIRBURY - HARBINE 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.99957	179.5996	FAIRBURY - HARBINE 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99459	178.11	FAIRBURY - HARBINE 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.2	0.99959	177.8521	FAIRBURY - HARBINE 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99474	177.2182	FAIRBURY - HARBINE 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99956	176.2863	FAIRBURY - HARBINE 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.99497	174.4861	FAIRBURY - HARBINE 115KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.99486	174.1665	FAIRBURY - HARBINE 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.99498	172.2928	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.6285	128.8372	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.62875	123.3064	BEATRICE - HARBINE 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.62834	121.4732	BEATRICE - HARBINE 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.2	0.62837	121.2876	BEATRICE - HARBINE 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.62834	119.6166	BEATRICE - HARBINE 115KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.63645	117.5672	BEATRICE - HARBINE 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.63601	117.5138	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.62996	116.1731	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.62793	114.8146	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.63407	113.0317	BEATRICE - HARBINE 115KV CKT 1
20WP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.63565	112.3134	BEATRICE - HARBINE 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.41152	112.2519	KNOB HILL - STEELE CITY 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98.9	0.63683	110.6366	BEATRICE - HARBINE 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.63648	109.569	BEATRICE - HARBINE 115KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	98	0.63619	107.9008	BEATRICE - HARBINE 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.37649	100.7963	CLIFTON - CONCORDIA 115kV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.37706	100.6618	P12:115:WERE:MARS-SSEN_115::
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.37706	100.5595	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	G15087_T 115.00 - NORTH HEBRON 115KV CKT 1	97.8	0.37706	100.1505	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20578	116.2002	BEATRICE - HARBINE 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.20536	113.6739	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.20574	113.3061	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20568	110.0128	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12093	107.8064	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12093	107.8064	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12093	107.8064	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.11912	106.9628	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.11912	106.9628	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.11912	106.9628	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.20321	106.6208	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.2049	105.9144	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12093	105.8305	CLIFTON - GREENLEAF 115KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.07906	105.0353	KELLY - S1399 5 161KV CKT 1
20L	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12093	104.0742	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.11912	103.7549	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.20527	101.453	BEATRICE - HARBINE 115KV CKT 1
17G	09NR	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.07778	100.2584	KELLY - S1399 5 161KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	0.31567	126.6732	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	0.31567	123.1264	FAIRBURY - HARBINE 115KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.8	0.3155	120.6229	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.8	0.3155	119.1438	FAIRBURY - HARBINE 115KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.5	0.31546	117.406	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
16WP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.7	0.31548	117.0365	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.5	0.31546	114.3821	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.7	0.31548	114.1025	FAIRBURY - HARBINE 115KV CKT 1
20L	09NR	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.2	0.31428	112.3068	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	0.21848	109.9461	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.3	0.31556	109.5345	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09NR	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.2	0.31428	108.4587	FAIRBURY - HARBINE 115KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.1	0.31563	108.4468	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09NR	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.7	0.31498	107.564	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117	0.31564	107.5159	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	0.21848	107.1827	CARLTON JUNCTION - GENEVA 115KV CKT 1
17G	09NR	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.7	0.31498	105.8603	FAIRBURY - HARBINE 115KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.3	0.2175	105.5413	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	115.8	0.19914	105.4376	BEATRICE - HARBINE 115KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.3	0.31556	104.4904	FAIRBURY - HARBINE 115KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117.1	0.31563	103.3097	FAIRBURY - HARBINE 115KV CKT 1
17SP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	117	0.31564	102.3733	FAIRBURY - HARBINE 115KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.8	0.21772	100.2794	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	PAULINE - ROSEMONT 115.00 115KV CKT 1	116.5	0.21792	100.2149	CARLTON JUNCTION - NORTH HEBRON 115KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.02962	104.5168	HOYT - STRANGER CREEK 345KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.20655	113.2589	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20611	111.3927	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.20652	110.2254	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.5	0.20645	107.1536	BEATRICE - HARBINE 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12376	106.657	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12376	106.547	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12376	106.547	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12193	105.2515	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12193	105.2515	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12193	105.2515	P12:115:WERE:KNOB-MKEC_115::
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12376	104.6768	CLIFTON - GREENLEAF 115KV CKT 1
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.08096	103.8671	KELLY - S1399 5 161KV CKT 1
17G	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.2038	103.8357	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.20553	103.8103	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12376	102.9166	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12193	102.0329	CLIFTON - GREENLEAF 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.20655	111.5144	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.20611	110.3243	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.20652	108.3696	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12376	105.5691	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12376	105.5691	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12376	105.5691	P12:115:WERE:KNOB-MKEC_115::
20WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.20645	105.4036	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12376	103.5846	CLIFTON - GREENLEAF 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.12193	103.3759	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.12193	103.2646	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.12193	103.2646	P12:115:WERE:KNOB-MKEC_115::
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.08096	102.8834	KELLY - S1399 5 161KV CKT 1
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.20553	102.7162	BEATRICE - HARBINE 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.2038	101.9555	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.7	0.12376	101.8205	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.8	0.12193	100.1465	CLIFTON - GREENLEAF 115KV CKT 1
16WP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	95.8	0.99474	123.6952	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.1	0.99459	123.3091	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
16WP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.4	0.99936	123.1328	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20WP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.7	0.99938	122.7508	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.2	0.99926	122.6611	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17G	09NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.6	0.99456	122.4638	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.3	0.99447	122.0966	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	0.99498	122.0061	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
17SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	0.99956	122.0061	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20L	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.4	0.99979	121.9713	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.9	0.99957	121.2336	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
25SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.6	0.99959	121.1968	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
20SP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.5	0.99486	121.1168	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB
25SP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.6	0.99497	121.0953	P12:115:NPPD:1175B:FAIRBRY7:HARBINE7:BTB

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.2	0.99926	117.0595	FAIRBURY - HARBINE 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.6	0.99456	115.8874	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.4	0.99936	112.0573	FAIRBURY - HARBINE 115KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.7	0.99938	111.2984	FAIRBURY - HARBINE 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.4	0.99979	108.5984	FAIRBURY - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.3	0.99447	107.2317	FAIRBURY - HARBINE 115KV CKT 1
20WP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	96.1	0.99459	106.6085	FAIRBURY - HARBINE 115KV CKT 1
16WP	00NR	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	95.8	0.99474	106.0217	FAIRBURY - HARBINE 115KV CKT 1
17SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	97.7	0.99956	102.6072	FAIRBURY - HARBINE 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.9	0.99957	102.1723	FAIRBURY - HARBINE 115KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	FAIRBURY - G15087_T 115.00 115KV CKT 1	98.6	0.99959	101.8771	FAIRBURY - HARBINE 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20655	114.7586	BEATRICE - HARBINE 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.20611	112.4541	BEATRICE - HARBINE 115KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.20652	111.9671	BEATRICE - HARBINE 115KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.20645	108.7916	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12376	107.7401	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12376	107.6303	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12376	107.6303	P12:115:WERE:KNOB-MKEC_115::
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12193	106.8934	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12193	106.7827	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12193	106.7827	P12:115:WERE:KNOB-MKEC_115::
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12376	105.7642	CLIFTON - GREENLEAF 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.2038	105.4823	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.08096	104.9563	KELLY - S1399 5 161KV CKT 1
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.20553	104.8997	BEATRICE - HARBINE 115KV CKT 1
20L	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.1	0.12376	104.0079	CLIFTON - CONCORDIA 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12193	103.6854	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.20605	101.2279	BEATRICE - HARBINE 115KV CKT 1
17G	09NR	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.07967	100.2881	KELLY - S1399 5 161KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.03034	104.5289	HOYT - STRANGER CREEK 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.02977	104.4493	HOYT - STRANGER CREEK 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	360.8	0.36813	112.8745	P12:345:SPS:J15.1.XRDS.TOLK
16WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	360.7	0.37507	111.7596	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.3	0.36112	111.6382	P12:345:SPS:J15.1.XRDS.TOLK
20L	06NR	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.1	0.30543	109.3125	P12:345:SPS:J15.1.XRDS.TOLK
20L	06NR	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.1	0.30085	105.9423	POTTER COUNTY INTERCHANGE - TOLK STATION 345KV CKT 1
20L	06NR	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.1	0.30568	105.8164	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.3	0.35063	105.41	POTTER COUNTY INTERCHANGE - TOLK STATION 345KV CKT 1
17G	06NR	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.6	0.3002	105.2618	P12:345:SPS:J15.1.XRDS.TOLK
20WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	360.8	0.3569	104.0344	POTTER COUNTY INTERCHANGE - TOLK STATION 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	360.7	0.3633	103.2692	POTTER COUNTY INTERCHANGE - TOLK STATION 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	349.6	0.37124	100.3998	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	350.3	0.3475	100.2284	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1	476.2	0.6487	100.0815	P12:345:SPS:J15.1.XRDS.TOLK
17G	06NR	0	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	95.8	0.12504	101.1582	P12:230:SPS:K11.1.BSHLND.DFSMTH
25SP	00NR	0	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.9215	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.8765	P12:LPL:SPS:K64.1.LP-SE.LUBBS
25SP	00NR	0	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	102.0064	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	101.9171	P12:LPL:SPS:K64.1.LP-SE.LUBBS
17G	06NR	2	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	95.9	0.12504	101.5741	P12:230:SPS:K11.1.BSHLND.DFSMTH
25SP	00NR	2	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.9215	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.8765	P12:LPL:SPS:K64.1.LP-SE.LUBBS
25SP	00NR	2	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	102.0064	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_1	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	101.9171	P12:LPL:SPS:K64.1.LP-SE.LUBBS

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.0468	102.2978	SWISHER COUNTY INTERCHANGE - TUCO_2 230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.9215	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.8765	P12:LPL:SPS:K64.1.LP-SE.LUBBS
25SP	00NR	0	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	102.0064	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	101.9171	P12:LPL:SPS:K64.1.LP-SE.LUBBS
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	559	0.30102	101.3855	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	559.9	0.30102	101.2939	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	558.2	0.2733	100.321	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	559.7	0.2733	100.1236	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2	559.8	0.34158	101.315	P13:230-345:SPS:POTTER_CO.1
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2	559.8	0.34158	101.315	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2	558.2	0.34158	100.695	P13:230-345:SPS:POTTER_CO.1
20WP	06ALL	0	FROM->TO	G15_101_2	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 2	558.2	0.34158	100.695	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	00NR	2	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.04652	102.5655	SWISHER COUNTY INTERCHANGE - TUCO_2 230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.9215	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	222.3	0.03581	102.8765	P12:LPL:SPS:K64.1.LP-SE.LUBBS
25SP	00NR	2	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	102.0064	LUBBOCK POWER & LIGHT-SOUTHEAST - LUBBOCK SOUTH INTERCHANGE 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	LUBBOCK POWER & LIGHT-HOLLY PLANT (SHIH T101039) 230/69/13.5KV TRANSFORMER CKT 1	224	0.03581	101.9171	P12:LPL:SPS:K64.1.LP-SE.LUBBS

H: FCITC Analysis Constraints Not Requiring Transmission Reinforcement

See next page.

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	TO->FROM	G15_099_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.045	108.3974	CIMARRON - MINCO 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01049	149.2071	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01285	148.7863	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01049	144.7428	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01285	144.2717	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0132	123.2558	DBL-G1114-WWRD
20WP	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0132	118.9639	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00827	114.7035	DBL-OTA-BVR
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:WALKEMEYER-HITCHLAND
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01032	113.6179	DBL-OTA-BVR
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00827	112.2481	DBL-HTCH-OTA
16WP	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01427	112.1816	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01032	111.1348	DBL-HTCH-OTA
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00811	109.321	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01022	107.9585	P12:345:SPS:J04.1.FINN.HOLC(534)
16WP	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01427	107.704	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01022	106.6041	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00986	105.8692	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00752	105.4329	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00811	103.9639	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00919	103.2788	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00778	101.6794	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00735	100.9416	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00735	100.9416	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
17G	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00986	100.6773	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00778	100.5633	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	P13:138-230:AEPW:ELKCTY-4
17G	06ALL	0	TO->FROM	G15_099_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01285	110.2762	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_099_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01049	108.6839	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_099_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01285	107.0711	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_099_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01049	105.4941	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_099_1	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1	173.7	0.0135	102.6244	P12:115:SPS:W51.1.NEWHART.CASTRO
20WP	06ALL	0	FROM->TO	G15_099_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	169.8	0.01086	104.1644	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	06ALL	0	FROM->TO	G15_099_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	170.3	0.01158	101.1874	P12:115:SPS:T04.1.DFSMTH.CASTRO
17G	06ALL	0	FROM->TO	G15_099_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01285	120.1127	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01285	116.9974	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_099_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01049	115.4662	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_099_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01049	112.3558	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01285	124.4018	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01285	121.3153	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01049	118.5876	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01049	115.5012	DBL-BVR-G1114
20WP	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0132	108.2237	DBL-G1114-WWRD
20WP	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0132	105.1421	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_099_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01032	100.3591	DBL-OTA-BVR

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02301	136.6951	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02301	127.5273	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02384	123.6809	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02624	117.9013	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02384	114.4307	DBL-THIS-G1524
17SP	06ALL	0	FROM->TO	G15_099_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02624	107.9573	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02301	190.391	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02301	178.1037	DBL-THIS-G1524
20L	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02055	176.2617	DBL-G1524-WICH
20WP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02444	175.9039	DBL-G1524-WICH
16WP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02384	169.032	DBL-G1524-WICH
17SP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02624	164.8234	DBL-G1524-WICH
20L	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02055	162.9527	DBL-THIS-G1524
20WP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02444	162.5094	DBL-THIS-G1524
16WP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02384	156.9248	DBL-THIS-G1524
17SP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02624	151.7599	DBL-THIS-G1524
20SP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02574	145.4463	DBL-G1524-WICH
20SP	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02574	131.6145	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.0123	104.2281	DBL-TGA-MATT
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01193	102.3129	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01193	102.3129	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	0	TO->FROM	G15_099_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.0123	100.1638	DBL-G1151-TGA
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	114.5299	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03413	112.6728	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	111.6841	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	111.4373	ONEY - WASHITA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03404	110.0045	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	109.407	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	108.9191	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03128	108.0324	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	107.4485	BINGER NIJECT - SICKLES 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02749	106.9945	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	106.8759	DBL-TGA-MATT
20WP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.03269	106.3885	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03119	106.2968	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03395	105.749	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	105.2321	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	104.943	BINGER NIJECT - SICKLES 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	103.973	DBL-WWRD-G1151
20L	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02385	102.9439	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	102.7065	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03128	102.3995	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02818	101.9833	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	101.4491	DBL-WWRD-G1151
16WP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03491	100.9511	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.0294	100.9057	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03119	100.6714	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	100.1685	HYDRO - SICKLES 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00587	112.5889	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00617	109.0172	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00587	108.1208	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00617	104.5491	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00587	120.7105	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00617	117.2052	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00587	116.2801	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00617	112.5541	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.006	110.0667	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00596	110.0594	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.006	104.4256	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00596	104.4184	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01179	100.2527	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	159.5	0.09294	113.1654	P12:115:SPS:T94.1.MADDOX.HOBBG
20SP	06ALL	0	FROM->TO	G15_099_1	CUNNINGHAM STATION - MADDOX STATION 115KV CKT 1	159.8	0.09274	100.2406	P12:115:SPS:T94.1.MADDOX.HOBBG
20WP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00587	126.5058	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00617	122.6065	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00587	121.884	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.006	119.6041	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00596	119.2901	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00617	117.9749	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.006	113.9486	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00596	113.6491	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	48	0.00606	105.4797	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	DUNCAN - TOSCO 69KV CKT 1	48	0.00606	100.8964	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00573	100.2141	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00573	110.7287	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00742	108.6874	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00721	107.0226	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00721	107.0226	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00711	107.0226	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00715	105.678	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00615	105.3931	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00804	102.238	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	102.0836	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00798	101.8194	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00804	101.5163	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	101.0527	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00783	100.9855	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00849	100.9307	DBL-THIS-WWRD
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00783	100.8824	P12:069:OKGE:3TERM34
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00839	100.8203	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	100.5373	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00757	100.451	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	100.228	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00724	100.2207	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00776	100.0525	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00776	100.0525	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00765	100.0525	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00701	99.9976	PARK LANE - SEMINOLE 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	FROM->TO	G15_099_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.2	0.00575	134.3826	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00585	117.7343	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.00624	109.7533	G15085_T 138.00 - RUSSELL 138KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00609	100.1218	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00585	120.5446	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.00575	114.7946	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00624	112.8268	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00575	126.1856	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELDORADO JCT - GYPSUM 69KV CKT 1	30.9	0.00585	112.0238	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.00624	103.9969	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.08241	113.7614	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08241	113.3891	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07668	107.2987	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.08212	106.4922	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08212	106.2957	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08629	105.0238	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08629	104.7625	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.06784	103.2353	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.06784	103.0488	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07668	102.4652	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07668	102.1209	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.06641	101.3873	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.07647	101.1432	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06641	101.07	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07647	100.9399	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08476	100.7601	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08476	100.6489	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07835	100.3042	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.00575	110.5791	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02301	154.2693	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02301	145.1465	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02384	138.2897	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02384	129.1353	DBL-THIS-G1524
20WP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.01882	111.9301	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02021	109.3708	DBL-G1524-WICH
20L	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01582	109.1008	DBL-G1524-WICH
20WP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.01882	104.087	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	135.2	0.01982	101.4107	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02021	101.2766	DBL-THIS-G1524
20L	06ALL	0	FROM->TO	G15_099_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01582	101.2741	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_099_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00561	102.4426	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_099_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.0059	100.1997	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_099_1	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1	156.4	0.07229	107.118	MADDOX STATION - SANGER SWITCHING STATION 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1	156.4	0.07229	106.7983	OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01514	126.6062	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	97.5	0.01511	113.6131	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01514	111.8911	P12:115:SPS:V98.1.CUNN.LE-SNANDR
25SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01514	111.6839	LE-TXACO_TP3115.00 - LEA COUNTY REC-SAN ANDRES INTERCHANGE 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01514	111.5803	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	97.2	0.01543	104.3164	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	97.5	0.01511	100.0747	P12:115:SPS:V98.1.CUNN.LE-SNANDR
25SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1	82.6	0.01547	114.8891	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1	83.1	0.01544	103.8463	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	LE-WEST_SUB3115.00 - LEA COUNTY REC-LOVINGTON INTERCHANGE 115KV CKT 1	174.6	0.0186	106.0828	DENVER CITY INTERCHANGE S. - SHELL C2 SUB 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	LE-WEST_SUB3115.00 - LEA COUNTY REC-LOVINGTON INTERCHANGE 115KV CKT 1	174.6	0.0186	100.47	SHELL C2 SUB - SHELL C3 TAP 115KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	121.9139	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	120.5874	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01144	120.0532	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01144	119.7585	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	119.7234	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	118.8925	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01151	118.523	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	118.4697	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01621	118.4605	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01151	118.228	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	117.0502	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	116.8473	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01634	116.711	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	115.0036	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01621	114.1127	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01634	112.36	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01282	107.8189	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	107.5697	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01294	107.3147	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	106.3179	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01282	105.6818	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01206	105.6379	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01206	105.3433	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	105.2767	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01294	105.1761	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	104.5506	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00605	103.9275	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	103.287	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	103.0729	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	102.7711	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
25SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	102.636	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01089	101.6015	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	101.3029	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00616	101.06	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	100.7867	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01099	100.2804	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00987	100.2216	ANADARKO - POCASSETT 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01089	100.2013	DBL-G1151-TGA
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0	183.0641	NORTON 6 230.00 - PLEASANT HILL 230KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0	170.6515	NORTON 6 230.00 - PLEASANT HILL 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01376	159.8551	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	158.1852	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	158.1852	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	158.1852	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	158.0594	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	158.0594	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	158.0594	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	157.7379	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	157.7379	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	157.7379	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01201	157.509	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	157.3444	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	157.3444	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	157.3421	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01344	156.8475	P12:345:SPS:J15.1.XRDS.TOLK
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01332	155.4857	P12:345:SPS:J15.1.XRDS.TOLK
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01176	155.4499	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01213	155.0883	P12:345:AEPW:O.K.U.-7:L.E.S.-7
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	155.0712	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	155.0712	P12:115:SPS:W59.1.LOPEZ.CMPBLL
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01154	154.7311	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.4542	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.4542	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.4542	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.0878	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.0878	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	154.0878	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01237	153.7989	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01201	153.1757	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	152.7379	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	152.7142	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01237	152.4521	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01202	152.3684	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01243	152.2751	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.0127	150.8475	P12:230:SPS:K59.1.POTTER.BSHLND
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01312	150.6112	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0138	149.9327	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01213	149.7011	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01219	148.885	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0117	148.769	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	148.4921	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	148.4921	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	148.4921	CIMARRON - MINCO 345KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01198	148.3185	P12:230:SPS:K51.1.OASIS.RSVLT
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	147.7899	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	147.7899	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	147.7899	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.0126	147.4566	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01073	147.32	P12:345:SPS:J15.1.XRDS.TOLK
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01204	146.8495	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0126	145.6487	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01172	145.5627	P12:230:SPS:K18.1.RSVLT_S.TOLK

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01172	145.5627	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT @1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01204	145.5161	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.0117	145.2212	P12:230:SPS:K30.2.RSVLT_N.TOLK
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01166	144.7595	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01219	144.5516	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01197	144.1662	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.00999	143.8023	P12:230:SPS:K38.1.CHAVES.EDDY_N
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0117	143.4357	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01187	142.8092	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.7995	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.7995	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.7995	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	141.4542	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	141.4542	P12:115:SPS:W59.1.LOPEZ.CMPBLL
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.0736	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.0736	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	141.0736	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	141.0712	BASE CASE
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01233	140.9181	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01221	140.8897	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	140.1209	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	140.0972	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	140.057	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	140.057	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	140.057	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	139.9978	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	139.9978	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	139.9978	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0099	139.5683	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01221	139.5564	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01278	139.0246	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01182	138.7974	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01261	137.9844	P12:345:SPS:J15.1.XRDS.TOLK
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01215	137.5422	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01187	137.4759	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01147	137.0479	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01233	136.5848	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00897	136.119	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01166	135.4262	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00954	135.3531	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00913	134.8714	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	134.4921	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	134.4921	P12:115:SPS:W59.1.LOPEZ.CMPBLL
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01065	134.3015	Norton Switching Station - PLEASANT HILL 115KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01166	134.0929	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01129	134.0053	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00919	133.9274	P12:230:SPS:K59.1.POTTER.BSHLND
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	133.8254	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	133.7994	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01023	133.4628	P12:345:SPS:J15.1.XRDS.TOLK
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00886	133.4386	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00913	133.1992	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20L	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.011	132.2592	BASE CASE
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0091	132.1768	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01147	131.7146	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01229	131.5753	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00897	131.1022	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	131.0712	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01292	131.0577	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01187	130.4759	P12:230:SPS:K59.1.POTTER.BSHLND
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00783	130.1864	P12:230:SPS:K65.1.OASIS.SANJN
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	130.0712	CROSSROADS 7345.00 - G08-22 345.00 345KV CKT 1
25SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01016	130.0712	G08-22 345.00 345/34.5KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01173	129.4428	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00945	128.8775	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	128.7876	BASE CASE
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	128.0349	DBL-G1114-WWRD
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	128.0349	DBL-G1114-WWRD
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	128.0349	DBL-G1114-WWRD
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0118	127.7927	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	127.3137	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	127.3137	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	127.3137	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01104	126.9461	P12:230:SPS:K51.1.OASIS.RSVLT
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	125.7237	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	125.6834	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00707	125.1313	P12:230:SPS:K38.1.CHAVES.EDDY_N
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00888	123.0945	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
17SP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01053	122.8254	BASE CASE
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0093	122.2407	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00862	121.9985	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01044	121.5426	Norton Switching Station - PLEASANT HILL 115KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00888	121.4223	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00873	118.3291	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00889	117.7362	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00921	116.4411	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
17G	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0101	114.7237	BASE CASE
16WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00797	114.0403	BASE CASE
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	112.3158	P12:115:SPS:W51.1.NEWHART.CASTRO
20WP	06ALL	0		G15_099_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00777	100.2757	BASE CASE
17G	06ALL	0	FROM->TO	G15_099_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.4	0.02469	105.0211	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	0	FROM->TO	G15_099_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.6	0.02694	103.3076	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	0	FROM->TO	G15_099_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.7	0.02713	102.697	P12:115:SPS:T08.2.SPRMN.PRNGLE
20WP	06ALL	0	FROM->TO	G15_099_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01066	107.0681	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_099_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01066	106.113	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_099_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01045	105.4602	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_099_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01045	104.5066	P12:230:AEPW:ELKCITY6:SWEETWT6

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	FROM->TO	G15_099_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00932	116.6757	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	0	FROM->TO	G15_099_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00943	113.0103	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	0	FROM->TO	G15_099_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00987	108.361	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	06ALL	0	FROM->TO	G15_099_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01045	103.8338	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	0	FROM->TO	G15_099_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.00995	100.8093	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	TO->FROM	G15_099_1	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00594	100.7771	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.00801	135.0462	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.00801	135.0462	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00801	135.0044	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00801	135.0044	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00804	131.5064	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00804	131.5064	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00804	131.3121	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00804	131.3121	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00792	121.8599	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00792	121.8599	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00792	121.7409	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00792	121.7409	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00751	120.2566	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00751	120.2566	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00751	119.9439	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00751	119.9439	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00847	117.5225	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00847	117.5225	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00847	117.5016	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00847	117.5016	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00851	114.6333	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00851	114.6333	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00851	114.3419	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00851	114.3419	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00802	135.1245	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00802	135.1245	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.00802	135.047	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.00802	135.047	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.00804	131.5064	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.00804	131.5064	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00804	131.4313	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00804	131.4313	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.9798	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.9798	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.7417	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.7417	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00751	120.2566	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00751	120.2566	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00751	119.9439	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00751	119.9439	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00847	117.5225	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00847	117.5225	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00847	117.5016	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00847	117.5016	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00851	114.6333	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00851	114.6333	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.00851	114.4787	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_099_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.00851	114.4787	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	TO->FROM	G15_099_1	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.01266	100.5682	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_099_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.04615	105.8941	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	TO->FROM	G15_099_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.04615	101.4511	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.04615	115.0384	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.04615	114.5025	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.04615	110.2148	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.04615	109.7014	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.05501	103.6118	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.05501	103.5378	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05283	101.9117	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_099_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05283	101.9117	P12:345:SPS:J04.1.FINN.HOLC(534)

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	TO->FROM	G15_099_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.04499	108.3971	CIMARRON - MINCO 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01049	149.2071	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01286	148.7879	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01049	144.7428	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01286	144.2733	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0132	123.2558	DBL-G1114-WWRD
20WP	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0132	118.9639	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00827	114.7035	DBL-OTA-BVR
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00867	114.0973	P12:345:SPS:WALKEMEYER-HITCHLAND
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01033	113.6195	DBL-OTA-BVR
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00827	112.2481	DBL-HTCH-OTA
16WP	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01427	112.1816	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01033	111.1364	DBL-HTCH-OTA
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00811	109.321	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01023	107.9601	P12:345:SPS:J04.1.FINN.HOLC(534)
16WP	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01427	107.704	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01023	106.6057	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00986	105.8692	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00752	105.4329	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00811	103.9639	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00919	103.2788	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00778	101.6794	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00735	100.9416	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00735	100.9416	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
17G	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.00986	100.6773	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00778	100.5633	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00729	100.2625	P13:138-230:AEPW:ELKCTY-4
17G	06ALL	0	TO->FROM	G15_099_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01286	110.2773	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_099_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01049	108.6839	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_099_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01286	107.0722	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_099_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01049	105.4941	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_099_2	CASTRO COUNTY INTERCHANGE - DEAF SMITH REC-#21 115KV CKT 1	173.7	0.0135	102.6244	P12:115:SPS:W51.1.NEWHART.CASTRO
20WP	06ALL	0	FROM->TO	G15_099_2	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	169.8	0.01086	104.1644	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	06ALL	0	FROM->TO	G15_099_2	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	170.3	0.01159	101.1878	P12:115:SPS:T04.1.DFSMTH.CASTRO
17G	06ALL	0	FROM->TO	G15_099_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01286	120.1138	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_099_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01286	116.9985	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_099_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01049	115.4662	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_099_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01049	112.3558	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01286	124.4029	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01286	121.3164	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01049	118.5876	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01049	115.5012	DBL-BVR-G1114
20WP	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0132	108.2237	DBL-G1114-WWRD
20WP	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0132	105.1421	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_099_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01033	100.3602	DBL-OTA-BVR

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02301	136.6951	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02301	127.5273	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02384	123.6809	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02625	117.9018	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02384	114.4307	DBL-THIS-G1524
17SP	06ALL	0	FROM->TO	G15_099_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02625	107.9578	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02301	190.391	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02301	178.1037	DBL-THIS-G1524
20L	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02055	176.2617	DBL-G1524-WICH
20WP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02444	175.9039	DBL-G1524-WICH
16WP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02384	169.032	DBL-G1524-WICH
17SP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02625	164.8241	DBL-G1524-WICH
20L	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02055	162.9527	DBL-THIS-G1524
20WP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02444	162.5094	DBL-THIS-G1524
16WP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02384	156.9248	DBL-THIS-G1524
17SP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02625	151.7606	DBL-THIS-G1524
20SP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02574	145.4463	DBL-G1524-WICH
20SP	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02574	131.6145	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.0123	104.2281	DBL-TGA-MATT
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01193	102.3129	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01193	102.3129	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	0	TO->FROM	G15_099_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.0123	100.1638	DBL-G1151-TGA
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	114.5299	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03413	112.6728	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	111.6841	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	111.4373	ONEY - WASHITA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03404	110.0045	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	109.407	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	108.9191	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03128	108.0324	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	107.4485	BINGER NIJECT - SICKLES 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02749	106.9945	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	106.8759	DBL-TGA-MATT
20WP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.03269	106.3885	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03119	106.2968	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03396	105.7494	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	105.2321	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01914	104.943	BINGER NIJECT - SICKLES 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.02951	103.973	DBL-WWRD-G1151
20L	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02385	102.9439	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	102.7065	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03128	102.3995	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02818	101.9833	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02943	101.4491	DBL-WWRD-G1151
16WP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03491	100.9511	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.02941	100.9061	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03119	100.6714	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01908	100.1685	HYDRO - SICKLES 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00587	112.5889	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00617	109.0172	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00587	108.1208	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00617	104.5491	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00587	120.7105	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00617	117.2052	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00587	116.2801	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00617	112.5541	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.006	110.0667	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00596	110.0594	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.006	104.4256	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00596	104.4184	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01179	100.2527	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00587	126.5058	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00617	122.6065	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00587	121.884	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.006	119.6041	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00596	119.2901	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00617	117.9749	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.006	113.9486	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00596	113.6491	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	48	0.00606	105.4797	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	DUNCAN - TOSCO 69KV CKT 1	48	0.00606	100.8964	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00573	100.2141	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00573	110.7287	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00742	108.6874	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00721	107.0226	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00721	107.0226	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00711	107.0226	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00715	105.678	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00615	105.3931	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00804	102.238	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	102.0836	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00798	101.8194	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00804	101.5163	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	101.0527	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00783	100.9855	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00849	100.9307	DBL-THIS-WWRD
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00783	100.8824	P12:069:OKGE:3TERM34
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00839	100.8203	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	100.5373	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00757	100.451	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00734	100.228	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00724	100.2207	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00776	100.0525	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00776	100.0525	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00765	100.0525	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_099_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00701	99.9976	PARK LANE - SEMINOLE 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.2	0.00575	134.3826	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00585	117.7343	G15085_T 138.00 - RUSSELL 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0	FROM->TO	G15_099_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.00624	109.7533	G15085_T 138.00 - RUSSELL 138KV CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00609	100.1218	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_099_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00585	120.5446	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_099_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.00575	114.7946	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	TO->FROM	G15_099_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00624	112.8268	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00575	126.1856	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELDORADO JCT - GYPSUM 69KV CKT 1	30.9	0.00585	112.0238	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.00624	103.9969	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.08241	113.7614	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08241	113.3891	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07668	107.2987	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.08212	106.4922	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08212	106.2957	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08629	105.0238	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08629	104.7625	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.06784	103.2353	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.06784	103.0488	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07668	102.4652	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07668	102.1209	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.06641	101.3873	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.07646	101.143	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06641	101.07	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07646	100.9397	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08476	100.7601	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08476	100.6489	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07835	100.3042	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.00575	110.5791	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02301	154.2693	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02301	145.1465	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02384	138.2897	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02384	129.1353	DBL-THIS-G1524
20WP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.01882	111.9301	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02021	109.3708	DBL-G1524-WICH
20L	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01582	109.1008	DBL-G1524-WICH
20WP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.01882	104.087	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	135.2	0.01982	101.4107	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02021	101.2766	DBL-THIS-G1524
20L	06ALL	0	FROM->TO	G15_099_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01582	101.2741	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_099_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00561	102.4426	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_099_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.0059	100.1997	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_099_2	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1	156.4	0.0468	105.9609	MADDOX STATION - SANGER SWITCHING STATION 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	HOBBS INTERCHANGE - MILLEN SUB 115KV CKT 1	156.4	0.0468	105.6412	OXY PERMIAN SUB - SANGER SWITCHING STATION 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01425	126.5407	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	97.5	0.01422	113.5483	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01425	111.8256	P12:115:SPS:V98.1.CUNN.LE-SNANDR
25SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01425	111.6184	LE-TXACO_TP3115.00 - LEA COUNTY REC-SAN ANDRES INTERCHANGE 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	96.5	0.01425	111.5148	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1	97.2	0.01458	104.2543	BUCKEYE TAP - LE-TXACO_TP3115.00 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1	82.6	0.01585	114.9217	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	FROM->TO	G15_099_2	LEA COUNTY REC-SAN ANDRES INTERCHANGE 115/69KV TRANSFORMER CKT 1	83.1	0.01582	103.8787	LEA COUNTY REC-LOVINGTON INTERCHANGE 115/69KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LE-WEST_SUB3115.00 - LEA COUNTY REC-LOVINGTON INTERCHANGE 115KV CKT 1	174.6	0.01457	105.9189	DENVER CITY INTERCHANGE S. - SHELL C2 SUB 115KV CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	LE-WEST_SUB3115.00 - LEA COUNTY REC-LOVINGTON INTERCHANGE 115KV CKT 1	174.6	0.01457	100.3061	SHELL C2 SUB - SHELL C3 TAP 115KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	121.9139	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	120.5874	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01144	120.0532	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01144	119.7585	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	119.7234	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	118.8925	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01151	118.523	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	118.4697	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01621	118.4605	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01151	118.228	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01179	117.0502	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	116.8473	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01634	116.711	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0119	115.0036	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01621	114.1127	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01634	112.36	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01282	107.8189	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	107.5697	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01293	107.3142	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	106.3179	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01282	105.6818	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01206	105.6379	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01206	105.3433	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	105.2767	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01293	105.1755	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	104.5506	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00605	103.9275	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	103.287	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	103.0729	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01071	102.7711	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
25SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01239	102.636	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01089	101.6015	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	101.3029	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00616	101.06	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	100.7867	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01099	100.2804	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00987	100.2216	ANADARKO - POCASSETT 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_099_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01089	100.2013	DBL-G1151-TGA
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0	183.0688	NORTON 6 230.00 - PLEASANT HILL 230KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0	170.6515	NORTON 6 230.00 - PLEASANT HILL 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01377	159.8575	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	158.1876	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	158.1876	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	158.1876	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	158.0617	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	158.0617	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	158.0617	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	157.7402	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	157.7402	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	157.7402	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01202	157.5114	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	157.3444	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	157.3444	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	157.3444	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01345	156.8498	P12:345:SPS:J15.1.XRDS.TOLK
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01334	155.4905	P12:345:SPS:J15.1.XRDS.TOLK
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01177	155.4522	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01214	155.0907	P12:345:AEPW:O.K.U.-7:L.E.S.-7
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	155.0736	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	155.0736	P12:115:SPS:W59.1.LOPEZ.CMPBLL
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01155	154.7335	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.4566	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.4566	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.4566	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.0878	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.0878	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	154.0878	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01238	153.8013	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01202	153.1781	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	152.7402	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	152.7166	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01238	152.4545	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01203	152.3708	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01244	152.2775	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.0127	150.8475	P12:230:SPS:K59.1.POTTER.BSHLND
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01313	150.6136	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01383	149.9398	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01214	149.7035	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01219	148.885	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01171	148.7714	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	148.4968	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	148.4968	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	148.4968	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01199	148.3208	P12:230:SPS:K51.1.OASIS.RSVLT
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	147.7947	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	147.7947	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	147.7947	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01261	147.459	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01076	147.3271	P12:345:SPS:J15.1.XRDS.TOLK
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01204	146.8495	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01261	145.651	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01173	145.5651	P12:230:SPS:K18.1.RSVLT_S.TOLK
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01173	145.5651	Roosevelt County Interchange SOUTH - Roosevelt County Interchange SWITCH #4K33 230KV CKT @1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01204	145.5161	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01171	145.2236	P12:230:SPS:K30.2.RSVLT_N.TOLK
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01167	144.7619	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01219	144.5516	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01197	144.1662	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01	143.8047	P12:230:SPS:K38.1.CHAVES.EDDY_N
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01171	143.438	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01189	142.8139	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.8042	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.8042	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.8042	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	141.4566	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	141.4566	P12:115:SPS:W59.1.LOPEZ.CMPBLL
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.0807	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.0807	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	141.0807	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	141.0736	BASE CASE
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01236	140.9252	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01224	140.8968	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	140.1233	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	140.0996	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0617	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0617	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0617	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0049	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0049	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	140.0049	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00992	139.573	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01224	139.5635	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01281	139.0317	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01185	138.8045	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01265	137.9938	P12:345:SPS:J15.1.XRDS.TOLK
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01217	137.5469	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01189	137.4806	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01149	137.0526	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01236	136.5919	G15039_T 230.00 - PLANT X STATION 230KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00898	136.1237	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01169	135.4333	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00956	135.3602	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00915	134.8762	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	134.4968	FARMERS ELECTRIC REC-TUCUMCARI - LOPEZ 3115.00 115KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	134.4968	P12:115:SPS:W59.1.LOPEZ.CMPBLL
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01067	134.3063	Norton Switching Station - PLEASANT HILL 115KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01169	134.1	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01132	134.0124	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00921	133.9322	P12:230:SPS:K59.1.POTTER.BSHLND
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	133.8302	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	133.8065	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01023	133.4651	P12:345:SPS:J15.1.XRDS.TOLK
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00888	133.4458	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00915	133.2039	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20L	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01101	132.2616	BASE CASE
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00912	132.1816	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01149	131.7193	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01231	131.58	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00898	131.107	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	131.0736	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01295	131.0648	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01189	130.4806	P12:230:SPS:K59.1.POTTER.BSHLND
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00783	130.1864	P12:230:SPS:K65.1.OASIS.SANJN
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	130.0736	CROSSROADS 7345.00 - G08-22 345.00 345KV CKT 1
25SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01017	130.0736	G08-22 345.00 345/34.5KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01175	129.4475	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00947	128.8846	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01038	128.7899	BASE CASE
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	128.0372	DBL-G1114-WWRD
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	128.0372	DBL-G1114-WWRD
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	128.0372	DBL-G1114-WWRD
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01182	127.7974	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	127.3161	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	127.3161	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	127.3161	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01108	126.9556	P12:230:SPS:K51.1.OASIS.RSVLT
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	125.7284	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	125.6882	NICHOLS STATION 230/22.0KV TRANSFORMER CKT 1
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00708	125.1361	P12:230:SPS:K38.1.CHAVES.EDDY_N
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00889	123.0969	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
17SP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01055	122.8302	BASE CASE
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00931	122.2407	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00862	121.9985	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01044	121.5426	Norton Switching Station - PLEASANT HILL 115KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00889	121.4246	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00874	118.3315	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00889	117.7362	AMARILLO SOUTH INTERCHANGE - G15031_T 230.00 230KV CKT 1
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00922	116.4435	DEAF SMITH COUNTY INTERCHANGE - G15039_T 230.00 230KV CKT 1
17G	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01012	114.7284	BASE CASE
16WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00799	114.045	BASE CASE
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	112.3182	P12:115:SPS:W51.1.NEWHART.CASTRO
20WP	06ALL	0		G15_099_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00778	100.278	BASE CASE
17G	06ALL	0	FROM->TO	G15_099_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.4	0.0247	105.0215	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	0	FROM->TO	G15_099_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.6	0.02694	103.3076	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	0	FROM->TO	G15_099_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.7	0.02713	102.697	P12:115:SPS:T08.2.SPRMN.PRNGLE
20WP	06ALL	0	FROM->TO	G15_099_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01066	107.0681	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_099_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01066	106.113	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_099_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01046	105.4613	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_099_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01046	104.5077	P12:230:AEPW:ELKCITY6:SWEETWT6
20SP	06ALL	0	FROM->TO	G15_099_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00932	116.6757	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	0	FROM->TO	G15_099_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00943	113.0103	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	0	FROM->TO	G15_099_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00987	108.361	P12:345:AEPW-GRDA:FLINTCR7:TONECE7

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	06ALL	0	FROM->TO	G15_099_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01045	103.8338	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	0	FROM->TO	G15_099_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.00995	100.8093	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	TO->FROM	G15_099_2	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00594	100.7771	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.00802	135.047	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.00802	135.047	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00802	135.0053	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00802	135.0053	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00804	131.5064	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00804	131.5064	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00804	131.3121	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00804	131.3121	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00793	121.8608	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00793	121.8608	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00793	121.7417	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00793	121.7417	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00751	120.2566	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00751	120.2566	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00751	119.9439	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00751	119.9439	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00847	117.5225	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.00847	117.5225	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00847	117.5016	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00847	117.5016	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00851	114.6333	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00851	114.6333	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00851	114.3419	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.00851	114.3419	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00802	135.1245	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00802	135.1245	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.00802	135.047	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.00802	135.047	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.00805	131.5072	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.00805	131.5072	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00805	131.4321	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00805	131.4321	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.9798	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.9798	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.7417	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00793	121.7417	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00751	120.2566	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00751	120.2566	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00751	119.9439	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00751	119.9439	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00847	117.5225	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.00847	117.5225	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00847	117.5016	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00847	117.5016	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00852	114.6342	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00852	114.6342	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.00852	114.4796	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_099_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.00852	114.4796	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	TO->FROM	G15_099_2	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.01266	100.5682	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_099_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.04615	105.8941	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	TO->FROM	G15_099_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.04615	101.4511	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.04615	115.0384	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.04615	114.5025	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.04615	110.2148	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.04615	109.7014	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.05501	103.6118	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.05501	103.5378	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05284	101.912	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_099_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05284	101.912	P12:345:SPS:J04.1.FINN.HOLC(534)

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	09ALL	0	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01021	107.8069	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01027	104.4984	FRANKS - HUBEN 345KV CKT 1
17SP	09ALL	0	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.00977	100.9033	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.7	0.01027	101.3106	FRANKS - HUBEN 345KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.6	0.01021	100.446	FRANKS - HUBEN 345KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.12674	129.4085	P12:115:MKEC:CONCORDIA-CLIFTON::
25SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12719	117.0483	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.12853	116.5258	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.12853	116.5258	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.12853	116.5258	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12699	115.1475	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12699	115.1475	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12699	115.1475	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.12853	113.1813	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12699	113.163	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12699	111.3989	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.12853	109.2794	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.08585	109.2635	KELLY - S1399 5 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.7	0.08794	108.9775	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12812	107.6044	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12812	107.6044	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12812	107.6044	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.08683	107.1252	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.12769	106.0358	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.12769	106.0358	P12:115:WERE:KNOB-MKEC_115::
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.12769	106.0358	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12812	104.6177	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.5	0.12769	103.4129	CLIFTON - GREENLEAF 115KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12779	101.8084	GREENLEAF - KNOB HILL 115KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12779	101.6978	P12:115:WERE:KNOB-MKEC_115::
20WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12779	101.6978	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.12812	101.0779	P12:115:MKEC:CONCORDIA-CLIFTON::
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12674	126.3773	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.12853	114.5678	GREENLEAF - KNOB HILL 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.12853	114.5678	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.12853	114.5678	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12699	114.2022	GREENLEAF - KNOB HILL 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.5	0.12719	114.1025	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12699	114.0916	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12699	114.0916	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12699	112.1004	CLIFTON - GREENLEAF 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.12853	111.2121	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12699	110.3305	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.08585	108.2987	KELLY - S1399 5 161KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.12853	107.2971	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.08794	106.9942	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	0.12812	105.854	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	0.12812	105.854	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	0.12812	105.854	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.08683	104.179	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12769	103.0884	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12769	102.979	P12:115:WERE:KNOB-MKEC_115::
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12769	102.979	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.1	0.12812	102.8573	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12769	100.3532	CLIFTON - GREENLEAF 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.00595	107.5368	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.00604	106.7876	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.00761	103.6064	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.00581	102.2533	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00965	108.7073	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01186	106.9707	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01203	106.919	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00965	106.6929	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01203	104.5305	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	104.4919	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	103.8612	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	103.4031	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	102.8275	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	101.7313	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
17G	09ALL	0	FROM->TO	G15_100	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	159.9	0.00757	113.5762	P12:230:SPS:K10.1.LUBBS.WOLFTH
25SP	09ALL	0	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01212	105.8188	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01377	103.678	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	0	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01389	102.9443	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01212	119.204	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01377	117.0632	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01389	116.3295	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01388	108.2877	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
20SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01395	107.9806	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01424	105.412	87th STREET - STRANGER CREEK 345KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01274	104.472	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01197	100.8313	GRAND AVENUE - GRAND AVENUE REACTOR 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01197	100.8313	GRAND AVENUE - NAVY 161KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01197	100.8313	GRAND AVENUE REACTOR - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01197	100.8313	NORTHEAST - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01197	100.8313	P12:161:KCPL:NORTHEAST-REACTORS-GRAND
25SP	09ALL	0	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.0141	100.1525	87th STREET - CRAIG 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	192	0.00934	110.6358	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	191.9	0.00959	104.1953	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.11831	102.0275	P12:115:WERE:MARS-SSEN_115::
20SP	09ALL	0	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.11831	101.9393	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.11831	100.9684	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.01131	113.0824	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.01131	101.2586	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1
17SP	09ALL	0	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01486	105.3036	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
17SP	09ALL	0	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01493	105.113	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.2	0.01136	115.1895	BASE CASE
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01136	114.7212	BASE CASE
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.8	0.01137	112.7134	BASE CASE
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01022	112.4705	BASE CASE
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01137	112.4299	BASE CASE
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01022	112.1209	BASE CASE
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01179	111.7498	BASE CASE
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01179	111.4032	BASE CASE
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01952	107.5591	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01952	107.3196	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01442	105.4779	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01934	105.3033	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01442	105.2215	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01934	105.1478	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01408	104.6559	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01476	104.5277	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01478	104.4339	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01408	104.4023	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01476	104.3741	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01478	104.2556	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01784	104.1396	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.02004	104.0833	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01517	104.0154	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01784	103.9621	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.02004	103.8821	HOSKINS - RAUN 345KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01346	103.8709	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01517	103.8382	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01346	103.6941	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.0114	102.6142	BASE CASE
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01432	102.5581	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.0114	102.5508	BASE CASE
17SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.011	102.4508	BASE CASE
16WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01432	102.4091	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.011	102.3876	BASE CASE
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01145	102.096	RASMUSN - SIOUX CITY 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01478	101.9273	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01145	101.851	RASMUSN - SIOUX CITY 230KV CKT 1
20WP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01478	101.7556	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01132	100.3156	BASE CASE
25SP	09ALL	0	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01132	100.2853	BASE CASE
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01063	107.5328	PLEASANT HILL (P HILL) 345/161/13.8KV TRANSFORMER CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.00917	106.7357	ECKLES - SIBLEYPL 161.00 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	103.7137	ORRICK - SIBLEYPL 161.00 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	103.2232	LEEDS - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	102.9952	ORRICK - RICHMOND 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	101.8312	P12:161:KCPL:WINCHESTERJCTN-LOMEVISTAE-LEEDS-SWOPEN
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	101.7863	LOMA VISTA EAST - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	0	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	101.3787	P12:161:GMO:SIBLEYPLANT-ORRICK-RICHMOND-LEXINGTON
17G	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63437	141.6234	DBL-CLRK-THIS
17G	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.8	0.62322	135.4667	DBL-G1524-WICH
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62368	135.1251	DBL-G1524-WICH
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62285	134.2701	DBL-G1524-WICH
20WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.62368	133.479	DBL-THIS-G1524
16WP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97	0.62285	132.5175	DBL-THIS-G1524
20WP	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.6	0.63353	128.6103	DBL-G1524-WICH
20L	09ALL	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.2	0.63351	127.3881	DBL-CLRK-THIS
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62494	126.2542	DBL-G1524-WICH
20L	09NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.1	0.62502	126.0581	DBL-G1524-WICH
17SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	96.8	0.62259	117.2632	DBL-G1524-WICH
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62323	115.2069	DBL-G1524-WICH
20SP	00NR	0	FROM->TO	G15_100	FAIRBURY - HARBINE 115KV CKT 1	97.9	0.62323	113.5726	DBL-THIS-G1524
20SP	09ALL	0	FROM->TO	G15_100	G13-002&019T115.00 - SW7&BENNET7 115.00 115KV CKT 1	240	0.13373	108.4782	P12:115:LES:L1099::FOLSOM&PLEASANTHILL.SHELDON.CKT1
16WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.5473	COOPER 345/22.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.3263	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.2385	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.2267	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.2151	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.1794	COOPER 345/22.0KV TRANSFORMER CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00719	118.6446	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00719	118.4176	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00719	118.4176	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00719	118.2049	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.0067	116.9911	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00677	116.7086	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.0068	116.0567	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.0073	116.0085	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00692	115.4631	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00692	115.4631	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00692	115.4631	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00679	114.9645	HANLON - STORLA 230KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00669	114.6083	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00716	114.0915	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00687	113.7037	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00687	113.7037	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.6893	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00687	113.2356	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00677	113.0354	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0065	110.9625	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0065	110.7486	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0065	110.7486	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0065	110.549	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.0073	109.6884	P13:014-115:GRIS:GSUPGS
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	109.5161	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	109.3863	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	109.331	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	109.331	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.0073	109.2861	BASE CASE
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	109.1601	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00599	109.1571	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0066	109.025	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00608	108.3316	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00646	108.3274	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00634	108.1545	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00696	108.0512	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00644	107.3587	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00609	107.3051	HANLON - STORLA 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00597	106.8895	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0066	106.3585	HANLON - STORLA 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00645	106.305	HANLON - STORLA 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0066	106.1589	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0065	106.0288	BUFFALO - JAMESTOWN 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00648	105.9429	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8795	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00633	105.8758	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8653	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0061	105.8366	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	105.6504	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00633	105.5981	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.4375	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00686	105.2155	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00696	105.1318	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00696	105.0036	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	104.9161	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00648	104.853	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00648	104.853	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00696	104.8185	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.8101	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00646	104.5963	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00648	104.4115	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.0066	102.1948	BASE CASE
25SP	00NR	0	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00696	101.2297	BASE CASE
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00719	117.8634	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00719	117.6402	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00719	117.6402	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00719	117.4171	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0067	116.2371	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00677	115.9454	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0068	115.3182	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0073	115.2568	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00692	114.7343	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00692	114.7343	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00692	114.7343	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00679	114.2439	HANLON - STORLA 230KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00669	113.8935	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00716	113.3853	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00687	113.0038	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00687	113.0038	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	112.9897	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00687	112.5435	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00677	112.3465	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0065	109.5968	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0065	109.3875	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0065	109.3875	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0065	109.1921	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0073	109.0547	P13:014-115:GRIS:GSUPGS
17SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0073	108.6589	BASE CASE
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	108.2748	RIEL - ROSEAU 500KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	108.0935	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	108.0935	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	108.0544	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	107.9261	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00599	107.8302	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0066	107.7009	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00646	107.1105	KELLY - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00608	107.0224	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00634	106.9411	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00696	106.8399	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00644	106.1616	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00609	106.018	HANLON - STORLA 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00597	105.6113	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00645	105.1296	HANLON - STORLA 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0066	105.0917	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0066	104.8963	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0065	104.7691	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00633	104.7091	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00648	104.685	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.623	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.623	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0061	104.581	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	104.3988	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00633	104.3616	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00633	104.3616	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	104.0624	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00696	103.9803	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00696	103.8548	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	103.7691	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00648	103.7073	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00648	103.7073	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00696	103.6735	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.6653	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00646	103.4559	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00648	103.2749	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.0066	101.0174	BASE CASE
25SP	00NR	0	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00696	100.1583	BASE CASE
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	126.3159	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	126.3159	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	122.5912	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	119.9397	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.4823	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.1667	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.1667	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00597	102.8513	OCHILTREE - TEXAS FARMS SUB 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00571	102.6422	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00597	100.8942	SPEARMAN SUB - TEXAS FARMS SUB 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00554	100.6091	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	118.8381	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	118.8381	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	115.1436	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	112.5137	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	101.1497	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	100.8992	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	100.8992	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01975	106.2015	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01975	106.2015	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01975	105.8091	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01975	105.8091	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00769	106.3406	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00769	106.3406	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00769	106.0149	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00769	106.0149	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02018	108.6841	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02018	108.6841	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02018	108.1825	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02018	108.1825	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00769	106.3406	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00769	106.3406	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00769	106.0149	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00769	106.0149	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	0	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	342.8	0.00798	109.7601	P12:230:SPS:K24.1.TUCO.CRLSLE
17G	09ALL	0	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	343.6	0.01184	100.457	JONES STATION 230/22.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12674	131.7435	P12:115:MKEC:CONCORDIA-CLIFTON::
25SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.12719	119.321	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12853	118.1172	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12853	118.1172	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12853	118.1172	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12699	116.3064	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12699	116.3064	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12699	116.3064	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12853	114.7876	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12699	114.3284	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12699	112.5701	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.12853	110.903	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.08794	110.6024	KELLY - S1399 5 161KV CKT 1
20L	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.08585	110.4418	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.08683	109.6179	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12812	109.1228	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12812	109.1228	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12812	109.1228	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12769	108.5309	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12769	108.5309	P12:115:WERE:KNOB-MKEC_115::
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12769	108.5309	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12812	106.146	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12769	105.9136	CLIFTON - GREENLEAF 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12779	103.346	GREENLEAF - KNOB HILL 115KV CKT 1
20WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12779	103.346	P12:115:WERE:KNOB-MKEC_115::
20WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12779	103.346	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12812	102.6179	P12:115:MKEC:CONCORDIA-CLIFTON::
17SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12839	101.6613	GREENLEAF - KNOB HILL 115KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12839	101.6613	P12:115:WERE:KNOB-MKEC_115::
17SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12839	101.6613	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.08749	101.3217	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.07054	101.0521	P12:161:WERE:TECH-KELL-OPPD_161::
20SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.07054	101.0521	P12:161:WERE-OPPD:S1399-KELLY
20WP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12779	100.2589	CLIFTON - GREENLEAF 115KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.08712	100.0598	KELLY - S1399 5 161KV CKT 1
16WP	00NR	0	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.6	0.00053	101.1982	COOPER 345/22.0KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.3	0.00052	100.4286	COOPER 345/22.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	NORTH PLATTE - STOCKVILLE 115KV CKT 1	136.6	0.01221	100.9994	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 1	268	0.01572	108.7263	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 2
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02885	124.8369	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02885	122.2374	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02885	122.1194	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02452	121.7669	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02825	121.4084	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02452	119.9674	G14-074T 345.00 - OKLAUNION 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02885	119.5982	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02452	119.2536	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02825	118.9031	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02452	117.4762	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	116.4801	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02335	116.1223	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02335	116.1223	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02335	116.1223	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02335	116.1223	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	115.9863	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	115.5058	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5789	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5471	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5471	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5471	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.1566	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	114.0845	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02335	113.7167	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02335	113.7167	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02335	113.7167	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02335	113.7167	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	113.6017	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3303	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3303	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3303	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	113.1139	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.2256	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1945	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1766	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1766	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.8127	P13:230-345:SPS:HITCHLAND.1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	103.0292	BASE CASE
25SP	09ALL	0	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	100.9151	BASE CASE
25SP	09ALL	0	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01091	106.4751	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	0	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01118	102.7412	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.01981	107.3317	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	0	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.01981	107.3317	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	0	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02019	100.5294	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	0	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02019	100.5294	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.01981	110.9416	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.01981	110.9416	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.01981	110.8466	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.01981	110.8466	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.02019	103.9063	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.02019	103.9063	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02019	103.8621	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02019	103.8621	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01993	103.3365	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01993	103.3365	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01993	103.2927	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01993	103.2927	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	09ALL	0	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.1	0.01323	106.1481	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20SP	09ALL	0	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.6	0.01323	105.0137	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.8	0.00959	102.8299	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.4	0.00959	101.3552	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20WP	00NR	0	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.9	0.00969	99.9322	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
25SP	09ALL	0	TO->FROM	G15_100	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	350.5	0.00595	101.5161	TUCO INTERCHANGE - YOAKUM_345 345.00 345KV CKT 1
17SP	09ALL	0	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	184.3	0.00506	106.7321	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	09ALL	0	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	186	0.00506	105.4877	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	00NR	0	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.01892	103.4128	G15074_T 345.00 - HOYT 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.02159	122.3774	TUCO INTERCHANGE - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	0	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	P13:230-345:SPS:TUCO_INT.1
25SP	09ALL	0	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	0	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00957	109.369	P13:230-345:SPS:TUCO_INT.2
25SP	09ALL	0	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00957	109.369	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
17G	09ALL	0	FROM->TO	G15_100	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	423.7	0.00993	100.2576	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
20SP	09ALL	2	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01019	107.8054	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01024	104.4962	FRANKS - HUBEN 345KV CKT 1
17SP	09ALL	2	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.00975	100.9018	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.7	0.01024	101.3084	FRANKS - HUBEN 345KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.6	0.01019	100.4445	FRANKS - HUBEN 345KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.12963	129.3183	P12:115:MKEC:CONCORDIA-CLIFTON::
25SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13007	116.9883	P12:115:MKEC:CONCORDIA-CLIFTON::

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.13141	116.2241	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.13141	116.2241	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.13141	116.2241	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12987	114.9773	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12987	114.9773	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12987	114.9773	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12987	112.9927	CLIFTON - GREENLEAF 115KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.13141	112.8833	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.12987	111.2287	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.0878	109.301	KELLY - S1399 5 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.13141	109.0971	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	89.8	0.0899	108.784	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.13101	107.435	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.13101	107.435	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.13101	107.435	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.08879	107.1559	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.08879	107.1559	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.13058	106.0804	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.13058	106.0804	P12:115:WERE:KNOB-MKEC_115::
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.13058	106.0804	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.13101	104.4482	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.6	0.13058	103.4603	CLIFTON - GREENLEAF 115KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.5	0.13067	101.5253	GREENLEAF - KNOB HILL 115KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.5	0.13067	101.5253	P12:115:WERE:KNOB-MKEC_115::
20WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.5	0.13067	101.5253	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	2	TO->FROM	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.4	0.13101	100.9084	P12:115:MKEC:CONCORDIA-CLIFTON::
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.12963	126.4285	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.13141	114.3951	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.13141	114.3951	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.13141	114.3951	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
25SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.5	0.13007	114.1529	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12987	113.9208	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12987	113.9208	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12987	113.9208	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12987	111.9296	CLIFTON - GREENLEAF 115KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.13141	111.0394	CLIFTON - GREENLEAF 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.12987	110.1597	P12:115:MKEC:CONCORDIA-CLIFTON::
20L	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.4	0.0878	108.2257	KELLY - S1399 5 161KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.13141	107.1244	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	89.4	0.0899	106.9217	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.13101	105.6776	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.13101	105.5667	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.13101	105.5667	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.08879	104.3269	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.13058	103.249	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.13058	103.1396	P12:115:WERE:KNOB-MKEC_115::
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.13058	103.1396	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	90.2	0.13101	102.5734	CLIFTON - GREENLEAF 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1	91.4	0.13058	100.5138	CLIFTON - GREENLEAF 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.00584	107.5258	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.00593	106.7766	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.0075	103.5953	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.0057	102.2423	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00964	108.707	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01184	106.97	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01202	106.9187	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00964	106.6926	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01202	104.5302	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00937	104.4915	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00937	103.8608	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00937	103.4027	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00937	102.8272	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00937	101.731	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
17G	09ALL	2	FROM->TO	G15_100	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	159.9	0.00758	113.577	P12:230:SPS:K10.1.LUBBS.WOLFTH
25SP	09ALL	2	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01208	105.817	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01371	103.6752	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	2	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01383	102.9415	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01208	119.2022	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01371	117.0604	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01383	116.3267	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01382	108.2849	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
20SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01389	107.9778	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.0142	105.4101	87th STREET - STRANGER CREEK 345KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.0127	104.4701	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01192	100.8289	GRAND AVENUE - GRAND AVENUE REACTOR 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01192	100.8289	GRAND AVENUE - NAVY 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01192	100.8289	GRAND AVENUE REACTOR - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01192	100.8289	NORTHEAST - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01192	100.8289	P12:161:KCPL:NORTHEAST-REACTORS-GRAND
25SP	09ALL	2	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01407	100.1511	87th STREET - CRAIG 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	192	0.00932	110.5825	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	191.9	0.00958	104.1947	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.12092	102.0392	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.12092	102.0392	P12:115:WERE:MARS-SSEN_115::

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	09ALL	2	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.3	0.12092	101.0683	BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.01127	113.0805	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.01127	101.2567	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1
17SP	09ALL	2	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01479	105.3003	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
17SP	09ALL	2	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01486	105.1098	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.2	0.01118	115.2129	BASE CASE
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01118	114.7148	BASE CASE
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.8	0.0112	112.7073	BASE CASE
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01004	112.4641	BASE CASE
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.0112	112.4238	BASE CASE
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01004	112.1145	BASE CASE
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01161	111.7433	BASE CASE
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01161	111.3968	BASE CASE
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01921	107.5741	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01921	107.3108	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01424	105.4727	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01903	105.2944	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01424	105.2402	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01903	105.1389	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01389	104.6505	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01458	104.5226	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.0146	104.4287	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01389	104.4207	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01458	104.3689	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.0146	104.2505	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01753	104.1546	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01973	104.0744	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01498	104.0099	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01753	103.9771	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01973	103.897	HOSKINS - RAUN 345KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01327	103.8655	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01498	103.8328	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01327	103.6887	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01122	102.6077	BASE CASE
20SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01122	102.5741	BASE CASE
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01413	102.5526	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01082	102.4444	BASE CASE
16WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01413	102.4037	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01082	102.3812	BASE CASE
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01125	102.0903	RASMUSN - SIOUX CITY 230KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01458	101.9455	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01125	101.869	RASMUSN - SIOUX CITY 230KV CKT 1
20WP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01458	101.7737	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01114	100.3389	BASE CASE
25SP	09ALL	2	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01114	100.2789	BASE CASE
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01061	107.5317	PLEASANT HILL (P HILL) 345/161/13.8KV TRANSFORMER CKT 1
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.00915	106.7346	ECKLES - SIBLEYPL 161.00 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01141	103.7132	ORRICK - SIBLEYPL 161.00 161KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01064	103.2226	LEEDS - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01141	102.9947	ORRICK - RICHMOND 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01064	101.8306	P12:161:KCPL:WINCHESTERJCTN-LOMEVISTAE-LEEDS-SWOPEN
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01064	101.7857	LOMA VISTA EAST - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	2	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01141	101.3782	P12:161:GMO:SIBLEYPLANT-ORRICK-RICHMOND-LEXINGTON
20SP	09ALL	2	FROM->TO	G15_100	G13-002&019T115.00 - SW7&BENNET7 115.00 115KV CKT 1	240	0.13604	108.427	P12:115:LES:L1099::FOLSOM&PLEASANTHILL.SHELDON.CKT1
16WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00183	110.5472	COOPER 345/22.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00183	110.3262	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00183	110.2383	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00183	108.2266	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
20WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00183	108.2148	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	2	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00183	108.1792	COOPER 345/22.0KV TRANSFORMER CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00756	118.6509	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00756	118.4239	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00756	118.4239	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00756	118.2112	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00705	116.997	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00715	116.7151	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00716	116.0629	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00767	116.0148	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00728	115.4692	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00728	115.4692	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00728	115.4692	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00715	114.9706	HANLON - STORLA 230KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00704	114.6142	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00752	114.0976	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00723	113.7098	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00723	113.7098	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00722	113.6954	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00723	113.2418	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00715	113.0418	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00686	110.9687	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00686	110.7548	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00686	110.7548	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00686	110.5551	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00767	109.6947	P13:014-115:GRIS:GSUPGS
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00722	109.5224	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00644	109.393	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00722	109.3515	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00722	109.3515	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00767	109.2924	BASE CASE
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00722	109.1664	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00634	109.1631	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00697	109.0313	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00644	108.3378	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	108.3339	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.0067	108.1606	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00732	108.0573	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00679	107.3647	STORLA - WESSINGTON 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00645	107.3113	HANLON - STORLA 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00633	106.8957	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00697	106.3791	HANLON - STORLA 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.0068	106.311	HANLON - STORLA 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00697	106.1652	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00687	106.0351	BUFFALO - JAMESTOWN 345KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00685	105.9492	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00668	105.896	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00648	105.8859	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00648	105.8859	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00647	105.8429	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00644	105.657	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00669	105.6043	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00648	105.4438	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00723	105.2218	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00732	105.1379	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00732	105.0098	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00721	104.9366	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	104.8591	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	104.8591	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00732	104.8246	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00683	104.8162	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	104.6028	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	104.4177	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00697	102.2011	BASE CASE
25SP	00NR	2	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00732	101.2359	BASE CASE
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00756	117.8696	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00756	117.6464	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00756	117.6464	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00756	117.4232	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00705	116.243	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00715	115.9517	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00716	115.3242	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00767	115.263	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00728	114.7403	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00728	114.7403	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00728	114.7403	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00715	114.25	HANLON - STORLA 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00704	113.8994	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00752	113.3913	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00723	113.0098	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00723	113.0098	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00722	112.9957	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00767	112.7103	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00723	112.5356	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00715	112.3529	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00686	109.6028	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00686	109.4074	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00686	109.4074	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00686	109.1982	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00767	108.6651	BASE CASE
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00722	108.281	RIEL - ROSEAU 500KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00722	108.1136	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00722	108.1136	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00644	108.0609	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00722	107.9323	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00634	107.836	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00697	107.707	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	107.1169	KELLY - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00644	107.0284	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0067	106.9471	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	106.8459	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00679	106.1675	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00645	106.024	HANLON - STORLA 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00633	105.6174	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.0068	105.1354	HANLON - STORLA 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00697	105.1118	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00697	104.9025	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00687	104.7753	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00668	104.7289	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00685	104.6912	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00648	104.6292	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00648	104.6292	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00647	104.5872	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00644	104.4053	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00669	104.3676	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00669	104.3676	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00723	104.0686	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	103.9864	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	103.8608	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00721	103.7893	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	103.7133	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	103.7133	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	103.6795	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00683	103.6713	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	103.5121	G15_023_1 345.00 345/34.5KV TRANSFORMER CKT 1
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	103.4622	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00697	101.0236	BASE CASE
25SP	00NR	2	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00732	100.1644	BASE CASE
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00736	126.3152	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00736	126.3152	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00736	122.5904	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00736	119.9389	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00529	108.4816	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00529	108.1659	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00529	108.1659	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00596	102.8505	OCHILTREE - TEXAS FARMS SUB 115KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0057	102.6414	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00596	100.8934	SPEARMAN SUB - TEXAS FARMS SUB 115KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00553	100.6083	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00736	118.8373	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00736	118.8373	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00736	115.2055	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00736	112.513	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00529	101.1489	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00529	100.8984	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00529	100.8984	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01971	106.2007	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01971	106.2007	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01971	105.8083	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01971	105.8083	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00767	106.3397	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00767	106.3397	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00767	106.0488	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00767	106.0488	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02014	108.6833	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02014	108.6833	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02014	108.1817	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02014	108.1817	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00767	106.3397	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00767	106.3397	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00767	106.0488	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00767	106.0488	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	2	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	342.8	0.00799	109.7604	P12:230:SPS:K24.1.TUCO.CRLSLE
17G	09ALL	2	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	343.6	0.01185	100.4574	JONES STATION 230/22.0KV TRANSFORMER CKT 1
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.12963	131.9036	P12:115:MKEC:CONCORDIA-CLIFTON::
25SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.13007	119.2612	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.13141	117.9458	GREENLEAF - KNOB HILL 115KV CKT 1
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.13141	117.9458	P12:115:WERE:KNOB-MKEC_115::
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.13141	117.9458	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12987	116.1367	GREENLEAF - KNOB HILL 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12987	116.0268	P12:115:WERE:KNOB-MKEC_115::
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12987	116.0268	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.13141	114.6162	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12987	114.1587	CLIFTON - GREENLEAF 115KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.12987	112.4004	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.13141	110.8426	P12:115:MKEC:CONCORDIA-CLIFTON::
17G	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.1	0.0899	110.5305	KELLY - S1399 5 161KV CKT 1
20L	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91	0.0878	110.3692	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.08879	109.7653	KELLY - S1399 5 161KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13101	108.9539	GREENLEAF - KNOB HILL 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13101	108.9539	P12:115:WERE:KNOB-MKEC_115::
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13101	108.9539	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.13058	108.691	GREENLEAF - KNOB HILL 115KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.13058	108.691	P12:115:WERE:KNOB-MKEC_115::

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.13058	108.691	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.13058	106.0737	CLIFTON - GREENLEAF 115KV CKT 1
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13101	105.9771	CLIFTON - GREENLEAF 115KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13067	103.1758	GREENLEAF - KNOB HILL 115KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13067	103.1758	P12:115:WERE:KNOB-MKEC_115::
20WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13067	103.1758	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13101	102.449	P12:115:MKEC:CONCORDIA-CLIFTON::
17SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13127	101.6013	GREENLEAF - KNOB HILL 115KV CKT 1
17SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13127	101.4911	P12:115:WERE:KNOB-MKEC_115::
17SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13127	101.4911	P12:115:WERE-MKEC:CLIFTON-KNOBHILL::
16WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.08944	101.249	KELLY - S1399 5 161KV CKT 1
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.07212	101.1498	P12:161:WERE:TECH-KELL-OPPD_161::
20SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	91.7	0.07212	101.1498	P12:161:WERE-OPPD:S1399-KELLY
25SP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.9	0.08907	100.2073	KELLY - S1399 5 161KV CKT 1
20WP	09ALL	2	FROM->TO	G15_100	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1	90.7	0.13067	100.0886	CLIFTON - GREENLEAF 115KV CKT 1
16WP	00NR	2	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.6	0.00055	101.1993	COOPER 345/22.0KV TRANSFORMER CKT 1
20WP	00NR	2	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.3	0.00054	100.4297	COOPER 345/22.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	NORTH PLATTE - STOCKVILLE 115KV CKT 1	136.6	0.01206	100.9862	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
17SP	09ALL	2	FROM->TO	G15_100	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 1	268	0.01568	108.7245	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 2
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02881	124.8361	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02881	122.2544	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02881	122.1185	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02448	121.7844	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0282	121.4073	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02448	119.9665	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02881	119.5974	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02448	119.2527	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0282	118.902	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02448	117.4933	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	116.4792	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02331	116.1214	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02331	116.1214	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02331	116.1214	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02331	116.1214	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	115.9854	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	115.5049	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	114.5964	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	114.546	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	114.546	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	114.546	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	114.1557	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	114.0836	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02331	113.7338	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02331	113.7338	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02331	113.7338	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02331	113.7338	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	113.6008	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	113.3478	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	113.3294	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	113.3294	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	113.131	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	112.2248	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	112.1935	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	112.1935	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	112.1935	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	111.8119	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	111.004	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	111.004	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	111.004	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.0241	103.0283	BASE CASE
25SP	09ALL	2	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.0241	100.9321	BASE CASE
25SP	09ALL	2	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01089	106.4493	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	2	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01116	102.7406	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.01991	107.3139	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	2	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.01991	107.3139	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	2	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02029	100.5319	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	2	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02029	100.5319	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.01991	110.9232	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.01991	110.9232	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.01991	110.8492	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.01991	110.8492	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02029	103.8871	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02029	103.8871	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02029	103.8646	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02029	103.8646	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.02003	103.339	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.02003	103.339	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02003	103.2952	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02003	103.2952	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	09ALL	2	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.1	0.01332	106.1677	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20SP	09ALL	2	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.6	0.01332	104.8532	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.8	0.00967	102.8474	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.4	0.00967	101.3726	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20WP	00NR	2	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.9	0.00977	100.1319	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
25SP	09ALL	2	TO->FROM	G15_100	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	350.5	0.00595	101.5161	TUCO INTERCHANGE - YOAKUM_345 345.00 345KV CKT 1
17SP	09ALL	2	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	184.3	0.00506	106.7321	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	09ALL	2	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	186	0.00506	105.4877	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	00NR	2	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.01938	103.4205	G15074_T 345.00 - HOYT 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.02158	122.377	TUCO INTERCHANGE - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	2	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	P13:230-345:SPS:TUCO_INT.1
25SP	09ALL	2	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	2	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00958	109.3693	P13:230-345:SPS:TUCO_INT.2
25SP	09ALL	2	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00958	109.3693	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
17G	09ALL	2	FROM->TO	G15_100	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	423.7	0.00994	100.2579	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
20SP	09ALL	3	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01021	107.8069	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.01026	104.4977	FRANKS - HUBEN 345KV CKT 1
17SP	09ALL	3	TO->FROM	G15_100	5SCROCKR 161.00 - FRANKS 161KV CKT 1	163	0.00977	100.9033	FRANKS - HUBEN 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.7	0.01026	101.3099	FRANKS - HUBEN 345KV CKT 1
20SP	09ALL	3	FROM->TO	G15_100	5SCROCKR 161.00 - LEBANON 161KV CKT 1	162.6	0.01021	100.446	FRANKS - HUBEN 345KV CKT 1
16WP	09ALL	3	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.00595	107.6204	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20WP	09ALL	3	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.00604	106.7876	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
20L	09ALL	3	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.6	0.00761	103.6064	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
17G	09ALL	3	FROM->TO	G15_100	BLOOMFIELD - GAVINS POINT 115KV CKT 1	119.7	0.00581	102.2533	ANTELOPE 3345.00 - HOSKINS 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00965	108.7073	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01186	106.9707	NEWHART 230 - POTTER COUNTY INTERCHANGE 230KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01202	106.9187	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00965	106.6929	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.01202	104.5302	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	104.4919	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	103.8612	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	103.4031	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	102.8275	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	BUSHLAND INTERCHANGE - POTTER COUNTY INTERCHANGE 230KV CKT 1	347.5	0.00938	101.7313	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
17G	09ALL	3	FROM->TO	G15_100	CARLISLE INTERCHANGE - LP-DOUD_TP 3115.00 115KV CKT 1	159.9	0.00757	113.5762	P12:230:SPS:K10.1.LUBBS.WOLFTH
25SP	09ALL	3	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01211	105.8184	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01376	103.6775	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	3	FROM->TO	G15_100	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1	257	0.01388	102.9438	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01211	119.2036	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01376	117.0627	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01388	116.329	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01386	108.2867	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
20SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01394	107.9414	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01423	105.4115	87th STREET - STRANGER CREEK 345KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257.8	0.01273	104.4715	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01196	100.8308	GRAND AVENUE - GRAND AVENUE REACTOR 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01196	100.8308	GRAND AVENUE - NAVY 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01196	100.8308	GRAND AVENUE REACTOR - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01196	100.8308	NORTHEAST - NORTHEAST REACTOR 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01196	100.8308	P12:161:KCPL:NORTHEAST-REACTORS-GRAND
25SP	09ALL	3	TO->FROM	G15_100	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1	257	0.01409	100.1132	87th STREET - CRAIG 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	192	0.00934	110.5837	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	CLARKSVILLE - DARDANELLE 161KV CKT 1	191.9	0.00959	104.1953	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	3	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.4	0.11795	101.3704	MARSHAL3 115.00 - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1
20SP	09ALL	3	FROM->TO	G15_100	CLIFTON - CONCORDIA 115KV CKT 1	113.4	0.11795	101.3704	P12:115:WERE:MARS-SSEN_115::
25SP	09ALL	3	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.0113	113.0433	CHARLOT5 161.00 - NORTHEAST 161KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	CROSSTOWN - GRAND AVENUE WEST 161KV CKT 1	258.8	0.0113	101.2581	CHARLOT5 161.00 - CROSSTOWN 161KV CKT 1
17SP	09ALL	3	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01484	105.3414	P12:161:KCPL:NORTHEAST-GRANDAVEW-NAVY
17SP	09ALL	3	TO->FROM	G15_100	CROSSTOWN - NORTHEAST 161KV CKT 1	258	0.01492	105.1125	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.2	0.01134	115.2187	BASE CASE
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01134	114.7502	BASE CASE
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.8	0.01136	112.713	BASE CASE
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01021	112.4702	BASE CASE
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01136	112.4295	BASE CASE
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01021	112.1504	BASE CASE
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	334.6	0.01177	111.779	BASE CASE
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	336	0.01177	111.4323	BASE CASE
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.0195	107.6063	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.0195	107.3428	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01441	105.5015	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01932	105.3266	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01441	105.245	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01932	105.1711	HOSKINS - RAUN 345KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01407	104.6795	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01474	104.551	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01477	104.4336	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01407	104.4258	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01474	104.3973	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01477	104.2553	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01782	104.1868	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.02002	104.1066	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01515	104.0387	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01782	104.0091	HOSKINS - RAUN 345KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.02002	103.9292	HOSKINS - RAUN 345KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01345	103.8945	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01515	103.8614	BELDEN 4 230.00 - DIXONCO 230.00 230KV CKT 1
20L	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01345	103.7176	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01139	102.6138	BASE CASE
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	419	0.01431	102.5817	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01139	102.5802	BASE CASE
17SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.01099	102.4504	BASE CASE

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01431	102.4327	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.01099	102.417	BASE CASE
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.6	0.01144	102.1196	RASMUSN - SIOUX CITY 230KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	418.9	0.01476	101.9506	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01144	101.8983	RASMUSN - SIOUX CITY 230KV CKT 1
20WP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	420	0.01476	101.7789	BELDEN 4 230.00 - RASMUSN 230KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.4	0.0113	100.3447	BASE CASE
25SP	09ALL	3	TO->FROM	G15_100	DIXONCO 3 345.00 (DIXON1) 345/230/13.8KV TRANSFORMER CKT 1	335.9	0.0113	100.2846	BASE CASE
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01063	107.5328	PLEASANT HILL (P HILL) 345/161/13.8KV TRANSFORMER CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.00917	106.7357	ECKLES - SIBLEYPL 161.00 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	103.7137	ORRICK - SIBLEYPL 161.00 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	103.2232	LEEDS - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	102.9952	ORRICK - RICHMOND 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	101.8312	P12:161:KCPL:WINCHESTERJCTN-LOMEVISTAE-LEEDS-SWOPEN
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01065	101.7863	LOMA VISTA EAST - WINCHESTER JUNCTION NORTH 161KV CKT 1
17G	09ALL	3	TO->FROM	G15_100	DUNCAN ROAD - SIBLEYPL 161.00 161KV CKT 1	222.7	0.01142	101.3787	P12:161:GMO:SIBLEYPLANT-ORRICK-RICHMOND-LEXINGTON
20SP	09ALL	3	FROM->TO	G15_100	G13-002&019T115.00 - SW7&BENNET7 115.00 115KV CKT 1	240	0.13321	108.1605	P12:115:LES:L1099::FOLSOM&PLEASANTHILL.SHELDON.CKT1
16WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.5473	COOPER 345/22.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.3263	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.2385	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.2267	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
20WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.215	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	3	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.1794	COOPER 345/22.0KV TRANSFORMER CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.6444	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.4316	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.4316	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.2047	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00669	117.0051	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00676	116.7084	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00679	116.0566	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	116.0083	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00678	114.9785	HANLON - STORLA 230KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00667	114.6079	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00715	114.1055	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.7177	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.7035	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00684	113.7031	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.2355	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00676	113.0352	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.9623	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.7627	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.7627	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.5488	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	109.6883	P13:014-115:GRIS:GSUPGS
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.5159	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	109.3863	KELLY - MEADOWGROVE4230.00 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.345	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.345	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	109.2859	BASE CASE
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.1599	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00598	109.1569	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	109.0248	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00607	108.3314	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00645	108.3273	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00633	108.1543	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	108.051	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00643	107.3585	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00608	107.305	HANLON - STORLA 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00596	106.8894	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	106.3726	HANLON - STORLA 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00644	106.3049	HANLON - STORLA 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	106.1587	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	106.0286	BUFFALO - JAMESTOWN 345KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00647	105.9427	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00632	105.8898	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8795	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8795	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00609	105.8364	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	105.6504	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00632	105.6122	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.4375	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	105.2153	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	105.1316	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	105.0034	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00683	104.9159	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.8528	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.8528	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	104.8183	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00646	104.8099	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00645	104.5819	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.4113	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	102.1946	BASE CASE
25SP	00NR	3	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	101.2296	BASE CASE
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.8632	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.6401	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.6401	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.4308	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00669	116.237	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00676	115.9592	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00679	115.318	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	115.2706	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00678	114.2438	HANLON - STORLA 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00667	113.8932	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00715	113.3851	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	113.0036	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	113.0036	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	113.0033	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	112.5433	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00676	112.3464	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.5966	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.4013	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.4013	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.192	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	109.0545	P13:014-115:GRIS:GSUPGS
17SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	108.6588	BASE CASE
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.2746	RIEL - ROSEAU 500KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.0933	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.0933	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	108.0544	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	107.9259	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00598	107.83	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	107.7007	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00645	107.1103	KELLY - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00607	107.0222	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00633	106.9409	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	106.8397	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00643	106.1615	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00608	106.0178	HANLON - STORLA 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00596	105.6112	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00644	105.1294	HANLON - STORLA 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	105.1054	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	104.8961	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	104.7689	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00632	104.7089	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00647	104.6849	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.637	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.623	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00609	104.5808	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	104.3988	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00632	104.3614	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00632	104.3614	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	104.0622	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.9802	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.8546	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00683	103.7689	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.7071	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.7071	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.6733	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00646	103.6651	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00645	103.4417	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.2747	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	101.0173	BASE CASE
25SP	00NR	3	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	100.1582	BASE CASE
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	126.3159	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	126.3159	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	122.5912	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00737	119.9397	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.4823	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.1667	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.0053	108.1667	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00597	102.8513	OCHILTREE - TEXAS FARMS SUB 115KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00571	102.6422	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00597	100.8942	SPEARMAN SUB - TEXAS FARMS SUB 115KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hansford County Switch Station - SPEARMAN INTERCHANGE 115KV CKT 1	158.4	0.00554	100.6091	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	118.8381	P13:230-345:SPS:POTTER_CO.1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	118.8381	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	115.2063	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.00737	112.5137	G14_038T 345.00 - Hitchland Interchange 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	101.1497	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	100.8992	OCHILTREE (H TP80219401) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE - Hansford County Switch Station 115KV CKT 1	159.7	0.0053	100.8992	P13:115-230:SPS:OCHILTREE.1
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01974	106.2013	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	641.3	0.01974	106.2013	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01974	105.8089	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1	643.3	0.01974	105.8089	P13:230-345:SPS:HITCHLAND.2
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00768	106.3402	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	287.4	0.00768	106.3402	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00768	106.0144	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1	288	0.00768	106.0144	P13:115-230:SPS:HITCHLAND.2
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02018	108.6841	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	640.5	0.02018	108.6841	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02018	108.1825	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	Hitchland Interchange (SIEM 8743067) 345/230/13.2KV TRANSFORMER CKT 2	643.1	0.02018	108.1825	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00768	106.3402	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	287.4	0.00768	106.3402	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00768	106.0144	HITCHLAND INTERCHANGE (H TP80148301) 230/115/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	HITCHLAND INTERCHANGE (UPDATE LATER) 230/115/13.2KV TRANSFORMER CKT 2	288	0.00768	106.0144	P13:115-230:SPS:HITCHLAND.1
25SP	09ALL	3	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	342.8	0.00798	109.7601	P12:230:SPS:K24.1.TUCO.CRLSLE
17G	09ALL	3	TO->FROM	G15_100	JONES STATION - TUCO INTERCHANGE 230KV CKT 1	343.6	0.01184	100.457	JONES STATION 230/22.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.6	0.00053	101.1982	COOPER 345/22.0KV TRANSFORMER CKT 1
20WP	00NR	3	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.3	0.00052	100.4292	COOPER 345/22.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	NORTH PLATTE - STOCKVILLE 115KV CKT 1	136.6	0.01222	101.0003	GERALD GENTLEMAN STATION - RED WILLOW 345KV CKT 1
17SP	09ALL	3	FROM->TO	G15_100	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 1	268	0.01571	108.7631	OTTUMWA - WAPELLO COUNTY NO1 + NO 2 + N 161KV CKT 2
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02884	124.8367	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02884	122.2551	BORDER 7345.00 - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02884	122.1191	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02451	121.785	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02825	121.4084	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02451	119.9672	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02884	119.598	BORDER 7345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02451	119.2534	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02825	118.9031	P12:230:SPS:K75.1.HITCH.MOORE
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02451	117.4939	G14-074T 345.00 - OKLAUNION 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	116.4798	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02334	116.1221	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02334	116.1221	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02334	116.1221	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02334	116.1221	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	116.0046	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	115.5056	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5973	G14_038T 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5469	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5469	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.5469	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	114.1566	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	114.0842	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02334	113.7344	P12:230:AEPW-SPS:SWEETWT6:WHEELER 6
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02334	113.7344	P12:230:SPS:K74.1.WEELR.SWT(520)
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02334	113.7344	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02334	113.7344	STLN-DEMARC6 - SWEETWATER 230KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	113.6017	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3487	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3303	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	113.3303	GRAND AVENUE WEST - NORTHEAST 161KV CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	113.1316	Golden Spread REC - Mustang Interchange 230 kV Generation Bus - MUSTANG STATION 230KV CKT @1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.2256	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1943	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1943	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	112.1943	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.8127	P13:230-345:SPS:HITCHLAND.1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	Hitchland Interchange (H TB80155502) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	111.0048	P12:230:SPS:K76.1.HITCH.OCLTRE
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	544.6	0.02414	103.0292	BASE CASE
25SP	09ALL	3	FROM->TO	G15_100	POTTER COUNTY INTERCHANGE (WAUK 90343-A) 345/230/13.2KV TRANSFORMER CKT 1	557	0.02414	100.933	BASE CASE
25SP	09ALL	3	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01091	106.4499	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
20SP	09ALL	3	TO->FROM	G15_100	RUSSELLVILLE EAST - RUSSELLVILLE NORTH 161KV CKT 1	395.5	0.01118	102.7412	ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.0198	107.3112	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	3	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.0198	107.3112	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	3	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02017	100.529	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	3	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02017	100.529	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.0198	110.9204	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.0198	110.9204	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.0198	110.8464	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.0198	110.8464	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02017	103.8841	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02017	103.8841	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02017	103.8616	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02017	103.8616	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01992	103.3362	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01992	103.3362	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01992	103.2924	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01992	103.2924	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	09ALL	3	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.1	0.01314	106.1285	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20SP	09ALL	3	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.6	0.01314	104.9942	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.8	0.00949	102.808	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.4	0.00949	101.5141	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
20WP	00NR	3	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.9	0.00959	100.0925	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
25SP	09ALL	3	TO->FROM	G15_100	SUNDOWN INTERCHANGE - WOLFFORTH INTERCHANGE 230KV CKT 1	350.5	0.00595	101.5161	TUCO INTERCHANGE - YOAKUM_345 345.00 345KV CKT 1
17SP	09ALL	3	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	184.3	0.00506	106.7321	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	09ALL	3	FROM->TO	G15_100	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	186	0.00506	105.4877	P12:230:SPS:K03.1.SUNDWN.WOLFTH
17SP	00NR	3	FROM->TO	G15_100	SWISSVALE - WEST GARDNER 345KV CKT 1	714.1	0.01888	103.3701	G15074_T 345.00 - HOYT 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.02159	122.3774	TUCO INTERCHANGE - TUCO_2 345.00 345KV CKT 1
25SP	09ALL	3	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	P13:230-345:SPS:TUCO_INT.1
25SP	09ALL	3	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00987	116.6917	TUCO INTERCHANGE (GE M1022338) 345/230/13.2KV TRANSFORMER CKT 1
25SP	09ALL	3	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00957	109.369	P13:230-345:SPS:TUCO_INT.2
25SP	09ALL	3	TO->FROM	G15_100	TUCO INTERCHANGE - TUCO_2 230.00 230KV CKT 1	337.8	0.00957	109.369	TUCO INTERCHANGE (SIEM 8743066) 345/230/13.2KV TRANSFORMER CKT 2
17G	09ALL	3	FROM->TO	G15_100	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	423.7	0.00992	100.2573	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
16WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.5473	COOPER 345/22.0KV TRANSFORMER CKT 1
16WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.3263	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
16WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.9	-0.00182	110.2385	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1
20WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.2267	GERALD GENTLEMAN STATION 230/23.0KV TRANSFORMER CKT 1
20WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.215	GERALD GENTLEMAN STATION 345/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	00NR	4	FROM->TO	G15_100	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1	788.3	-0.00182	108.1794	COOPER 345/22.0KV TRANSFORMER CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.6444	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.4316	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.4316	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00718	118.2047	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00669	117.0051	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00676	116.7084	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00679	116.0566	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	116.0083	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00691	115.4771	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00678	114.9785	HANLON - STORLA 230KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00667	114.6079	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00715	114.1055	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.7177	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.7035	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00684	113.7031	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00686	113.2355	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00676	113.0352	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.9623	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.7627	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.7627	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	110.5488	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	109.6883	P13:014-115:GRIS:GSUPGS
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.5159	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	109.3863	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.345	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.345	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	705.1	0.00729	109.2859	BASE CASE
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00684	109.1599	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00598	109.1569	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	109.0248	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00607	108.3314	STORLA - WESSINGTON 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00645	108.3273	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00633	108.1543	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	108.051	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00643	107.3585	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00608	107.305	HANLON - STORLA 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00596	106.8894	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	106.3726	HANLON - STORLA 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00644	106.3049	HANLON - STORLA 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	106.1587	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00649	106.0286	BUFFALO - JAMESTOWN 345KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00647	105.9427	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00632	105.8898	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8795	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.8795	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00609	105.8364	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00605	105.6504	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00632	105.6122	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00611	105.4375	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00685	105.2153	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	105.1316	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	105.0034	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00683	104.9159	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.8528	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.8528	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	104.8183	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00646	104.8099	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00645	104.5819	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00647	104.4113	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	701.3	0.00659	102.1946	BASE CASE
25SP	00NR	4	FROM->TO	G15_100	GRPRAR1-LNX3345.00 - HOLT.CO3 345.00 345KV CKT 1	702.2	0.00695	101.2296	BASE CASE
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.8632	RIEL - ROSEAU 500KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.6401	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.6401	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00718	117.4308	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00669	116.237	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00676	115.9592	KELLY - MEADOWGROVE4230.00 230KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00679	115.318	STORLA - WESSINGTON 230KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	115.2706	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	P12:345:UMZW:# 1747 #: WT2 IN SD. WT2-WHT LINE FAULT
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00691	114.7342	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00678	114.2438	HANLON - STORLA 230KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00667	113.8932	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00715	113.3851	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	113.0036	FT RANDAL - G12_009IST 230.00 230KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	113.0036	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	113.0033	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00686	112.5433	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00676	112.3464	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.5966	RIEL - ROSEAU 500KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.4013	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.4013	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	109.192	FORBES - ROSEAU 500KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	109.0545	P13:014-115:GRIS:GSUPGS
17SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00729	108.6588	BASE CASE
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.2746	RIEL - ROSEAU 500KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.0933	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	108.0933	ROSEAU - ROSEAUM 2 500.00 500KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	108.0544	KELLY - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00684	107.9259	FORBES - ROSEAU 500KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00598	107.83	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	107.7007	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00645	107.1103	KELLY - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00607	107.0222	STORLA - WESSINGTON 230KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00633	106.9409	P12:230:UMZB:# 116 #: ST IN SD. WSG-ST-VH
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	106.8397	G15_023_1 345.00 - HOLT.CO3 345.00 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00643	106.1615	STORLA - WESSINGTON 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00608	106.0178	HANLON - STORLA 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00596	105.6112	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00644	105.1294	HANLON - STORLA 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	105.1054	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	104.8961	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00649	104.7689	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00632	104.7089	P12:230:UMZW:# 737 #: FT IN SD. FT-LET LINE FAULT
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00647	104.6849	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.637	FT RANDAL - G12_009IST 230.00 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00611	104.623	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00609	104.5808	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00605	104.3988	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00632	104.3614	WATERTN-LNX3345.00 - WATERTOWN 345KV CKT Z
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00632	104.3614	WATERTN-LNX3345.00 - WHITE 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00685	104.0622	BUFFALO - JAMESTOWN 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.9802	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.8546	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00683	103.7689	G09_001IST 345.00 - WATERTOWN 345KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.7071	FT RANDAL - G12_009IST 230.00 230KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.7071	P12:230:UMZW:# 739 #: FT IN SD. FT-LP LINE FAULT
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	103.6733	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00646	103.6651	P12:230:UMZW:# 738 #: FT IN SD. FT-FR LINE FAULT
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00645	103.4417	FT RANDAL - MEADOWGROVE4230.00 230KV CKT 1
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00647	103.2747	G12_009IST 230.00 - LAKE PLATT 230KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.7	0.00659	101.0173	BASE CASE
25SP	00NR	4	TO->FROM	G15_100	GRPRAR1-LNX3345.00 - YANKTON 345KV CKT Z	716.9	0.00695	100.1582	BASE CASE
16WP	00NR	4	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.6	0.00053	101.1982	COOPER 345/22.0KV TRANSFORMER CKT 1
20WP	00NR	4	FROM->TO	G15_100	NEOSHO - SUB 452 - RIVERTON 161KV CKT 1	222.3	0.00052	100.4292	COOPER 345/22.0KV TRANSFORMER CKT 1
17SP	00NR	4	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.0198	107.3112	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	4	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	494.8	0.0198	107.3112	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	4	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02017	100.529	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	4	TO->FROM	G15_100	SIDNEY - SIDNEY TRANSFORMER 230KV CKT 1	495.4	0.02017	100.529	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.0198	110.9204	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	478.7	0.0198	110.9204	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
17SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.0198	110.8464	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
17SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.2	0.0198	110.8464	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02017	103.8841	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.4	0.02017	103.8841	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
20SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02017	103.8616	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
20SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.02017	103.8616	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01992	103.3362	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.3	0.01992	103.3362	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
25SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01992	103.2924	KEYSTONE - SIDNEY1-LNX3345.00 345KV CKT 1
25SP	00NR	4	FROM->TO	G15_100	SIDNEY (SDQ KV2A) 345/230/13.8KV TRANSFORMER CKT 1	479.6	0.01992	103.2924	SIDNEY - SIDNEY1-LNX3345.00 345KV CKT Z
16WP	00NR	4	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.8	0.00949	102.808	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1
16WP	00NR	4	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	55.4	0.00949	101.5141	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	00NR	4	FROM->TO	G15_100	STERLING (STERLING T1) 115/69/13.8KV TRANSFORMER CKT 1	54.9	0.00959	100.0925	SUB 1263 BROCK (S1263 T1) 161/69/13.8KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.04082	111.316	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.04082	102.7837	GRACEMONT - MINCO 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	284	0.03357	100.5834	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01651	155.6713	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01389	154.9857	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01651	151.1567	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01389	150.5214	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0166	129.794	DBL-G1114-WWRD
20WP	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0166	125.5022	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01165	119.6339	DBL-OTA-BVR
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01396	119.5269	DBL-OTA-BVR
16WP	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01765	119.0533	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:WALKEMEYER-HITCHLAND
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01165	117.1786	DBL-HTCH-OTA
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01396	117.0438	DBL-HTCH-OTA
16WP	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01765	114.5757	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0098	113.2857	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.0128	113.2551	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.0128	111.9007	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01164	110.595	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00995	109.5714	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01178	108.1878	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0098	107.9286	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0101	105.8571	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01164	105.4032	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00977	105.0107	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00977	105.0107	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0101	104.7411	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	104.1697	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	104.1697	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	104.1697	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00922	103.1536	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01119	102.902	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01119	102.902	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01119	102.902	P13:138-230:AEPW:ELKCTY-4
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01155	102.8713	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01155	102.8713	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00939	102.1286	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0098	101.6786	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01651	115.1641	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01389	112.8128	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01651	111.959	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01389	109.623	DBL-BVR-G1114
16WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	163.4	0.19451	106.1704	P12:230:SPS:K59.1.POTTER.BSHLND
16WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	164.2	0.19451	105.5922	P12:230:SPS:K59.1.POTTER.BSHLND
20WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	164.6	0.19041	103.2797	P12:230:SPS:K59.1.POTTER.BSHLND
20WP	06ALL	0	FROM->TO	G15_101_1	BUSHLAND INTERCHANGE (WH 7001795) 230/115/13.2KV TRANSFORMER CKT 1	165.2	0.19041	102.7835	P12:230:SPS:K59.1.POTTER.BSHLND

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0	TO->FROM	G15_101_1	CANYON WEST SUB - DAWN SUB 115KV CKT 1	104.9	0.13578	103.801	P12:230:SPS:K11.1.BSHLND.DFSMTH
20WP	06ALL	0	FROM->TO	G15_101_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	169.8	0.00644	104.6205	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	06ALL	0	FROM->TO	G15_101_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	170.3	0.00736	101.7419	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3304	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3304	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3227	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.2308	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.1914	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	106.9151	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	716.5	0.09748	100.2087	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CIMARRON RIVER PLANT - WALKEMEYER 115KV CKT 1	148.1	0.03035	101.4072	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01651	124.8636	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01651	121.7483	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01389	119.4924	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01389	116.382	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01651	129.1086	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01651	126.0222	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01389	122.5827	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01389	119.4963	DBL-BVR-G1114
20WP	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0166	112.9183	DBL-G1114-WWRD
20WP	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0166	109.8367	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01396	104.3988	DBL-OTA-BVR
16WP	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01765	103.9075	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01396	102.7012	DBL-HTCH-OTA
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	52.7	0.01013	101.767	BASE CASE
16WP	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01765	100.6718	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.0128	100.1111	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02447	139.6846	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02447	130.5168	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02517	126.728	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0277	121.2521	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02517	117.4778	DBL-THIS-G1524
17SP	06ALL	0	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0277	111.3081	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02447	194.3977	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02447	182.1104	DBL-THIS-G1524
20WP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02601	180.0389	DBL-G1524-WICH
20L	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02212	179.771	DBL-G1524-WICH
16WP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02517	173.0507	DBL-G1524-WICH
17SP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0277	169.2254	DBL-G1524-WICH
20WP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02601	166.6444	DBL-THIS-G1524
20L	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02212	166.462	DBL-THIS-G1524
16WP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02517	160.9435	DBL-THIS-G1524
17SP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0277	156.1619	DBL-THIS-G1524
20SP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02731	149.8639	DBL-G1524-WICH
20SP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02731	136.0322	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	106.4174	DBL-TGA-MATT
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01273	104.4	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01273	104.4	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	102.3531	DBL-G1151-TGA

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.9	0.02878	101.3714	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	101.2189	DBL-WWRD-G1151
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	116.6989	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03512	116.6526	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03505	113.9722	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	113.8531	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	113.6143	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	112.9474	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03055	111.4195	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	111.0961	BINGER NIJECT - ONEY 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	110.4058	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03046	109.6693	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	109.6175	BINGER NIJECT - SICKLES 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02849	109.6129	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.03369	109.4778	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.0351	108.9769	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	108.7724	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	107.5133	DBL-WWRD-G1151
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	107.12	BINGER NIJECT - SICKLES 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	106.2364	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03055	105.7866	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02535	105.2969	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	104.979	DBL-WWRD-G1151
20WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	104.7271	DBL-TGA-MATT
16WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03594	104.2383	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03046	104.0439	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03107	103.7879	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03097	103.0038	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	102.3375	HYDRO - SICKLES 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03043	102.0415	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02925	101.9936	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0309	101.6651	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	101.4045	DBL-G1151-TGA
20L	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02472	100.9822	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	100.6919	HYDRO - SICKLES 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02535	100.6345	DBL-G1151-TGA
20WP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	100.3863	DBL-WWRD-G1151
17SP	06ALL	0	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	134.8	0.02498	100.1448	BASE CASE
20WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00517	114.3421	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00547	110.8783	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00517	109.874	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00547	106.4102	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00517	122.4489	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00547	119.0546	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00517	118.0186	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00547	114.4034	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0053	112.2359	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00525	112.2051	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0053	106.5949	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00525	106.5641	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	48	0.0053	101.4	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01104	101.6114	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.3	0.01116	100.2839	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01104	100.2621	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	155.6	0.19451	105.3229	P12:230:SPS:K59.1.POTTER.BSHLND
20WP	06ALL	0	TO->FROM	G15_101_1	COULTER INTERCHANGE - HILLSIDE 115KV CKT 1	156.5	0.19041	101.7242	P12:230:SPS:K59.1.POTTER.BSHLND
25SP	00NR	0	TO->FROM	G15_101_1	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.01231	102.4628	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	92.1	0.02304	101.6608	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	105.2	0.13578	107.2122	P12:230:SPS:K11.1.BSHLND.DFSMTH
16WP	06ALL	0	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	105.4	0.13578	111.5628	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	0	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.13555	107.0125	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	0	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	95.9	0.13536	100.1944	P12:230:SPS:K11.1.BSHLND.DFSMTH
20WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00517	128.237	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00547	124.448	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00517	123.6151	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0053	121.7789	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00525	121.4359	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00547	119.8164	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0053	116.1234	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00525	115.7949	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	48	0.0053	107.2333	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	48	0.0053	102.65	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	71.8	0.00517	100.7532	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	71.9	0.00517	100.3349	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00553	101.1669	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00553	111.6775	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00712	109.906	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00691	108.2045	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00691	108.2045	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	108.2045	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00677	106.8297	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00595	106.414	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00776	103.5695	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00704	103.2882	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00768	103.1341	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00776	102.8478	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00821	102.3406	DBL-THIS-WWRD
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00753	102.2755	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00706	102.2623	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00808	102.2054	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00753	102.1724	P12:069:OKGE:3TERM34
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00704	101.7419	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00727	101.6957	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00706	101.4375	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00695	101.4103	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00745	101.3265	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00745	101.3265	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00736	101.3265	G15085_T 138.00 - RUSSELL 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00675	101.1546	PARK LANE - SEMINOLE 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	100.7596	DBL-WWRD-G1151
20L	06ALL	0	TO->FROM	G15_101_1	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1	477.5	0.0249	100.3719	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00663	154.3724	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.2	0.00796	140.116	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00795	122.5338	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.0083	114.7179	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00663	112.2268	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00816	105.8587	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.7	0.00817	105.4712	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00663	129.3845	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00795	125.1801	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.00796	119.4166	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.0083	117.6223	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00663	149.9662	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00796	131.9631	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	30.9	0.00795	116.8544	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.0083	108.9775	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00663	107.2738	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0839	116.95	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0839	116.5636	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07342	110.3618	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07342	110.0046	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.0838	109.6751	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0838	109.4693	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08774	108.3536	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08774	108.0813	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.06933	105.8701	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.06933	105.6766	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07342	105.1832	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07342	104.8268	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08625	104.0249	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0687	104.0152	DBL-TGA-MATT
20SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08625	103.9137	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.073	103.8378	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0687	103.6862	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.073	103.6267	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.0865	103.1918	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.6	0.0865	103.1717	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07659	103.1655	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07659	102.8404	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.0768	102.3042	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.0768	102.052	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0687	101.6491	DBL-G1151-TGA
20SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07543	101.5795	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07543	101.4906	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0687	101.3084	DBL-G1151-TGA
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0687	100.9125	DBL-WWRD-G1151
20WP	06ALL	0	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0687	100.5751	DBL-WWRD-G1151

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	25.8	0.00663	141.0512	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.00796	116.4469	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	30.5	0.00795	103.3049	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02447	157.2441	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02447	148.1213	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02517	141.3283	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02517	132.1739	DBL-THIS-G1524
20WP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02003	114.3608	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02133	112.0818	DBL-G1524-WICH
20L	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01704	111.1737	DBL-G1524-WICH
20WP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02003	106.5176	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.2	0.02103	104.103	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02133	103.9876	DBL-THIS-G1524
20L	06ALL	0	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01704	103.347	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_101_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00693	103.2351	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_101_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.00721	101.0209	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	00NR	0	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.02033	106.5604	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	0	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.02033	105.4708	P12:230:SPS:K69.1.MUSTG.SEMINLE
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	123.2495	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	121.9231	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01073	121.3524	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	121.0755	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01073	121.0576	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01483	120.2352	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	120.2281	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	119.8318	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	119.8218	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	119.5369	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01498	118.5068	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	118.3858	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	118.1994	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	116.3558	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01483	115.8874	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01498	114.1557	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01187	109.2475	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	108.9791	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01199	108.7593	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	107.7272	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01187	107.1104	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01135	107.0133	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01135	106.7187	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01199	106.6206	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	106.4637	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	105.9599	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.0058	104.6367	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	104.474	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	104.2738	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	104.0454	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	103.9581	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	102.8852	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	102.5038	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	101.9876	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00591	101.7835	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	101.5793	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	101.485	DBL-G1151-TGA
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.3377	ANADARKO - POCASSETT 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.0156	101.137	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.1166	P12:138:WFEC:MSL01
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	101.0429	DBL-WWRD-G1151
20SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.0429	POCASSETT - TUTTLE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	100.1782	DBL-G1151-TGA
25SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0114	163.7867	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01158	155.264	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20L	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01036	154.4997	P12:230:SPS:K11.1.BSHLND.DFSMTH
25SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00973	154.1173	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01213	152.2263	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00989	149.5787	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01167	147.336	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
16WP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00526	145.6963	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01061	143.8213	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01071	136.568	P12:230:SPS:K11.1.BSHLND.DFSMTH
16WP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00869	135.7619	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
16WP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0015	135.1438	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01177	134.416	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20L	06NR	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01075	132.4832	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06NR	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01305	131.9866	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20WP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0048	130.9271	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06NR	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.00517	130.0027	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06NR	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	125.9627	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06NR	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0122	125.0933	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20WP	06ALL	0		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00857	123.2508	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.4	0.03474	109.2312	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	0	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.6	0.03664	107.6736	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	0	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.7	0.03669	107.0872	P12:115:SPS:T08.2.SPRMN.PRNGLE
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.416	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.416	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	0	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01467	111.175	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01467	110.1777	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01468	109.63	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01468	108.627	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.9	0.01224	102.8963	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01533	102.3396	P12:230:AEPW:ELKCITY6:SWEETWT6

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.6	0.01224	101.9787	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68.1	0.01533	101.5847	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01233	100.6823	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00928	117.1733	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	0	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00939	113.5134	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	0	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00982	108.8573	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	06ALL	0	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01041	104.393	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	0	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.00991	101.3093	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	TO->FROM	G15_101_1	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00594	101.1282	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	00NR	0	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH_XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02356	102.4299	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	0	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH_XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02674	101.0701	P12:230:SPS:K03.1.SUNDWN.WOLFTH
25SP	00NR	0	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH_XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	182.5	0.02356	100.3038	P12:115:SPS:T30.1.LAMB.HOCKLY
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01006	137.2487	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01006	137.2487	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	137.2043	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	137.2043	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01006	133.709	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01006	133.709	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	133.5094	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	133.5094	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	124.0362	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	124.0362	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	123.9171	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	123.9171	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00969	122.4135	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00969	122.4135	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00969	122.093	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00969	122.093	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01051	119.8122	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01051	119.8122	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01051	119.7886	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01051	119.7886	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01053	116.9391	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01053	116.9391	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01053	116.6394	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01053	116.6394	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	137.3235	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	137.3235	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01006	137.2487	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01006	137.2487	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01006	133.709	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01006	133.709	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	133.6286	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	133.6286	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	124.1581	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	124.1581	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	123.92	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	123.92	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00969	122.4135	P13:069-115:TCEC:TC-TXCOUNTY.2

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00969	122.4135	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00969	122.093	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00969	122.093	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01052	119.815	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01052	119.815	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01052	119.7914	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01052	119.7914	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01053	116.9391	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01053	116.9391	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01053	116.7789	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01053	116.7789	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	TO->FROM	G15_101_1	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.0119	101.9602	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05214	108.9568	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	TO->FROM	G15_101_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05214	104.5138	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05214	118.3634	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05214	117.8121	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05214	113.5398	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05214	113.011	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.061	107.4482	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.061	107.3714	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05852	105.5894	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05852	105.5894	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.0593	100.6905	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	0	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.0593	100.6186	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_1	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	425.5	0.01089	100.3087	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.3	0.04083	111.2679	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.3	0.04083	102.7836	GRACEMONT - MINCO 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	ANADARKO - GRACMNT4 138.00 138KV CKT 1	284	0.03357	100.5834	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01651	155.6713	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01389	154.9857	DBL-G1114-WWRD
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01651	151.1567	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01389	150.5214	DBL-BVR-G1114
20WP	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0166	129.794	DBL-G1114-WWRD
20WP	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.0166	125.5022	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01165	119.6339	DBL-OTA-BVR
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01396	119.5269	DBL-OTA-BVR
16WP	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01765	119.0533	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01109	118.6643	P12:345:SPS:WALKEMEYER-HITCHLAND
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01165	117.1786	DBL-HTCH-OTA
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01396	117.0438	DBL-HTCH-OTA
16WP	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01765	114.5757	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00979	113.2804	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.0128	113.2551	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.0128	111.9007	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01164	110.595	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00995	109.5714	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01178	108.1878	P12:230:AEPW:ELKCITY6:SWEETWT6

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00979	107.9232	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01009	105.8518	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01164	105.4032	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00977	104.7875	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00977	104.7875	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01009	104.7357	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	103.9464	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	103.9464	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00945	103.9464	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00922	103.1536	DBL-TGA-MATT
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01118	102.8966	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01118	102.8966	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01118	102.8966	P13:138-230:AEPW:ELKCTY-4
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01155	102.8713	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01155	102.8713	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00938	102.1232	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00979	101.6732	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01651	115.1641	DBL-G1114-WWRD
20L	06ALL	2	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01389	112.8128	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01651	111.959	DBL-BVR-G1114
20L	06ALL	2	TO->FROM	G15_101_1	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01389	109.623	DBL-BVR-G1114
16WP	06ALL	2	TO->FROM	G15_101_1	CANYON WEST SUB - DAWN SUB 115KV CKT 1	105.1	0.13577	103.7914	P12:230:SPS:K11.1.BSHLND.DFSMTH
20WP	06ALL	2	FROM->TO	G15_101_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	169.8	0.00645	104.6219	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	06ALL	2	FROM->TO	G15_101_1	CASTRO COUNTY INTERCHANGE - NEWHART 115KV CKT 1	170.3	0.00736	101.7419	P12:115:SPS:T04.1.DFSMTH.CASTRO
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3304	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3304	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.3227	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.2308	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	107.1914	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00056	106.9151	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	716.5	0.09748	100.2226	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CIMARRON RIVER PLANT - WALKEMEYER 115KV CKT 1	148.1	0.03035	101.4747	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01651	124.8636	DBL-G1114-WWRD
17G	06ALL	2	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01651	121.7483	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01389	119.4924	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_1	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01389	116.382	DBL-BVR-G1114
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01651	128.9543	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01651	125.8679	DBL-BVR-G1114
20L	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01389	122.5827	DBL-G1114-WWRD
20L	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01389	119.4963	DBL-BVR-G1114
20WP	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0166	112.9183	DBL-G1114-WWRD
20WP	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.0166	109.8367	DBL-BVR-G1114
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01396	104.3988	DBL-OTA-BVR
16WP	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01765	103.9075	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01396	102.5469	DBL-HTCH-OTA
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	52.7	0.01013	101.5772	BASE CASE
16WP	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01765	100.6718	DBL-BVR-G1114
17G	06ALL	2	TO->FROM	G15_101_1	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.0128	100.1111	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02447	139.6846	DBL-G1524-WICH

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02447	130.5168	DBL-THIS-G1524
16WP	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02517	126.728	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0277	121.2521	DBL-G1524-WICH
16WP	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02517	117.4778	DBL-THIS-G1524
17SP	06ALL	2	FROM->TO	G15_101_1	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0277	111.3081	DBL-THIS-G1524
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02447	194.3977	DBL-G1524-WICH
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02447	182.1104	DBL-THIS-G1524
20WP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02601	179.9471	DBL-G1524-WICH
20L	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02212	179.6799	DBL-G1524-WICH
16WP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02517	173.1431	DBL-G1524-WICH
17SP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0277	169.2254	DBL-G1524-WICH
20WP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02601	166.6444	DBL-THIS-G1524
20L	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02212	166.462	DBL-THIS-G1524
16WP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02517	160.9435	DBL-THIS-G1524
17SP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0277	156.2539	DBL-THIS-G1524
20SP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02731	149.8639	DBL-G1524-WICH
20SP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02731	136.0322	DBL-THIS-G1524
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	106.3229	DBL-TGA-MATT
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01273	104.4	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01273	104.4	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	102.3531	DBL-G1151-TGA
25SP	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	109.9	0.02878	101.3714	DBL-G1524-WICH
17G	06ALL	2	TO->FROM	G15_101_1	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01329	101.2189	DBL-WWRD-G1151
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	116.6327	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03512	116.5863	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03505	113.9722	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	113.7869	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	113.548	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	112.9474	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03055	111.4195	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	111.0961	BINGER NIJECT - ONEY 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	110.4058	DBL-TGA-MATT
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03046	109.6693	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	109.6175	BINGER NIJECT - SICKLES 138KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02849	109.5593	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.03369	109.4242	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.0351	108.9232	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	108.7724	DBL-G1151-TGA
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03099	107.5133	DBL-WWRD-G1151
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	107.12	BINGER NIJECT - SICKLES 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	106.2364	DBL-G1151-TGA
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03055	105.7866	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02535	105.2433	DBL-TGA-MATT
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03093	104.9128	DBL-WWRD-G1151
20WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	104.6735	DBL-TGA-MATT
16WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03593	104.237	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03046	104.0439	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03107	103.7342	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03097	102.9376	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0193	102.3375	HYDRO - SICKLES 138KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03043	102.0415	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02925	101.9936	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.0309	101.6651	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	101.3509	DBL-G1151-TGA
20L	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02472	100.9822	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01935	100.6919	HYDRO - SICKLES 138KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02535	100.5809	DBL-G1151-TGA
20WP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02967	100.3327	DBL-WWRD-G1151
17SP	06ALL	2	TO->FROM	G15_101_1	CLINTON JUNCTION - ELK CITY 138KV CKT 1	134.8	0.02498	100.1448	BASE CASE
20WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00517	114.3421	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00547	110.8783	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00517	109.874	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00547	106.4102	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00517	122.6599	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00547	119.0546	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.4	0.00517	118.0186	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00547	114.4034	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0053	112.2359	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00525	112.2051	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0053	106.5949	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00525	106.5641	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	COMANCHE TAP - TOSCO 69KV CKT 1	48	0.0053	101.6083	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01104	101.6114	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.3	0.01116	100.2839	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01104	100.2621	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
25SP	00NR	2	TO->FROM	G15_101_1	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.0123	102.4603	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	CURRY COUNTY INTERCHANGE - DEAF SMITH REC-#20 115KV CKT 1	92.2	0.02304	101.659	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	DAWN SUB - Panda Energy Substation Hereford 115KV CKT 1	105.3	0.13577	107.298	P12:230:SPS:K11.1.BSHLND.DFSMTH
16WP	06ALL	2	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	105.5	0.13577	111.6443	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	2	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	95.9	0.13555	107.9583	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	2	FROM->TO	G15_101_1	DEAF SMITH COUNTY INTERCHANGE - Panda Energy Substation Hereford 115KV CKT 1	96	0.13536	100.5067	P12:230:SPS:K11.1.BSHLND.DFSMTH
20WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00517	128.237	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00547	124.448	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.6	0.00517	123.8252	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0053	121.7789	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00525	121.4359	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00547	119.8164	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0053	116.1234	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	39	0.00525	115.7949	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	48	0.0053	107.2333	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	DUNCAN - TOSCO 69KV CKT 1	48	0.0053	102.65	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	71.8	0.00517	100.7532	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	DUNCAN (DUNCAN) 138/69/13.8KV TRANSFORMER CKT 1	71.9	0.00517	100.3349	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00553	101.1669	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00553	111.6775	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00712	109.906	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00691	108.2045	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00691	108.2045	P13:345-138:AEPW:C-RIVER7

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	108.2045	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00677	106.8297	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00595	106.414	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00776	103.5695	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00704	103.2882	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00768	103.1341	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00776	102.8478	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00821	102.3406	DBL-THIS-WWRD
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00753	102.2755	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00706	102.2623	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00808	102.2054	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00753	102.1724	P12:069:OKGE:3TERM34
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00704	101.7419	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00727	101.6957	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00706	101.4375	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00695	101.4103	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00745	101.3265	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00745	101.3265	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00736	101.3265	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00675	101.1546	PARK LANE - SEMINOLE 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	100.7596	DBL-WWRD-G1151
20L	06ALL	2	TO->FROM	G15_101_1	EDDY COUNTY INTERCHANGE - EDDY_NORTH 6230.00 230KV CKT @1	477.5	0.0249	100.3719	P12:345:SPS:J15.1.XRDS.TOLK
20L	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00663	154.3724	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.2	0.00796	140.116	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00795	122.2122	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.0083	114.7179	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00663	111.8437	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00816	105.4827	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	ELDORADO - ELDORADO JCT 69KV CKT 1	26.7	0.00817	105.4712	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00663	129.0749	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00795	125.1801	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.00796	119.1089	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_1	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.0083	117.3127	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00663	149.5815	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00796	131.5785	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	30.9	0.00795	116.5307	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.0083	108.6559	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00663	106.8892	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0839	116.9054	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0839	116.4969	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07342	110.3618	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07342	109.9824	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.0838	109.6305	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0838	109.4249	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08774	108.3536	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08774	108.0813	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.06933	105.8478	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.06933	105.6322	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07342	105.1609	G14-074T 345.00 - OKLAUNION 345KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07342	104.8268	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08625	104.0027	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.06869	103.97	DBL-TGA-MATT
20SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08625	103.9137	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.073	103.8155	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06869	103.6413	DBL-TGA-MATT
17G	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.073	103.6267	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08649	103.1913	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.6	0.08649	103.1489	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07659	103.1209	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07659	102.7737	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.0768	102.2819	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.0768	102.052	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.06869	101.6039	DBL-G1151-TGA
20SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07543	101.5795	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07543	101.4684	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06869	101.2635	DBL-G1151-TGA
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.06869	100.8673	DBL-WWRD-G1151
20WP	06ALL	2	FROM->TO	G15_101_1	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06869	100.5301	DBL-WWRD-G1151
20L	06ALL	2	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	25.8	0.00663	140.6636	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.00796	116.4469	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	GYPSUM - RUSSELL 69KV CKT 1	30.5	0.00795	103.3049	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02447	157.2441	DBL-G1524-WICH
17G	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02447	148.1213	DBL-THIS-G1524
16WP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02517	141.3283	DBL-G1524-WICH
16WP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02517	132.1739	DBL-THIS-G1524
20WP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02003	114.3608	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02133	112.0818	DBL-G1524-WICH
20L	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01704	111.1038	DBL-G1524-WICH
20WP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02003	106.5176	DBL-THIS-G1524
20SP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.2	0.02103	104.103	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02133	103.9876	DBL-THIS-G1524
20L	06ALL	2	FROM->TO	G15_101_1	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01704	103.347	DBL-THIS-G1524
20SP	06ALL	2	FROM->TO	G15_101_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00693	103.2977	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	2	FROM->TO	G15_101_1	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.00721	101.0209	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	00NR	2	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.02033	106.5604	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	2	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.02033	105.4708	P12:230:SPS:K69.1.MUSTG.SEMINLE
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	123.2495	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	121.9231	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01073	121.3524	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	121.0755	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01073	120.9839	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01483	120.2352	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	120.2281	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	119.8318	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	119.8218	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.0108	119.5369	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01498	118.5068	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01104	118.3858	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	118.1994	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01116	116.3558	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01483	115.8874	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01498	114.1557	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01187	109.2475	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	108.9791	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01199	108.7593	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	107.7272	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01187	107.1104	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01135	107.0133	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01135	106.7187	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01199	106.6206	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	106.4637	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	105.9599	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.0058	104.6367	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	104.474	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	104.2738	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01164	104.0454	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00988	103.9581	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	102.8852	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	102.5038	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00998	101.9876	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00591	101.7835	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	101.5793	DBL-TGA-MATT
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	101.485	DBL-G1151-TGA
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.3377	ANADARKO - POCASSETT 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.0156	101.137	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.1166	P12:138:WFEC:MSL01
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01048	101.0429	DBL-WWRD-G1151
20SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00923	101.0429	POCASSETT - TUTTLE 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_1	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	100.1782	DBL-G1151-TGA
25SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0114	164.12	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01158	155.5973	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20L	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01036	154.4997	P12:230:SPS:K11.1.BSHLND.DFSMTH
25SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00973	154.1173	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.7	0.01212	152.2182	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00989	149.912	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01167	147.336	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
16WP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00526	145.544	P12:230:SPS:K11.1.BSHLND.DFSMTH
17SP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01061	143.8213	P12:230:SPS:K11.1.BSHLND.DFSMTH
17G	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01071	137.3592	P12:230:SPS:K11.1.BSHLND.DFSMTH
16WP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00154	135.7493	P12:230:SPS:K59.1.POTTER.BSHLND
16WP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00869	135.3093	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
17G	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.01177	135.2	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20L	06NR	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01075	132.4832	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06NR	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01305	131.9866	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20WP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.0048	130.9271	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06NR	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.00523	130.051	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06NR	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01037	125.9627	P12:230:SPS:K11.1.BSHLND.DFSMTH

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06NR	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0122	125.0933	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20WP	06ALL	2		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00857	123.2508	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.4	0.03473	109.1018	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	2	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.6	0.03662	107.5436	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	2	FROM->TO	G15_101_1	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.7	0.03667	106.9565	P12:115:SPS:T08.2.SPRMN.PRNGLE
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.416	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.416	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	2	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01466	111.0229	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01466	110.0271	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01467	109.4765	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01467	108.4753	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.9	0.01224	102.7468	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01533	102.1914	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.6	0.01224	101.8308	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01533	101.5871	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	2	FROM->TO	G15_101_1	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01233	100.6823	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	2	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00928	117.1733	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	2	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00939	113.5134	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	2	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00982	108.8573	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	06ALL	2	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01041	104.393	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	2	FROM->TO	G15_101_1	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.00992	101.3101	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	2	TO->FROM	G15_101_1	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00594	101.1282	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	00NR	2	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02356	102.4299	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	2	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02674	101.0701	P12:230:SPS:K03.1.SUNDWN.WOLFTH
25SP	00NR	2	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	182.5	0.02356	100.3038	P12:115:SPS:T30.1.LAMB.HOCKLY
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01006	137.2487	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01006	137.2487	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	137.2043	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	137.2043	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01006	133.709	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01006	133.709	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	133.6286	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01006	133.6286	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	124.0362	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	124.0362	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	123.9171	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.00996	123.9171	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00969	122.2932	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.00969	122.2932	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00969	122.093	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.00969	122.093	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01051	119.8122	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01051	119.8122	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01051	119.7886	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01051	119.7886	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01053	116.9391	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01053	116.9391	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01053	116.6394	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01053	116.6394	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	137.3235	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	137.3235	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01006	137.2487	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01006	137.2487	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01006	133.709	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01006	133.709	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	133.6286	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01006	133.6286	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	124.1581	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	124.1581	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	123.92	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.00997	123.92	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00969	122.4135	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.00969	122.4135	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00969	122.093	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.00969	122.093	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01051	119.8122	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01051	119.8122	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01051	119.7886	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01051	119.7886	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01053	116.9391	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01053	116.9391	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01053	116.7789	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	2	FROM->TO	G15_101_1	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01053	116.7789	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	2	TO->FROM	G15_101_1	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.0119	101.9602	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05214	108.9568	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	TO->FROM	G15_101_1	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05214	104.5138	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05214	118.3274	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05214	117.7763	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05214	113.5038	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05214	112.9751	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.061	107.4482	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.061	107.3714	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05852	105.6252	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.05852	105.6252	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.0593	100.6905	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	2	FROM->TO	G15_101_1	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.0593	100.6186	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_1	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	425.5	0.01089	100.3087	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	107.3447	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	107.3447	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	107.3367	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	107.2311	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	107.1914	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	00NR	3	FROM->TO	G15_101_1	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00057	106.9294	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
25SP	00NR	3	TO->FROM	G15_101_1	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.0123	102.4603	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
25SP	00NR	3	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.02032	106.5596	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	3	FROM->TO	G15_101_1	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.02032	105.435	P12:230:SPS:K69.1.MUSTG.SEMINLE
20L	06NR	3		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01075	132.4832	P12:230:SPS:K11.1.BSHLND.DFSMTH
20L	06NR	3		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.01305	131.9866	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
20L	06NR	3		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.00523	130.3866	P12:230:SPS:K59.1.POTTER.BSHLND
17G	06NR	3		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.01218	125.0773	DEAF SMITH COUNTY INTERCHANGE - G15101T-1 230.00 230KV CKT 1
17G	06NR	3		G15_101_1	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00996	124.6347	P12:230:SPS:K11.1.BSHLND.DFSMTH
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.00723	105.1207	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.3482	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.00723	103.3482	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00732	106.5909	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	3	FROM->TO	G15_101_1	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00732	104.794	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	3	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.1	0.02357	102.5443	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	3	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.1	0.02676	101.185	P12:230:SPS:K03.1.SUNDWN.WOLFTH
25SP	00NR	3	FROM->TO	G15_101_1	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	182.5	0.02357	100.3051	P12:115:SPS:T30.1.LAMB.HOCKLY

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	0	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.03981	111.2088	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.03981	102.6766	GRACEMONT - MINCO 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	284	0.03258	100.4997	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01742	156.1643	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01475	155.4464	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01742	151.6497	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01475	150.9821	DBL-BVR-G1114
20WP	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.01746	130.2369	DBL-G1114-WWRD
20WP	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.01746	125.9451	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01249	120.0839	DBL-OTA-BVR
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01485	120.009	DBL-OTA-BVR
16WP	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01854	119.5087	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01168	118.9804	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01168	118.9804	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01168	118.9804	P12:345:SPS:WALKEMEYER-HITCHLAND
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01249	117.6286	DBL-HTCH-OTA
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01485	117.526	DBL-HTCH-OTA
16WP	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01854	115.0311	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01342	113.591	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0102	113.5	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01342	112.2366	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01206	110.8226	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01051	109.8714	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01237	108.5074	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0102	108.1429	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01066	106.1572	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01206	105.6307	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01036	105.3268	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01036	105.3268	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.01066	105.0411	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00996	104.4429	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00996	104.4429	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00996	104.4429	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.00975	103.4375	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01217	103.2072	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01217	103.2072	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01173	103.1946	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01173	103.1946	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.3	0.01173	103.1946	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0099	102.4018	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.8	0.0102	101.8929	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01742	115.5141	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01475	113.142	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.4	0.01742	112.309	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01475	109.9521	DBL-BVR-G1114
20L	06NR	0	TO->FROM	G15_101_2	CHISHOLM6 230.00 - SWEETWATER 230KV CKT 1	438.7	0.00556	105.0682	CHISHOLM7 345.00 - GRAPEVINE 345.00 345KV CKT 1
17G	06NR	0	TO->FROM	G15_101_2	CHISHOLM6 230.00 - SWEETWATER 230KV CKT 1	438.6	0.00506	100.1629	CHISHOLM7 345.00 - GRAPEVINE 345.00 345KV CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	108.6426	JONES STATION 230/22.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	108.6426	JONES STATION 230/22.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	107.3455	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	107.3455	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	107.3378	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	107.2459	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	107.2065	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00101	106.9302	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	716.5	0.09717	100.1983	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CIMARRON RIVER PLANT - WALKEMEYER 115KV CKT 1	148.1	0.03118	101.5416	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01742	125.2037	DBL-G1114-WWRD
17G	06ALL	0	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01742	122.0885	DBL-BVR-G1114
20L	06ALL	0	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01475	119.8134	DBL-G1114-WWRD
20L	06ALL	0	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01475	116.7029	DBL-BVR-G1114
17G	06ALL	0	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01485	100.2555	DBL-OTA-BVR
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01742	129.4457	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01742	126.3592	DBL-BVR-G1114
20L	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01475	122.9012	DBL-G1114-WWRD
20L	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01475	119.8148	DBL-BVR-G1114
20WP	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01746	113.2364	DBL-G1114-WWRD
20WP	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01746	110.1547	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01485	104.7284	DBL-OTA-BVR
16WP	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01854	104.2367	DBL-G1114-WWRD
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01485	103.0309	DBL-HTCH-OTA
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	52.7	0.01067	102.0129	BASE CASE
16WP	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01854	101.0009	DBL-BVR-G1114
17G	06ALL	0	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01342	100.3407	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02485	139.7489	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02485	130.5811	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02554	126.7902	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0281	121.3193	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02554	117.54	DBL-THIS-G1524
17SP	06ALL	0	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.0281	111.3754	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02485	194.4839	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02485	182.1966	DBL-THIS-G1524
20WP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02644	180.1336	DBL-G1524-WICH
20L	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02255	179.8651	DBL-G1524-WICH
16WP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02554	173.1327	DBL-G1524-WICH
17SP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0281	169.3137	DBL-G1524-WICH
20WP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02644	166.7391	DBL-THIS-G1524
20L	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02255	166.5561	DBL-THIS-G1524
16WP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02554	161.0255	DBL-THIS-G1524
17SP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.0281	156.2502	DBL-THIS-G1524
20SP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02774	149.9604	DBL-G1524-WICH
20SP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.02774	136.1286	DBL-THIS-G1524
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01355	106.4764	DBL-TGA-MATT
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01294	104.4476	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01294	104.4476	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01355	102.4121	DBL-G1151-TGA
25SP	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.9	0.0292	101.4632	DBL-G1524-WICH
17G	06ALL	0	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01355	101.2779	DBL-WWRD-G1151

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01925	116.6909	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03524	116.6717	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03516	113.9897	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01925	113.8451	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01931	113.608	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03126	112.9903	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03023	111.3686	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01931	111.0897	BINGER NIJECT - ONEY 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03118	110.4455	DBL-TGA-MATT
20L	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0286	109.627	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03015	109.6201	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01925	109.6095	BINGER NIJECT - SICKLES 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0338	109.492	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03525	108.9962	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03126	108.8154	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03126	107.5563	DBL-WWRD-G1151
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01931	107.1136	BINGER NIJECT - SICKLES 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03118	106.2761	DBL-G1151-TGA
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03023	105.7357	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0256	105.329	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03118	105.0187	DBL-WWRD-G1151
20WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02992	104.7593	DBL-TGA-MATT
16WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03607	104.255	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03015	103.9947	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03136	103.8252	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.0308	102.9768	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01925	102.3296	HYDRO - SICKLES 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03011	102.0002	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02893	101.9524	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03073	101.6381	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02992	101.4367	DBL-G1151-TGA
20L	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0244	100.941	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01931	100.6855	HYDRO - SICKLES 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0256	100.6667	DBL-G1151-TGA
20WP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02992	100.4184	DBL-WWRD-G1151
17SP	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	134.8	0.02509	100.1644	BASE CASE
17G	06ALL	0	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.3	0.03136	100.0142	DBL-G1151-TGA
16WP	06ALL	0	TO->FROM	G15_101_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00529	110.7864	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00529	106.3183	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00529	118.9632	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00529	114.312	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00512	112.1251	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00507	112.0944	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00512	106.4841	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00507	106.4533	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	48	0.00511	101.305	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01081	101.57	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.3	0.01093	100.2425	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01081	100.2207	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	0	TO->FROM	G15_101_2	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.01485	103.1004	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00529	124.3571	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.00512	121.6679	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00507	121.3251	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00529	119.7255	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.00512	116.0123	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00507	115.6841	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	48	0.00511	107.1383	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	48	0.00511	102.555	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00547	101.152	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00547	111.6627	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00704	109.8862	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00683	108.1847	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00683	108.1847	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00674	108.1847	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00666	106.8025	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00589	106.3992	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00769	103.5522	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00696	103.2685	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.0076	103.1143	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00769	102.8305	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00814	102.3233	DBL-THIS-WWRD
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00744	102.2532	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00698	102.2425	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00799	102.1831	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00745	102.1526	P12:069:OKGE:3TERM34
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00696	101.7221	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00719	101.6759	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00698	101.4177	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00688	101.393	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00737	101.3067	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00737	101.3067	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00728	101.3067	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00668	101.1373	PARK LANE - SEMINOLE 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00674	100.7398	DBL-WWRD-G1151
20L	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.0069	154.6207	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.2	0.00827	140.4	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00821	122.7344	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.00859	114.941	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.0069	112.4751	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00846	106.1293	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.7	0.00844	105.7139	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.0069	129.5851	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00821	125.3739	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.00827	119.6455	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	0	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00859	117.8378	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.0069	150.2154	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00827	132.2492	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	30.9	0.00821	117.0563	G15085_T 138.00 - RUSSELL 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	0	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.00859	109.2013	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.0069	107.5231	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.08397	116.9537	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08397	116.5673	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07233	110.3034	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07233	109.9465	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.08393	109.682	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08393	109.4763	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08784	108.359	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08784	108.0866	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.06941	105.8744	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.06941	105.6809	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07233	105.1248	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07233	104.7687	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.069	104.0312	DBL-TGA-MATT
20SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08633	104.0292	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08633	103.918	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.0719	103.7789	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.069	103.7022	DBL-TGA-MATT
17G	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0719	103.568	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.0866	103.1972	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.6	0.0866	103.177	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07581	103.1237	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06NR	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.5	0.00833	103.0099	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06NR	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.00833	102.8239	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07581	102.7988	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.07572	102.2464	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.07572	101.9944	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.069	101.6652	DBL-G1151-TGA
20SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07434	101.5214	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06NR	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	447.9	0.00893	101.4609	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07434	101.4324	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.069	101.3244	DBL-G1151-TGA
20L	06NR	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.3	0.00893	101.1892	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.069	100.9286	DBL-WWRD-G1151
20WP	06ALL	0	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.069	100.5911	DBL-WWRD-G1151
20L	06ALL	0	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	25.8	0.0069	141.3023	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.00827	116.7375	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	30.5	0.00821	103.5095	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02485	157.3081	DBL-G1524-WICH
17G	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02485	148.1853	DBL-THIS-G1524
16WP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02554	141.3904	DBL-G1524-WICH
16WP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02554	132.2359	DBL-THIS-G1524
20WP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02036	114.4162	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02164	112.1366	DBL-G1524-WICH
20L	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01736	111.2274	DBL-G1524-WICH
20WP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.02036	106.5731	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.2	0.02136	104.1615	DBL-G1524-WICH
17SP	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02164	104.0424	DBL-THIS-G1524

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	0	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01736	103.4007	DBL-THIS-G1524
20SP	06ALL	0	FROM->TO	G15_101_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00735	103.2982	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	0	FROM->TO	G15_101_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.00763	101.084	P12:115:SPS:W09.2.HITCH.TXSCO
20SP	06ALL	0	FROM->TO	G15_101_2	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1	44.8	0.00682	100.0821	KIRBY SWITCHING STATION - MCCLELLAN SUB 115KV CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	JERICHO (JERIC2WT) 115/69/14.4KV TRANSFORMER CKT 1	44.8	0.00682	100.0821	MCCLELLAN SUB - MCLEAN RURAL SUB 115KV CKT 1
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	215.2	0.01442	104.4427	BASE CASE
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01439	102.8146	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01439	101.5032	P12:115:SPS:T66.1.RNDALL.HAPPY
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01439	101.4609	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1
25SP	00NR	0	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.00788	99.9963	HALE CO INTERCHANGE - TUCO2 115.00 115KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.01995	106.5282	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	0	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.01995	105.4389	P12:230:SPS:K69.1.MUSTG.SEMINLE
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01081	123.2089	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01081	121.8824	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01052	121.3153	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01093	121.0348	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01052	121.0205	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01081	120.1875	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01445	120.168	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	119.7947	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01093	119.7811	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01059	119.4997	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01459	118.4378	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01081	118.3452	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01093	118.1587	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01093	116.315	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01445	115.8202	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01459	114.0867	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.0116	109.1997	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01142	108.9402	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01172	108.7115	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01142	107.6884	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.0116	107.0626	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01114	106.9761	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01114	106.6816	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01172	106.5729	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00964	106.4212	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01142	105.9211	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00572	104.6226	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00964	104.4315	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00973	104.2295	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01142	104.0065	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00964	103.9157	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01035	102.8622	DBL-TGA-MATT
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00973	102.4596	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00973	101.9434	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00583	101.7693	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01046	101.5563	DBL-TGA-MATT
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01035	101.462	DBL-G1151-TGA

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00904	101.3041	ANADARKO - POCASSETT 138KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00904	101.083	P12:138:WFEC:MSL01
25SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01522	101.0698	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01035	101.0199	DBL-WWRD-G1151
20SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00904	101.0093	POCASSETT - TUTTLE 138KV CKT 1
17SP	06ALL	0	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01046	100.1552	DBL-G1151-TGA
20L	06NR	0		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.00553	130.6282	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.4	0.03553	109.3524	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	0	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.6	0.03723	107.7634	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	0	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.7	0.03745	107.2036	P12:115:SPS:T08.2.SPRMN.PRNGLE
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.3948	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.3948	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	0	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.0152	111.364	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.0152	110.3647	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01529	109.8495	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01529	108.8439	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.9	0.01279	103.0936	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01591	102.5458	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.6	0.01279	102.174	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68.1	0.01591	101.7891	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	0	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.3	0.01249	100.7394	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	0	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00926	117.1718	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	0	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00938	113.5126	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	0	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00981	108.8566	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	06ALL	0	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01039	104.3915	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	0	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.0099	101.3086	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	0	TO->FROM	G15_101_2	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00593	101.1274	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20L	06NR	0	FROM->TO	G15_101_2	STATELINE INTERCHANGE - STLN-DEMARC6 230KV CKT 1	366.9	0.00556	103.3073	CHISHOLM7 345.00 - GRAPEVINE 345.00 345KV CKT 1
20L	06NR	0	FROM->TO	G15_101_2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	337.4	0.00556	112.3398	CHISHOLM7 345.00 - GRAPEVINE 345.00 345KV CKT 1
17G	06NR	0	FROM->TO	G15_101_2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	336.3	0.00506	106.1595	CHISHOLM7 345.00 - GRAPEVINE 345.00 345KV CKT 1
20L	06NR	0	FROM->TO	G15_101_2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	337.4	0.00562	104.6973	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	00NR	0	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02121	102.1152	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	0	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02552	100.9067	P12:230:SPS:K03.1.SUNDWN.WOLFTH
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01055	137.389	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01055	137.389	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01055	137.3444	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01055	137.3444	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01057	133.8552	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01057	133.8552	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01057	133.7745	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01057	133.7745	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01045	124.1762	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01045	124.1762	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01045	124.0571	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01045	124.0571	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.01021	122.5637	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.01021	122.5637	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01021	122.2427	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01021	122.2427	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.011	119.9523	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.011	119.9523	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.011	119.9286	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.011	119.9286	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01103	117.083	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01103	117.083	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01103	116.7828	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.01103	116.7828	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01055	137.4636	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01055	137.4636	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01055	137.389	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01055	137.389	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01057	133.8552	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.01057	133.8552	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01057	133.7745	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01057	133.7745	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01045	124.2952	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01045	124.2952	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01045	124.0571	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01045	124.0571	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.01021	122.5637	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.01021	122.5637	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01021	122.2427	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01021	122.2427	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01101	119.9552	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01101	119.9552	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01101	119.9314	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01101	119.9314	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01104	117.0859	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01104	117.0859	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01104	116.9254	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	0	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01104	116.9254	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	0	TO->FROM	G15_101_2	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.0117	101.926	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	0	TO->FROM	G15_101_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05375	109.0849	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	TO->FROM	G15_101_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05375	104.6419	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05375	118.5025	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05375	117.9505	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05375	113.6789	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05375	113.1494	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.06261	107.5863	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.06261	107.5094	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.06009	105.724	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.06009	105.724	P12:345:SPS:J04.1.FINN.HOLC(534)

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.0609	100.8277	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	0	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.0609	100.7557	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	0	FROM->TO	G15_101_2	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	425.5	0.01109	100.32	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.03975	111.1583	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	226.2	0.03975	102.626	GRACEMONT - MINCO 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_2	ANADARKO - GRACMNT4 138.00 138KV CKT 1	284	0.03252	100.4594	CIMARRON - MINCO 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.0174	156.027	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01473	155.0895	DBL-G1114-WWRD
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.0174	151.5225	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01473	150.8579	DBL-BVR-G1114
20WP	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.01744	130.4412	DBL-G1114-WWRD
20WP	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.6	0.01744	126.1494	DBL-BVR-G1114
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01475	119.6847	DBL-OTA-BVR
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01241	119.551	DBL-OTA-BVR
16WP	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01851	119.0669	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01163	118.6886	P12:345:SPS:FINNEY-HITCHLAND
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01163	118.6886	P12:345:SPS:J07.1.FINN.HITCH
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01163	118.6886	P12:345:SPS:WALKEMEYER-HITCHLAND
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01241	117.1011	DBL-HTCH-OTA
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01475	116.982	DBL-HTCH-OTA
16WP	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	46.9	0.01851	114.5893	DBL-BVR-G1114
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01336	113.3027	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01012	112.759	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01336	111.9514	FINNEY SWITCHING STATION - Hitchland Interchange 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01198	110.3045	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01041	109.3505	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01226	107.9784	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01012	107.6365	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.0106	105.8886	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01198	105.1243	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01031	104.8428	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01031	104.8428	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.0106	104.5523	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.0099	103.9554	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.0099	103.9554	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.0099	103.9554	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.00969	103.1751	DBL-TGA-MATT
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01211	102.9423	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01211	102.9423	G11-14T 345.00 - WOODWARD DISTRICT EHV 345KV CKT 2
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01165	102.9189	CHISHOLM6 230.00 - ELK CITY 230KV 230KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01165	102.9189	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.4	0.01165	102.9189	P13:138-230:AEPW:ELKCTY-4
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.00984	101.9189	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	BEAVER JCT - FT SUPPLY 69KV CKT 1	44.9	0.01012	101.4004	G14-074T 345.00 - TUCO INTERCHANGE 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.5	0.0174	115.3216	DBL-G1114-WWRD
20L	06ALL	2	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01473	113.2938	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.5	0.0174	112.1216	DBL-BVR-G1114
20L	06ALL	2	TO->FROM	G15_101_2	BEAVER JCT - SPEERMORE 69KV CKT 1	62.7	0.01473	110.104	DBL-BVR-G1114
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	108.6436	JONES STATION 230/22.0KV TRANSFORMER CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	108.6436	JONES STATION 230/22.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3465	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3465	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3388	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.2469	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.2075	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	106.9312	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	716.5	0.09716	100.2119	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CIMARRON RIVER PLANT - WALKEMEYER 115KV CKT 1	148.1	0.03126	101.6897	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.0174	125.1963	DBL-G1114-WWRD
17G	06ALL	2	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.0174	122.081	DBL-BVR-G1114
20L	06ALL	2	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01473	119.8059	DBL-G1114-WWRD
20L	06ALL	2	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.3	0.01473	116.6955	DBL-BVR-G1114
17G	06ALL	2	FROM->TO	G15_101_2	CLEARLAKE - SPEERMORE 69KV CKT 1	64.2	0.01475	100.0623	DBL-OTA-BVR
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.0174	129.4383	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.0174	126.3518	DBL-BVR-G1114
20L	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01473	122.8938	DBL-G1114-WWRD
20L	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01473	119.8074	DBL-BVR-G1114
20WP	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01744	113.3831	DBL-G1114-WWRD
20WP	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01744	110.3014	DBL-BVR-G1114
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01475	104.537	DBL-OTA-BVR
16WP	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01851	103.7633	DBL-G1114-WWRD
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01475	102.8395	DBL-HTCH-OTA
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	52.7	0.0106	101.7913	BASE CASE
16WP	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.9	0.01851	100.6817	DBL-BVR-G1114
17G	06ALL	2	TO->FROM	G15_101_2	CLEARLAKE - TRI COUNTY REC-TEXAS COUNTY INTERCHANGE 69KV CKT 1	64.8	0.01336	100.3185	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02491	139.8296	DBL-G1524-WICH
17G	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	141.8	0.02491	130.6618	DBL-THIS-G1524
16WP	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02559	126.7986	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02816	121.3994	DBL-G1524-WICH
16WP	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.7	0.02559	117.6185	DBL-THIS-G1524
17SP	06ALL	2	FROM->TO	G15_101_2	CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1	142.8	0.02816	111.4555	DBL-THIS-G1524
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02491	194.592	DBL-G1524-WICH
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.02491	182.3047	DBL-THIS-G1524
20WP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02649	180.1446	DBL-G1524-WICH
20L	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02261	179.9694	DBL-G1524-WICH
16WP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02559	173.2362	DBL-G1524-WICH
17SP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02816	169.4189	DBL-G1524-WICH
20WP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109	0.02649	166.8418	DBL-THIS-G1524
20L	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.7	0.02261	166.6604	DBL-THIS-G1524
16WP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.2	0.02559	161.129	DBL-THIS-G1524
17SP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	108.7	0.02816	156.3555	DBL-THIS-G1524
20SP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.0278	149.9738	DBL-G1524-WICH
20SP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	107	0.0278	136.2355	DBL-THIS-G1524
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01359	106.4854	DBL-TGA-MATT
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01297	104.549	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01297	104.549	G1524G1525 345.00 - THISTLE7 345.00 345KV CKT 2
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01359	102.5157	DBL-G1151-TGA
25SP	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	109.9	0.02926	101.4762	DBL-G1524-WICH

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17G	06ALL	2	TO->FROM	G15_101_2	CLEARWATER - MILAN TAP 138KV CKT 1	105.8	0.01359	101.3815	DBL-WWRD-G1151
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01916	116.6105	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03514	116.5895	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03506	113.9076	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01916	113.7647	BINGER NIJECT - ONEY 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01922	113.5274	ONEY - WASHITA 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03117	112.9097	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03008	111.2122	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01922	111.0091	BINGER NIJECT - ONEY 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03109	110.365	DBL-TGA-MATT
20L	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02852	109.5631	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01916	109.529	BINGER NIJECT - SICKLES 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02999	109.4623	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.0337	109.3719	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.4	0.03515	108.8712	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03117	108.8011	DBL-G1151-TGA
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03117	107.4757	DBL-WWRD-G1151
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01922	107.033	BINGER NIJECT - SICKLES 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03109	106.1956	DBL-G1151-TGA
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03008	105.5793	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02553	105.2664	DBL-TGA-MATT
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03109	104.9382	DBL-WWRD-G1151
20WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02983	104.6941	DBL-TGA-MATT
16WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	187	0.03597	104.1887	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.02999	103.8369	G14-074T 345.00 - OKLAUNION 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.4	0.03128	103.7056	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.03066	102.822	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.01916	102.2491	HYDRO - SICKLES 138KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.4	0.02996	101.8189	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02878	101.7723	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	151.1	0.03058	101.4819	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02983	101.3715	DBL-G1151-TGA
20L	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02427	100.7635	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	150.9	0.01922	100.6049	HYDRO - SICKLES 138KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02553	100.6041	DBL-G1151-TGA
20WP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	186.6	0.02983	100.3533	DBL-WWRD-G1151
17SP	06ALL	2	TO->FROM	G15_101_2	CLINTON JUNCTION - ELK CITY 138KV CKT 1	134.8	0.02498	100.0706	BASE CASE
16WP	06ALL	2	TO->FROM	G15_101_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00528	110.7813	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_2	COMANCHE - COMANCHE TAP 69KV CKT 1	47	0.00528	106.1004	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00528	118.7467	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	47.3	0.00528	114.307	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0051	112.1128	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00505	111.8256	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.0051	106.4718	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	39	0.00505	106.1846	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	COMANCHE TAP - TOSCO 69KV CKT 1	48	0.0051	101.3	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01076	101.4861	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.3	0.01088	100.2335	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	CORNVILLE - NORGE ROAD 138KV CKT 1	133.4	0.01076	100.2117	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
25SP	00NR	2	TO->FROM	G15_101_2	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.01478	103.3967	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00528	124.352	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0051	121.6555	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00505	121.3128	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	47.5	0.00528	119.7204	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	38.9	0.0051	116	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	39	0.00505	115.6718	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	48	0.0051	106.925	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	DUNCAN - TOSCO 69KV CKT 1	48	0.0051	102.55	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	EARLSBORO 4138.00 - FIXICO TAP 138KV CKT 1	96.6	0.00547	101.152	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00547	111.5596	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00703	109.7806	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	108.0792	P12:138:AEPW:MCALEST4:C-RIVER4
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00682	108.0792	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00674	108.0792	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00665	106.6969	FOREST HILL - MAUD 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00588	106.3967	P12:138:AEPW:OKMULGE4:R.S.S-4
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00768	103.5497	CLEVELAND - G15066_T 345.00 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00695	103.266	LTRIVRT2 69.000 - MAUD 69KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00759	103.1119	MAUD (MAUD1) 138/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00768	102.828	G15066_T 345.00 - SOONER 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00697	102.24	HAMMETT TAP - HAMMETT2 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00813	102.2177	DBL-THIS-WWRD
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00798	102.1806	P12:345:AEPW-OKGE:R.S.S.-7:REDBUD7
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00744	102.1501	EARLSBORO - FIXICO 69KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00744	102.047	P12:069:OKGE:3TERM34
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00695	101.7196	LTRIVRT2 69.000 - WEWOKA TAP 69KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00718	101.6734	FRANKLIN - FRANKLIN SW 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00697	101.4153	HAMMETT2 - MEEKER 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00687	101.3905	ETNA - PARK LANE 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00736	101.3042	P12:138:AEPW:MCALEST4:C-RIVER4
17SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00736	101.3042	P13:345-138:AEPW:C-RIVER7
17SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97.1	0.00727	101.3042	P13:345-138:AEPW:C-RIVER7
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00668	101.1373	PARK LANE - SEMINOLE 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	EARLSBORO 4138.00 - MAUD 138KV CKT 1	97	0.00674	100.7398	DBL-WWRD-G1151
20L	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00674	153.7073	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.3	0.0081	138.9506	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.1	0.00804	121.9601	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	31.2	0.00841	114.1615	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.1	0.00674	111.1785	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.6	0.00828	105.215	G15085_T 138.00 - RUSSELL 138KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	ELDORADO - ELDORADO JCT 69KV CKT 1	26.7	0.00826	105.1775	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.4	0.00674	128.1407	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.2	0.00804	124.6261	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.5	0.0081	118.5969	G15085_T 138.00 - RUSSELL 138KV CKT 1
16WP	06ALL	2	TO->FROM	G15_101_2	ELDORADO - LAKE PAULINE 69KV CKT 1	32.3	0.00841	116.7752	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00674	148.9138	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.0081	131.3231	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	31	0.00804	115.9019	G15085_T 138.00 - RUSSELL 138KV CKT 1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
16WP	06ALL	2	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	31.1	0.00841	108.0977	G15085_T 138.00 - RUSSELL 138KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	ELDORADO JCT - GYPSUM 69KV CKT 1	26	0.00674	106.6061	G15085_T 138.00 - LAKE PAULINE 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.08377	116.8761	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08377	116.4677	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07198	110.1507	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07198	109.7723	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17G	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.08373	109.6267	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.08373	109.3989	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.08764	108.326	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08764	108.0537	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.8	0.06924	105.7749	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.06924	105.5817	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07198	104.9721	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07198	104.6167	G14-074T 345.00 - OKLAUNION 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0688	103.9536	DBL-TGA-MATT
20SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.08612	103.9512	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.8	0.08612	103.8392	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.7	0.07156	103.627	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0688	103.6249	DBL-TGA-MATT
17G	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07156	103.4388	P12:345:AEPW:O.K.U.-7:L.E.S.-7
17SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.08639	103.1415	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06NR	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.5	0.00838	103.1017	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.6	0.08639	103.0991	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.07548	102.9945	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
17G	06NR	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.8	0.00838	102.8704	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.07548	102.6478	CHISHOLM7 345.00 - WOODWARD DISTRICT EHV 345KV CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.4	0.07537	102.1161	P12:345:AEPW:O.K.U.-7:L.E.S.-7
16WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.9	0.07537	101.8868	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0688	101.5875	DBL-G1151-TGA
20L	06NR	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	447.9	0.00898	101.5529	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.7	0.07399	101.3915	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20L	06NR	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.3	0.00898	101.3032	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.8	0.07399	101.2578	P12:345:AEPW:O.K.U.-7:L.E.S.-7
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0688	101.2471	DBL-G1151-TGA
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448	0.0688	100.8509	DBL-WWRD-G1151
20WP	06ALL	2	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	450	0.0688	100.5138	DBL-WWRD-G1151
20L	06ALL	2	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	25.8	0.00674	140.3783	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	25.6	0.0081	115.7969	G15085_T 138.00 - RUSSELL 138KV CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	GYPSUM - RUSSELL 69KV CKT 1	30.6	0.00804	102.3843	G15085_T 138.00 - RUSSELL 138KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02491	157.3884	DBL-G1524-WICH
17G	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.5	0.02491	148.2655	DBL-THIS-G1524
16WP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02559	141.4686	DBL-G1524-WICH
16WP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.02559	132.2443	DBL-THIS-G1524
20WP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.0204	114.493	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02168	112.1436	DBL-G1524-WICH
20L	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01741	111.2358	DBL-G1524-WICH
20WP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	142.8	0.0204	106.6498	DBL-THIS-G1524
20SP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.2	0.02141	104.2444	DBL-G1524-WICH
17SP	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	135.9	0.02168	104.123	DBL-THIS-G1524

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20L	06ALL	2	FROM->TO	G15_101_2	HARPER - MILAN TAP 138KV CKT 1	143.1	0.01741	103.479	DBL-THIS-G1524
20SP	06ALL	2	FROM->TO	G15_101_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.6	0.00736	103.1118	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	06ALL	2	FROM->TO	G15_101_2	HITCHLAND INTERCHANGE - TEXAS COUNTY INTERCHANGE 115KV CKT 1	159.7	0.00764	101.0855	P12:115:SPS:W09.2.HITCH.TXSCO
25SP	00NR	2	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	215.2	0.0144	104.4405	BASE CASE
25SP	00NR	2	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01428	102.9726	PALO DURO SUB - RANDALL COUNTY INTERCHANGE 115KV CKT 1
25SP	00NR	2	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01428	101.6613	P12:115:SPS:T66.1.RNDALL.HAPPY
25SP	00NR	2	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	236.4	0.01428	101.619	HAPPY INTERCHANGE - PALO DURO SUB 115KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.01995	106.5282	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	2	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.01995	105.4389	P12:230:SPS:K69.1.MUSTG.SEMINLE
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01076	123.1263	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01076	121.7999	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01047	121.2327	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01088	121.026	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01047	120.938	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01076	120.1786	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01439	120.0837	CIMARRON - MINCO 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01054	119.7121	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01088	119.6985	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01054	119.4171	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01453	118.4271	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01076	118.2626	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01088	118.0761	P12:138:AEPW:CORNVIL4:S.W.S.-4
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01088	116.3062	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01439	115.7359	GRACEMONT - MINCO 345KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01453	114.0024	GRACEMONT - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01155	109.1172	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01137	108.9314	SOUTHWESTERN STATION - VERDEN 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01167	108.7026	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01137	107.6795	NORTH 29TH CHICKASHA - VERDEN 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01155	106.9801	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01109	106.9673	ANADARKO - SEQUOYAHJ4 138.00 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01109	106.6728	CORN TAP - SEQUOYAHJ4 138.00 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01167	106.564	G14-057T 345.00 - LAWTON EASTSIDE 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00959	106.3387	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01137	105.9122	P12:138:AEPW:CORNVIL4:S.W.S.-4
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.0057	104.619	P12:138:AEPW:S.W.S.-4:L.E.S.-4
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00959	104.349	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00969	104.2224	COMANCHE TAP - OMPA-DUNCAN 840 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01137	103.9977	CORNVILLE - NORTH 29TH CHICKASHA 138KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.00959	103.8332	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01032	102.8569	DBL-TGA-MATT
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00969	102.3788	P12:138:AEPW:DUNCAN-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00969	101.8625	P12:138:AEPW-OMPA:DUNCAN-4:OMDUNCN4
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.00581	101.7658	P12:138:AEPW:S.W.S.-4:L.E.S.-4
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01043	101.551	DBL-TGA-MATT
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01032	101.3831	DBL-G1151-TGA
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.009	101.2233	ANADARKO - POCASSETT 138KV CKT 1
25SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.8	0.01516	101.0592	CIMARRON - MINCO 345KV CKT 1
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.009	101.0022	P12:138:WFEC:MSL01

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.01032	100.9409	DBL-WWRD-G1151
20SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.7	0.009	100.9285	POCASSETT - TUTTLE 138KV CKT 1
17SP	06ALL	2	TO->FROM	G15_101_2	NORGE ROAD - SOUTHWESTERN STATION 138KV CKT 1	135.6	0.01043	100.0761	DBL-G1151-TGA
20L	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00633	175.3151	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20SP	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00625	166.2207	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
16WP	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.8	0.00426	161.3665	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17SP	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	29.9	0.00641	160.6635	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
25SP	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.0062	158.2933	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17G	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00646	157.8347	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20L	06NR	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00513	153.7707	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
20WP	06ALL	2		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00409	149.7013	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.5	0.03388	106.857	P12:115:SPS:T08.2.SPRMN.PRNGLE
20SP	06ALL	2	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	157.7	0.03553	105.8511	P12:115:SPS:T08.2.SPRMN.PRNGLE
17SP	06ALL	2	FROM->TO	G15_101_2	PRINGLE INTERCHANGE - SPEARMAN INTERCHANGE 115KV CKT 1	156.8	0.03575	105.2168	P12:115:SPS:T08.2.SPRMN.PRNGLE
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.3948	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.3948	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	2	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.4	0.01483	110.0285	P12:230:AEPW:ELKCITY6:SWEETWT6
20WP	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01483	109.2047	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	66.7	0.01492	108.6669	P12:230:AEPW:ELKCITY6:SWEETWT6
17G	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01492	107.6753	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67	0.01246	101.6275	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.5	0.01554	101.3772	P12:230:AEPW:ELKCITY6:SWEETWT6
20L	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	67.6	0.01246	100.8734	P12:230:AEPW:ELKCITY6:SWEETWT6
16WP	06ALL	2	FROM->TO	G15_101_2	SHAMROCK (SHAMRCK1) 115/69/14.4KV TRANSFORMER CKT 1	68	0.01554	100.7788	P12:230:AEPW:ELKCITY6:SWEETWT6
20SP	06ALL	2	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.6	0.00926	117.1718	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
17SP	06ALL	2	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.9	0.00938	113.4809	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20WP	06ALL	2	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	333.7	0.00981	108.8566	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
25SP	06ALL	2	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	314.1	0.01039	104.3915	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
16WP	06ALL	2	FROM->TO	G15_101_2	SILOAM CITY - SILOAM SPRINGS 161KV CKT 1	334.4	0.0099	101.3086	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20SP	06ALL	2	TO->FROM	G15_101_2	SILOAM CITY - SILOAM SPRINGS TAP 161KV CKT 1	285.9	0.00593	101.1274	P12:345:AEPW-GRDA:FLINTCR7:TONECE7
20L	06NR	2	FROM->TO	G15_101_2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	338.3	0.00503	103.8744	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	00NR	2	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.02118	102.167	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	2	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.2	0.0255	100.9598	P12:230:SPS:K03.1.SUNDWN.WOLFTH
25SP	00NR	2	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	182.5	0.02118	100.0456	P12:115:SPS:T30.1.LAMB.HOCKLY
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01048	136.9669	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01048	136.9669	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01048	136.8916	P13:069-115:TCEC:TC-TXCOUNTY.1
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.8	0.01048	136.8916	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.0105	133.8351	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.7	0.0105	133.8351	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.0105	133.6353	P13:069-115:TCEC:TC-TXCOUNTY.1
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.0105	133.6353	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01038	124.1562	P13:069-115:TCEC:TC-TXCOUNTY.1

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01038	124.1562	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01038	124.0371	P13:069-115:TCEC:TC-TXCOUNTY.1
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01038	124.0371	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.01014	122.4231	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.1	0.01014	122.4231	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01014	122.1026	P13:069-115:TCEC:TC-TXCOUNTY.1
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01014	122.1026	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01093	119.9323	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.9	0.01093	119.9323	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01093	119.9086	P13:069-115:TCEC:TC-TXCOUNTY.1
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	84	0.01093	119.9086	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01096	116.7031	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.4	0.01096	116.7031	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.6	0.01096	116.5435	P13:069-115:TCEC:TC-TXCOUNTY.1
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2	83.6	0.01096	116.5435	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01048	137.011	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.8	0.01048	137.011	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01048	136.9669	P13:069-115:TCEC:TC-TXCOUNTY.2
20SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01048	136.9669	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.0105	133.8351	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.7	0.0105	133.8351	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.0105	133.6353	P13:069-115:TCEC:TC-TXCOUNTY.2
17SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.0105	133.6353	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01039	124.159	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01039	124.159	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01039	124.04	P13:069-115:TCEC:TC-TXCOUNTY.2
20WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01039	124.04	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.01014	122.4231	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.1	0.01014	122.4231	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01014	122.2225	P13:069-115:TCEC:TC-TXCOUNTY.2
17G	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01014	122.2225	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01093	119.9323	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.9	0.01093	119.9323	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01093	119.9086	P13:069-115:TCEC:TC-TXCOUNTY.2
25SP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	84	0.01093	119.9086	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01097	116.706	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.4	0.01097	116.706	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01097	116.5464	P13:069-115:TCEC:TC-TXCOUNTY.2
16WP	06ALL	2	FROM->TO	G15_101_2	TEXAS COUNTY INTERCHANGE (ABB MLL92047) 115/69/13.2KV TRANSFORMER CKT 1	83.6	0.01097	116.5464	TEXAS COUNTY INTERCHANGE (ABB MLL92046) 115/69/13.2KV TRANSFORMER CKT 2
20L	06ALL	2	TO->FROM	G15_101_2	TUPELO - TUPELO TAP 138KV CKT 1	140.6	0.01168	101.8515	G14-057T 345.00 - SUNNYSIDE 345KV CKT 1
20L	06ALL	2	TO->FROM	G15_101_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05392	109.2642	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	TO->FROM	G15_101_2	WALKEMEYER - WALKTAP3 115.00 115KV CKT 1	301.6	0.05392	104.8212	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05392	118.6972	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05392	118.1443	P12:345:SPS:J04.1.FINN.HOLC(534)
20L	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	277.8	0.05392	113.8736	P12:345:SPS:WALKEMEYER-FINNEY
20L	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.1	0.05392	113.3432	P12:345:SPS:WALKEMEYER-FINNEY
20SP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.06278	107.7081	P12:345:SPS:J04.1.FINN.HOLC(534)
20SP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.06278	107.6311	P12:345:SPS:J04.1.FINN.HOLC(534)
17SP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.06025	105.8449	P12:345:SPS:J04.1.FINN.HOLC(534)

SEASON	GROUP	SCENARIO	DIRECTION	SOURCE	MONITORED ELEMENT	RATE (MVA)	TDF	CONTINGENCY LOADING %	CONTINGENCY
17SP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.9	0.06025	105.8449	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	279.8	0.06107	101.021	P12:345:SPS:J04.1.FINN.HOLC(534)
20WP	06ALL	2	FROM->TO	G15_101_2	WALKTAP7 345.00 (WALKE345) 345/115/13.8KV TRANSFORMER CKT 1	280	0.06107	100.9489	P12:345:SPS:J04.1.FINN.HOLC(534)
17G	06ALL	2	FROM->TO	G15_101_2	WICHITA (WICH TX-12) 345/138/13.8KV TRANSFORMER CKT 1	425.5	0.01111	100.3446	WICHITA (WICH TX-11) 345/138/13.8KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	108.6436	JONES STATION 230/22.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	108.6436	JONES STATION 230/22.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3465	Harrington Station East Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3465	Harrington Station Mid Bus 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.3388	HARRINGTON STATION 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.2469	TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	107.2075	TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1
16WP	00NR	3	FROM->TO	G15_101_2	CIMARRON - DRAPER LAKE 345KV CKT 1	715.2	0.00104	106.9452	HOBBS INTERCHANGE 230/18.0KV TRANSFORMER CKT 1
25SP	00NR	3	TO->FROM	G15_101_2	COX INTERCHANGE - HALE CO INTERCHANGE 115KV CKT 1	95.6	0.01477	103.2895	KRESS INTERCHANGE - KRESS_RURAL3115.00 115KV CKT 1
17G	06NR	3	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	448.5	0.00838	103.1017	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
17G	06NR	3	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.8	0.00838	102.8704	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06NR	3	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	447.9	0.00898	101.5975	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
20L	06NR	3	FROM->TO	G15_101_2	ELK CITY 230KV (ELKCTY-6) 230/138/13.8KV TRANSFORMER CKT 1	449.3	0.00898	101.3255	CHISHOLM7 345.00 - GRACEMONT 345KV CKT 1
25SP	00NR	3	TO->FROM	G15_101_2	KRESS INTERCHANGE - SWISHER COUNTY INTERCHANGE 115KV CKT 1	223.3	0.0144	100.652	BASE CASE
25SP	00NR	3	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	283.2	0.01995	106.5282	P12:230:SPS:K69.1.MUSTG.SEMINLE
25SP	00NR	3	FROM->TO	G15_101_2	MUSTANG STATION (ENRCO 136161) 230/115/13.2KV TRANSFORMER CKT 1	286.6	0.01995	105.404	P12:230:SPS:K69.1.MUSTG.SEMINLE
20L	06NR	3		G15_101_2	NORTON 6 230.00 (NORTONXF) 230/115/13.2KV TRANSFORMER CKT 1	30	0.00513	153.7707	G15101T-2 230.00 - POTTER COUNTY INTERCHANGE 230KV CKT 1
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	145.2	0.0071	105.0992	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.327	P13:115-230:SPS:SEMINOLE.2
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1	147.4	0.0071	103.327	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	145	0.00719	106.5694	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	P13:115-230:SPS:SEMINOLE.1
25SP	00NR	3	FROM->TO	G15_101_2	SEMINOLE (GE M101898) 230/115/13.2KV TRANSFORMER CKT 2	147.2	0.00719	104.7728	SEMINOLE (GE M101687) 230/115/13.2KV TRANSFORMER CKT 1
20L	06NR	3	FROM->TO	G15_101_2	STLN-DEMARC6 - SWEETWATER 230KV CKT 1	338.3	0.00503	103.9336	GRAPEVINE 345.00 - POTTER COUNTY INTERCHANGE 345KV CKT 1
25SP	00NR	3	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.1	0.02119	102.2253	P12:115:SPS:T30.1.LAMB.HOCKLY
25SP	00NR	3	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	179.1	0.02551	101.0734	P12:230:SPS:K03.1.SUNDWN.WOLFTH
25SP	00NR	3	FROM->TO	G15_101_2	SUNDOWN INTERCHANGE (WH XDS70381) 230/115/13.8KV TRANSFORMER CKT 1	182.5	0.02119	100.0469	P12:115:SPS:T30.1.LAMB.HOCKLY