

Feasibility Cluster Study for Generation Interconnection Requests

Southwest Power Pool
Engineering Dept.
Tariff Studies – Generation Interconnection

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Executive Summary

Generation Interconnection customers have requested a Feasibility Study under the Large Generation Interconnection Procedures (LGIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study. This Feasibility Cluster Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 6,322 MW of new generation which would be located within the transmission systems of Midwest Energy Inc. (MIDW), Missouri Public Service (MIPU), Mid-Kansas Electric Power LLC (MKEC), Sunflower Electric Power Corporation (SUNC), Westar Energy (WERE), Nebraska Public Power District (NPPD), and Omaha Public Power District (OPPD). The various generation interconnection requests have differing proposed in-service dates¹. The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by their queue number, amount, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

Power flow analysis has indicated that for the powerflow cases studied, 6,322 MW of nameplate generation may be interconnected with transmission system reinforcements within the SPP transmission system. The need for reactive compensation in accordance with Order No. 661-A for wind farm interconnection requests will be evaluated in the Interconnection System Impact Study based on the wind turbine manufacturer and type requested by the Customer. Dynamic stability studies performed as part of the System Impact Cluster Study will provide additional guidance as to whether the required reactive compensation can be static or a portion must be dynamic (such as a SVC).

The total estimated minimum cost for interconnecting the studied generation interconnection request is \$330,100,005. These costs are shown in Appendix F and G. 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 network constraints in the SPP transmission system that were identified are shown in Appendix I.

Network Constraints listed in Appendix I are in the local area of the new generation when this generation is injected throughout the SPP footprint for the Energy Resource (ER) Interconnection Request. 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 F and G 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.

Based on the SPP Tariff Attachment O, transmission facilities that are part of the SPP Transmission Expansion Plan (STEP) including Sponsored Economic Upgrades or the Balanced Portfolio that may be approved by the SPP Board of Directors will receive notifications to construct. These projects will then be considered construction pending projects and would not be assignable to the Feasibility

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

Cluster Study Generation Interconnection Requests. The network Upgrades identified in the Base Case Upgrades will not be assigned to the Feasibility Cluster Study for Generation Interconnection Requests.

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Introduction

Generation Interconnection customers have requested a Feasibility Study under the Large Generation Interconnection Procedures (LGIP) in the Southwest Power Pool Open Access Transmission Tariff (OATT). The Interconnection Customers' requests have been clustered together for the following Feasibility Cluster Study. This Feasibility Cluster Study analyzes the interconnecting of multiple generation interconnection requests associated with new generation totaling 6,322 MW of new generation which would be located within the transmission systems of Midwest Energy Inc. (MIDW), Missouri Public Service (MIPU), Mid-Kansas Electric Power LLC (MKEC), Sunflower Electric Power Corporation (SUNC), Westar Energy (WERE), Nebraska Public Power District (NPPD), and Omaha Public Power District (OPPD). The various generation interconnection requests have differing proposed in-service dates². The generation interconnection requests included in this Feasibility Cluster Study are listed in Appendix A by their queue number, amount, area, requested interconnection point, proposed interconnection point, and the requested in-service date.

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

Model Development

Interconnection Requests Included in the Cluster – SPP has included the interconnection requests listed in Appendix A to be analyzed in this cluster study.

Electrically Isolated Interconnection Requests – Electrically isolated requests are discussed in the “Regional Groupings” section.

Previous Queued Projects – The previous queued projects included in this study are listed in Appendix B. In addition to the Base Case Upgrades, the previous queued projects were assumed to be in-service and added to the Base Case models. These projects were dispatched as Energy Resources with equal distribution across the SPP footprint.

Development of Base Cases – The 2009 series Transmission Service Request (TSR) Models 2010 spring and 2014 summer and winter scenario 0 peak cases were used for this study. After the 2010 spring and the 2014 summer and winter peak cases were developed, each of the control areas' resources were then redispatched using current dispatch orders.

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.

Base Case Upgrades -The following facilities have been previously assigned or are in construction stages and were assumed to be in-service at the time of dispatch and added to the base case models.

- Woodward – Northwest 345kV line and associated projects to be built by OKGE for 2010 in-service³.
- Hitchland 345/230/115kV upgrades to be built by SPS for 2010/2011 in-service⁴.
 - Hitchland – Pringle 230kV line
 - Hitchland – Moore County 230kV line
 - Hitchland – Texas County 115kV line
 - Hitchland – Hansford County 115kV line
 - Hitchland – Sherman County Tap 115kV line
- Valliant – Hugo – Sunnyside 345kV – assigned to Aggregate Study AG3-2006 Customers for 2011 in-service
- Wichita – Reno County – Summit 345kV to be built by WERE for 2011 in-service⁵.
- Rose Hill – Sooner 345kV to be built by WERE/OKGE for 2010 in-service.
- Finney – Holcomb 345kV Ckt #2 line assigned to GEN-2006-044 interconnection customer for possible 2010 in-service⁶.
- Hitchland – Woodward 345kV Ckt #1 line assigned to GEN-2006-049 interconnection customer for undetermined in service date.
- All facilities that are to be assigned in the Impact Cluster Study (ICS-2008-001) for the 1st transitional cluster. These facilities include:
 - Spearville – Comanche 345kV line
 - Comanche – Wichita 345kV line
 - Woodward – Comanche 345kV line
 - Conway – Wheeler County 345kV line
 - Wheeler County - Anadarko 345kV line
 - Wheeler County 345/230kV stepdown from the Tuco-Woodward 345kV line
- Balanced Portfolio Projects:
 - Anadarko 345/138/13.2kV Autotransformer
 - Woodward– TUCO 345kV line
 - Sooner– Cleveland 345kV line
 - Iatan– Nashua 345kV line
 - Muskogee– Seminole 345kV line
 - Knoll– Axtell 345kV line
 - Spearville– Knoll 345kV line
 - Tap Stillwell – Swissvale 345kV line at West Gardner
- Other Expansion Plan Projects:
 - Seven Rivers – Pecos 230kV line
 - Pecos – Potash Junction 230kV line
 - Hobbs – Seminole 230kV line
 - Seminole – Mustang 230kV line

³ Approved based on an order of the Corporation Commission of the State of Oklahoma, Cause No. PUD 200800148 Order No. 55935

⁴ Approved 230kV upgrades are based on SPP 2007 STEP. Upgrades may need to be re-evaluated in the system impact study.

⁵ Approved based on an order of the Kansas Corporation Commission issued in Docket no. 07-WSEE-715-MIS

⁶ Based on Facility Study Posting November 2008

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

Regional Groupings – The interconnection requests listed in Appendix A were grouped together in seven different regional groups based on geographical and electrical impacts. These groupings are shown in Appendix C. Certain interconnection requests were grouped by themselves that were not in close proximity to any other requests.

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

For each group, the various wind generating plants were modeled at 80% nameplate of maximum generation. The wind generating plants in the other areas were modeled at 20% nameplate of maximum generation. This process created seven different scenarios with each group being studied at 80% nameplate rating. These projects were dispatched as Energy Resources with equal distribution across the SPP footprint. This method allowed for the identification of network constraints that were common to the regional groupings that could then in turn have the mitigating upgrade cost allocated throughout the entire cluster. Additionally, each wind interconnection request was studied as a stand alone project at 100% nameplate assuming no other projects were in the cluster.

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

Identification of Network Constraints

The initial set of network constraints were found by using PTI MUST First Contingency Incremental Transfer Capability (FCITC) analysis on the entire cluster grouping dispatched at the various levels mentioned above. These constraints were then screened to determine if any of the generation interconnection requests had at least a 20% Distribution Factor (DF) upon the constraint. Constraints that measured at least a 20% DF from at least one interconnection request were considered for mitigation.

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

Determination of Cost Allocated Network Upgrades

Cost Allocated Network Upgrades of wind generation interconnection requests were determined using the 2010 spring model. Cost Allocated Network Upgrades of peaking units was determined using the 2014 summer peak model. Once a determination of the required Network Upgrades was made, a powerflow model of the 2010 spring case was developed with all cost allocated Network Upgrades in-service. A MUST FCITC analysis was performed to determine the Power Transfer Distribution Factors (PTDF), a distribution factor with no contingency that each generation interconnection request had on each new upgrade. The impact each generation interconnection request had on each upgrade project was weighted by the size of each request. Finally the costs due by each request for a particular project were then determined by allocating the portion of each request's impact over the impact of all affecting requests.

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

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

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

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

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

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

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

- Repeat previous for each responsible GI request for each Project

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

Credits for Amounts Advanced for Network Upgrades – Interconnection Customer shall be entitled to credits in accordance with Attachment Z1 of the SPP Tariff for any Network Upgrades including any tax gross-up or any other tax-related payments associated with the Network Upgrades, and not refunded to the Interconnection Customer.

Interconnection Facilities

The requirement to interconnect the 6,322 MW of generation into the existing and proposed transmission systems in the affected areas of the SPP transmission footprint consist of the necessary cost allocated shared facilities listed in Appendix G. Interconnection Facilities specific to each generation interconnection request are listed in Appendix F. Appendix G lists the costs by upgrade.

Other Network Constraints in the AEPW, MIDW, OKGE, SPS, SUNC, SWPA, MKEC, WERE, NPPD, OPPD, AND WFEC transmission systems that were identified are shown in Appendix I. With a defined source and sink in a TSR, this list of Network Constraints will be refined and expanded to account for all Network Upgrade requirements.

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

Powerflow Analysis Methodology

The Southwest Power Pool (SPP) Criteria states that:

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

The FCITC function of MUST function of PSS/E was used to simulate single contingencies in portions or all of the modeled control areas of AEPW, EMDE, Grand River Dam Authority (GRDA), Kansas City Power & Light (KCPL), MIDW, MIPU, OKGE, SPS, SUNC, WERE, WFEC, NPPD, and OPPD and other control areas were applied and the resulting scenarios analyzed. This satisfies the “more probable” contingency testing criteria mandated by NERC and the SPP criteria.

Powerflow Analysis

A powerflow analysis was conducted for each Interconnection Customer’s facility using modified versions of the 2010 spring peak and the 2014 summer peak and winter peak models. The output of the Interconnection Customer’s facility was offset in each model by a reduction in output of existing online SPP generation. This method allows the request to be studied as an Energy Resource (ER) Interconnection Request. The available seasonal models used were through the 2014 Summer Peak.

This analysis was conducted assuming that previous queued requests in the immediate area of these interconnect requests were in-service. The analysis of the each Customer’s project indicates that additional criteria violations will occur on the AEPW, MIDW, OKGE, SPS, SUNC, SWPA, MKEC,

WERE, WFEC, NPPD, and OPPD transmission systems under steady state and contingency conditions in the peak seasons.

The need for reactive compensation will be determined during the Cluster System Impact Cluster 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

On the next page is the map of the transmission upgrades that are recommended to interconnect the cluster of generation interconnection requests.

Regional Map with Proposed Upgrades

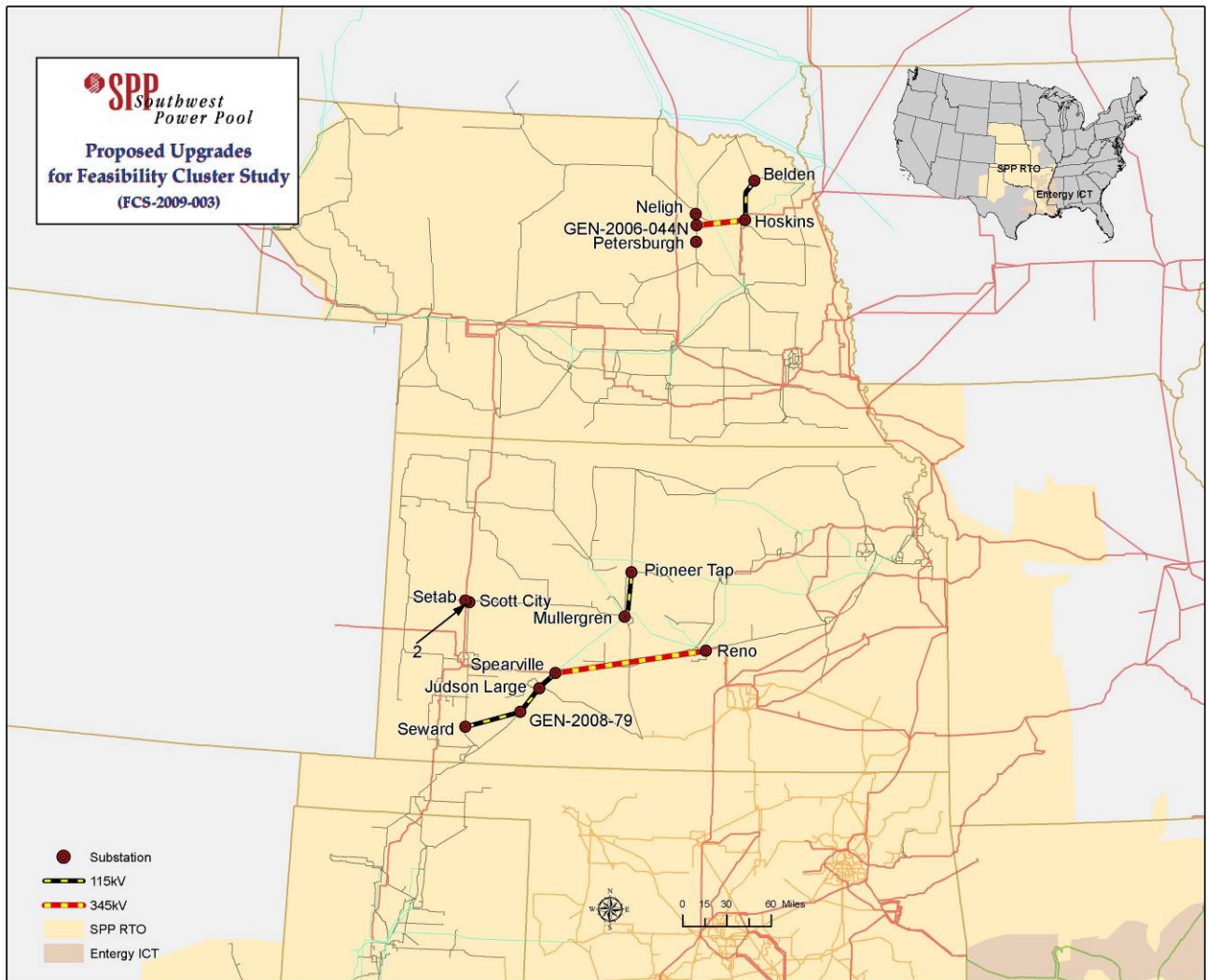


Figure 1 - Proposed Major Line Upgrades

Conclusion

The minimum cost of interconnecting all of the interconnection requests included in the Feasibility Cluster Study is estimated at \$330,100,005 for the Allocated Network Upgrades and Transmission Owner Interconnection Facilities are listed in Appendix E and F. These costs do not include the cost of upgrades of other transmission facilities listed in Appendix I which are Network Constraints.

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

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

Appendix

A: Generation Interconnection Requests Considered for Feasibility Study

Request	Amount	Area	Requested Point of Interconnection	Proposed Point of Interconnection	Requested In-Service Date
GEN-2006-038N009	250	NPPD	Ft. Randall - Kelly 230kV	Ft. Randall - Columbus 230kV	
GEN-2006-038N010	200	NPPD	Belden 115kV	Belden 115kV	
GEN-2006-038N023	100	NPPD	Spalding 115kV	Spalding 115kV	
GEN-2008-030N	201	NPPD	Twin Church - Hoskins 230kV	Twin Church - Hoskins 230kV	
GEN-2008-068	150	MIDW	Smokey Hills 230kV	Smokey Hills 230kV	10/1/2011
GEN-2008-080	80	SUNC	Seward 115kV	Seward 115kV	12/31/2010
GEN-2008-081	110	SUNC	E. Liberal 115kV - Cudahay 115kV	E. Liberal 115kV - Cudahay 115kV	12/31/2010
GEN-2008-086N	99	NPPD	Neligh 115kV	Neligh 115kV	
GEN-2008-086N01	99	NPPD	Neligh - Petersburg 115kV	Neligh - Petersburg 115kV	1/1/2010
GEN-2008-089	150	MIDW	Knoll 230kV	Knoll 230kV	12/31/2011
GEN-2008-099	100	WERE	Wolf Creek – Lacyne 345kV	Wolf Creek – Lacyne 345kV	12/31/2011
GEN-2008-117	161	SUNC	Holcomb - Mingo 345kV	Setab 345kV	12/15/2010
GEN-2008-118	161	SUNC	Holcomb - Mingo 345kV	Setab 345kV	12/15/2011
GEN-2008-119	179.4	SUNC	Holcomb - Mingo 345kV	Setab 345kV	12/15/2012
GEN-2008-121O	249	OPPD	Cass County 345kV	Cass County 345kV	1/1/2014
GEN-2008-133	800	SUNC	Holcomb – Spearville 345kV	Holcomb – Spearville 345kV	12/31/2012
GEN-2009-003O	80	OPPD	S974 69kV	S974 69kV	12/31/2011
GEN-2009-003O1	80	OPPD	Cass County 345kV	Cass County - Brock 161kV	12/31/2011
GEN-2009-008	199.5	MIDW	Ness City 115kV	South Hays 230kV	9/1/2011
GEN-2009-009	150	SUNC	Pioneer Tap 115kV	Pioneer Tap 115kV	9/1/2011
GEN-2009-010	199.5	MKEC	Mullergreen 230kV	Mullergreen 230kV	9/1/2011
GEN-2009-012	300	MIPU	Cooper - St. Joseph 345kV	Cooper - St. Joseph 345kV	12/31/2012
GEN-2009-013	151	MKEC	North Judson Large 115kV	North Judson Large 115kV	5/1/2011
GEN-2009-014	151	MKEC	Mullergreen 115kV	Mullergreen 115kV	5/1/2011
GEN-2009-015	72	MIDW	Spearville - Mullergren 230kV	Spearville - Mullergren 230kV	12/31/2011
GEN-2009-020	49.5	MIDW	Nekoma - Balzine 69kV	Nekoma - Balzine 69kV	12/31/2011
GEN-2009-021	895	SUNC	Holcomb 345kV	Holcomb 345kV	6/15/2015
GEN-2009-026	102	MIDW	Spearville - Knoll 345kV	Spearville - Knoll 345kV	12/31/2012
GEN-2009-027	150	EMDE	Neosho - Morgan 345kV	Neosho - Morgan 345kV	12/31/2014
GEN-2009-028	150	EMDE	Neosho - Morgan 345kV	Neosho - Morgan 345kV	12/31/2015
GEN-2009-029	300	KCPL	Saint Joseph 161kV	Saint Joseph 161kV	12/1/2012
GEN-2009-040	91	WERE	Knob Hill - Baileyville 115kV	Knob Hill - Baileyville 115kV	12/31/2012
GEN-2009-043	102	MIDW	Spearville - Knoll 345kV	Spearville - Knoll 345kV	12/31/2013
GROUPED TOTAL	6311.9 MW				

* Planned Facility

^ Proposed Facility

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

*** Electrically Remote Interconnection Requests

**** Portions of this request are alternates for other interconnection requests listed as prior queued generators

B: Prior Queued Interconnection Requests

Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2001-014	96	WFEC	Fort Supply 138kV	On-Line
GEN-2001-026	74	WFEC	Washita 138kV	On-Line
GEN-2001-033	180	SPS	San Juan Mesa Tap 230kV	On-Line
GEN-2001-036	80	SPS	NORTON 115kV	On-Line
GEN-2001-037	100	OKGE	Windfarm Switching 138kV	On-Line
GEN-2001-039A	105	WPEK	Greensburg - Judson-Large 115kV	On Suspension
GEN-2001-039M	100	SUNC	Central Plains Tap 115kV	On-Line
GEN-2002-005	120	WFEC	RED HILLS TAP 138kV	On-Line
GEN-2002-006	150	SPS	Texas County 115kV	12/31/2010
GEN-2002-008	240	SPS	*Hitchland 345kV	On-Line (120MW)
GEN-2002-009	80	SPS	Hansford County 115kV	On-Line
GEN-2002-022	240	SPS	Bushland 230kV	On-Line (160MW)
GEN-2002-025A	150	WPEK	Spearville 230kV	On-Line
GEN-2003-004	100	WFEC	Washita 138kV	On-Line
GEN-2003-005	100	WFEC	Tap Anadarko - Paradise 138kV	12/31/2008
GEN-2003-006A-E	200	EMDE	Elm Creek 230kV	On-Line
GEN-2003-006A-W	200	WERE	Elm Creek 230kV	On-Line
GEN-2003-013**	198	SPS	Tap Finney - *Hitchland 345kV	On Suspension
GEN-2003-019	250	MIDW	Smoky Hills 230kV	On-Line
GEN-2003-020	160	SPS	MARTIN 115kV	On-Line (80MW)
GEN-2003-021N	75	NPPD	Ainsworth Wind Tap 115kV	On-Line
GEN-2003-022	120	AEPW	Washita 138kV	On-Line
GEN-2004-003	240	SPS	Conway 115kV	On Suspension
GEN-2004-005N	30	NPPD	St. Francis 115kV	
GEN-2004-010	300	WERE	Latham 345kV	On Suspension
GEN-2004-014	155	MIDW	Spearville 230kV	12/31/2009
GEN-2004-020	27	AEPW	Washita 34.5kV	On-Line
GEN-2004-023	21	WFEC	Washita 138kV	On-Line
GEN-2005-003	31	WFEC	Washita 138kV	On-Line
GEN-2005-005	18	OKGE	Windfarm Switching 138kV	5/1/2006
GEN-2005-008	120	OKGE	Woodward 138kV	On-Line
GEN-2005-010	160	SPS	Tap Roosevelt County North - Tolk West 230kV	On Suspension
GEN-2005-012	250	WPEK	Spearville 345kV	10/1/2011
GEN-2005-013	201	WERE	Tap Latham-Neosho 345kV	On Suspension

Appendix B: Prior Queued Interconnection Requests



Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2005-015	150	SPS	TUCO - Oklaunion 345kV	On Suspension
GEN-2005-016	150	WERE	Tap Latham-Neosho 345kV	12/31/2006
GEN-2005-017	340	SPS	Tap *Hitchland - Potter County 345kV	On Suspension
GEN-2005-021	86	SPS	Kirby 115kV	On Suspension
GEN-2006-002	150	AEPW	Grapevine - Elk City 230kV	On Suspension
GEN-2006-006	206	MKEC	Speerville 230kV	Under Study (ICS-2008-001)
GEN-2006-014	300	MIPU	Tap Maryville-Clarinda and tie to Midway (WFARMS) 161kV	5/31/2008
GEN-2006-017	300	MIPU	Tap Maryville-Clarinda and tie to Midway (WFARMS) 161kV	On Suspension
GEN-2006-020S	18.9	SPS	*DWS FRISCO TAP 115kV	12/31/2009
GEN-2006-020N	42	NPPD	BloomField 115kV	1/1/2009
GEN-2006-021	101	WPEK	Flat Ridge Wind Farm Tap 138kV	On-Line (100MW)
GEN-2006-022	150	WEPL	Ninnescah Tap 115kV	On Suspension
GEN-2006-024S	20	WFEC	SOUTH BUFFALO TAP 69kV	On-Line
GEN-2006-027	320	WERE	Emporia Energy Center Tap (Lang) 345kV	On-Line
GEN-2006-031	75	MIDW	Knoll 115kV	On-Line
GEN-2006-032	200	MIDW	South Hays 230kV	4/30/2012
GEN-2006-034	81	SUNC	Kanarado - Sharon Springs 115kV	On Suspension
GEN-2006-035	225	AEPW	Grapevine - Elk City 230kV	10/1/2010
GEN-2006-037N	100.5	NPPD	Valentine 115kV	Under Study (DISIS-2009-001)
GEN-2006-037N1	75	NPPD	Broken Bow 115kV	Under Study (DISIS-2009-001)
GEN-2006-038	750	WFEC	Hugo 345kV	On Suspension
GEN-2006-038N005	80	NPPD	Broken Bow 115kV	12/1/2010
GEN-2006-038N019	80	NPPD	Petersburg 115kV	5/1/2011
GEN-2006-039	400	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV	On Suspension
GEN-2006-040	108	SUNC	Mingo 115kV	6/30/2010
GEN-2006-043	99	AEPW	Grapevine - Elk City 230kV	12/31/2009
GEN-2006-044	370	SPS	*Hitchland 345kV	11/1/2011
GEN-2006-044N	40.5	NPPD	Tap Neligh-Petersburg 115kV	Under Study (DISIS-2009-001)
GEN-2006-045	240	SPS	Tap and Tie both Potter County - Plant X 230kV and Bushland - Deaf Smith 230kV	12/31/2010
GEN-2006-046	131	OKGE	Dewey 138kV	12/31/2009
GEN-2006-047	240	SPS	TAP & TIE POTTER-PLANT X & BUSHLAND-DEAF SMITH (GEN-2006-039 TAP & TIE)	12/31/2013
GEN-2006-049	400	SPS	Tap Finney - *Hitchland 345kV	IA Pending
GEN-2007-002	160	SPS	Grapevine 115kV	On Suspension
GEN-2007-005	200	SPS	Pringle 115kV	Under Study (ICS-2008-001)
GEN-2007-006	160	OKGE	Roman Nose 138kV	On Suspension
GEN-2007-008	300	SPS	^Grapevine EHV 230kV	Under Study (ICS-2008-001)

Appendix B: Prior Queued Interconnection Requests



Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2007-011	135	SUNC	Syracuse 115kV	12/31/2010
GEN-2007-011N06	75	NPPD	Tap Neligh-Petersburg 115kV	Under Study (DISIS-2009-001)
GEN-2007-011N08	81	NPPD	BloomField 115kV	On-Line
GEN-2007-011N09	75	NPPD	BloomField 115kV	Under Study (DISIS-2009-001)
GEN-2007-013	99	SUNC	Selkirk 115kV	IA Pending
GEN-2007-015	135	WERE	Tap Humboldt - Kelly 161kV	IA Pending
GEN-2007-017	101	MIPU	Tap Maryville-Clarinda and tie to Midway (WFARMS) 161kV	12/31/2009
GEN-2007-021	201	OKGE	TATONGA EHV 345kV	Under Study (ICS-2008-001)
GEN-2007-025	300	WERE	Wichita – Woodring 345kV	Under Study (ICS-2008-001)
GEN-2007-032	150	WFEC	Tap Clinton Junction - Clinton 138kV	Under Study (ICS-2008-001)
GEN-2007-034	150	SPS	Tap Tolk - Eddy County 345kV	Under Study (ICS-2008-001)
GEN-2007-038	200	SUNC	Spearville 345kV	Under Study (ICS-2008-001)
GEN-2007-040	200	SUNC	Tap Holcomb - Spearville 345kV	Under Study (DISIS-2009-001)
GEN-2007-043	300	AEPW	Lawton Eastside - Cimarron 345kV	Under Study (ICS-2008-001)
GEN-2007-044	300	OKGE	^TATONGA EHV 345kV	Under Study (ICS-2008-001)
GEN-2007-045	171	SPS	Conway 115kV	Under Study (ICS-2008-001)
GEN-2007-046	200	SPS	TAP & TIE TEXAS COUNTY-HITCHLAND & DWS FRISCO TAP-HITCHLAND 115kV	Under Study (ICS-2008-001)
GEN-2007-048	400	SPS	Amarillo South - Swisher County 230kV	Under Study (ICS-2008-001)
GEN-2007-050	170	OKGE	Woodward EHV 138kV	Under Study (ICS-2008-001)
GEN-2007-051	200	WFEC	Mooreland 138kV	Under Study (ICS-2008-001)
GEN-2007-052	150	WFEC	Anadarko 138kV	Under Study (ICS-2008-001)
GEN-2007-053***	110	MIPU	Maryville 161kV	Under Study (ICS-2008-001)
GEN-2007-057	35	SPS	MOORE EAST 115kV	Under Study (ICS-2008-001)
GEN-2007-062**	765	OKGE	*Woodward EHV 345kV	Under Study (ICS-2008-001)
GEN-2008-003	101	OKGE	Woodward 138kV	Under Study (ICS-2008-001)
GEN-2008-008	60	SPS	Graham 115kV	Under Study (ICS-2008-001)
GEN-2008-009	60	SPS	San Juan Mesa 230kV	Under Study (ICS-2008-001)
GEN-2008-013	300	OKGE	Wichita - Woodring 345kV	Under Study (ICS-2008-001)
GEN-2008-014	150	SPS	Tap TUCO - Oklaunion 345kV	Under Study (ICS-2008-001)
GEN-2008-016	248	SPS	Grassland 230kV	Under Study (ICS-2008-001)
GEN-2008-017	300	SUNC	Setab 345kV	Under Study (ICS-2008-001)
GEN-2008-018	405	SUNC	FINNEY 345kV	Under Study (ICS-2008-001)

Appendix B: Prior Queued Interconnection Requests



Request	Amount	Area	Requested/Proposed Point of Interconnection	Status or In-Service Date
GEN-2008-019**	300	OKGE	TATONGA EHV 345kV	Under Study (ICS-2008-001)
GEN-2008-021	42	WERE	Wolf Creek 25kV	Under Study (DISIS-2009-001)
GEN-2008-023	150	AEPW	Hobart Junction 138kV	Under Study (DISIS-2009-001)
GEN-2008-025	101	SUNC	Ruleton 115kV	Under Study (DISIS-2009-001)
GEN-2008-029	205.5	OKGE	Woodward EHV 138kV	Under Study (DISIS-2009-001)
GEN-2008-038	144	AEPW	Tap Shidler-West Pawhuska 138kV	Under Study (DISIS-2009-001)
GEN-2008-051	322	SWPS	Potter 345kV	Under Study (DISIS-2009-001)
GEN-2008-079	100.5	MKEC	TAP JUDSON LARGE-CUDAHY 115kV	Under Study (DISIS-2009-001)
GEN-2008-086N02	99	NPPD	TAP FT RANDALL-COLUMBUS 230kV	Under Study (DISIS-2009-001)
GEN-2008-092	201	MIDW	KNOLL 115kV	Under Study (DISIS-2009-001)
GEN-2008-119O	60	OPPD	TAP HUMBOLDT-KELLY (NORTH OF GEN-2007-015) 161kV	Under Study (DISIS-2009-001)
GEN-2008-124	200.1	MKEC	SPEARVILLE 230kV	Under Study (DISIS-2009-001)
GEN-2008-127	200.1	WERE	TAP SOONER-ROSE HILL 345kV	Under Study (DISIS-2009-001)
GEN-2008-129	46S/79W	MIPU	PLEASANT HILL 161kV	Under Study (DISIS-2009-001)
GEN-2009-006	60	AEPW	SE FAYETTEVILLE 161kV	Under Study (DISIS-2009-001)
GEN-2009-011	50	MKEC	TAP PLAINVILLE-PHILLIPSBURG 115kV	Under Study (DISIS-2009-001)
GEN-2009-016	170.2	AEPW	FALCON ROAD 138kV	Under Study (DISIS-2009-001)
GEN-2009-017	151.8	SPS	TAP PEMBROOK-STILES 138kV	Under Study (DISIS-2009-001)
GEN-2009-025	60	OKGE	Kaycoop 69kV	Under Study (DISIS-2009-001)
Llano Estacado	80	SPS	Llano Wind Farm Tap 115kV	On-Line
SPS Distubted Generation	90	SPS	Dumas 19ST 115kV	On-Line
			Etter 115kV	On-Line
			Sherman 115kV	On-Line
			Spearman 115kV	On-Line
			Texas County 115kV	On-Line
GEN-2003-004	151.2	WFEC	Washita 138kV (GEN-2003-004)	On-Line
GEN-2004-023			Washita 138kV (GEN-2004-023)	On-Line
GEN-2005-003			Washita 138kV (GEN-2005-003)	On-Line
Montezuma	112	MKEC	Haggard 115kV	On-Line
GROUPED TOTAL	20897.3 MW			

* Planned Facility
 ^ Proposed Facility
 ** Alternate requests - counted as one request for study purpose
 *** Electrically Remote Interconnection Requests

C: Study Groupings

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Montezuma	110	MKEC	Haggard 115kV
	GEN-2001-039A	105	WPEK	Greensburg - Judson-Large 115kV
	GEN-2002-025A	150	WPEK	Spearville 230kV
	GEN-2004-014	155	MIDW	Spearville 230kV
	GEN-2005-012	250	WPEK	Spearville 345kV
	GEN-2006-006	206	MKEC	Spearville 230kV
	GEN-2006-021	101	WPEK	Flat Ridge Tap 138kV
	GEN-2006-022	150	WPEK	Ninnescah Tap 115kV
	GEN-2007-038	200	SUNC	Spearville 345kV
	GEN-2008-018	405	SUNC	Finney 345kV
PRIOR QUEUED SUBTOTAL		1,832		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Spearville	GEN-2008-080	80	SUNC	Seward 115kV
	GEN-2008-081	110	SUNC	Cimarron Plant 115kV
	GEN-2008-133	800	SUNC	*GEN-2007-040 345kV
	GEN-2009-008	199.5	MKEC	South Hays 230kV
	GEN-2009-009	150	MKEC	Pioneer Tap 115kV
	GEN-2009-010	199.5	MKEC	Mullergreen 230kV
	GEN-2009-013	151	MKEC	North Judson Large 115kV
	GEN-2009-014	151	MKEC	Mullergreen 115kV
	GEN-2009-015	72	MIDW	Spearville - Mullergren 230kV
	GEN-2009-021	895	SUNC	Holcomb 345kV
Spearville SUBTOTAL		2,808		
AREA SUBTOTAL		4,640		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2001-039M	100	SUNC	Leoti - City Services 115kV
	GEN-2006-034	81	SUNC	Kanarado - Sharon Springs 115kV
	GEN-2006-040	108	SUNC	Mingo 115kV
	GEN-2007-011	135	SUNC	Syracuse 115kV
	GEN-2007-013	99	SUNC	Selkirk 115kV
	GEN-2008-017**	300	SUNC	Setab 345kV
PRIOR QUEUED SUBTOTAL		823		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Mingo	GEN-2008-117	161	SUNC	Holcomb - Mingo 345kV
	GEN-2008-118	161	SUNC	Holcomb - Mingo 345kV
	GEN-2008-119	179.4	SUNC	Holcomb - Mingo 345kV
MINGO SUBTOTAL		501.4		
AREA SUBTOTAL		1,324.4		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Genoa	4	NPPD	Genoa 115kV
	GEN-2006-020N	42	NPPD	Bloomfield 115kV
	GEN-2006-038N019	80	NPPD	Petersburg 115kV
	GEN-2007-011N08	81	NPPD	Bloomfield 115kV
PRIOR QUEUED SUBTOTAL		207		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
NE Nebraska	GEN-2006-038N009	250	NPPD	Ft. Randall - Columbus 230kV
	GEN-2006-038N010	200	NPPD	Belden 115kV
	GEN-2008-030N	201	NPPD	Twin Church - Hoskins 230kV
	GEN-2008-086N	99	NPPD	Neligh 115kV
	GEN-2008-086N01	99	NPPD	Neligh - Petersburg 115kV
	GEN-2008-121O	249	OPPD	Cass County 345kV (S3740)
GEN-2009-003O1	80	OPPD	Cass County - Brock 161kV	
NE NEBRASKA SUBTOTAL		1,178		
AREA SUBTOTAL		1,385		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Broken Bow	8.3	NPPD	Broken Bow 115kV
	Ord	13.9	NPPD	Ord 115kV
	Stuart	2.1	NPPD	Stuart 115kV
	GEN-2003-021N	75	NPPD	Ainsworth Wind Tap 115kV
	GEN-2004-005N	30	NPPD	St. Francis 115kV
	GEN-2006-038N005	80	NPPD	Broken Bow 115kV
PRIOR QUEUED SUBTOTAL		209.3		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
North Nebraska	GEN-2006-038N023	100	NPPD	Spalding 115kV
NORTH NEBRASKA SUBTOTAL		100		
AREA SUBTOTAL		309.3		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	GEN-2003-006A-E	100	EMDE	Elm Creek 230kV
	GEN-2003-006A-W	100	WERE	Elm Creek 230kV
	GEN-2003-019	250	MIDW	Smoky Hills Tap 230kV
	GEN-2006-031	75	MIDW	Knoll 115kV
	GEN-2006-032	200	MIDW	South Hays 230kV
PRIOR QUEUED SUBTOTAL		725		
Cluster	Request	Amount	Area	Proposed Point of Interconnection
North Kansas	GEN-2008-068	150	MIDW	Smokey Hills 230kV
	GEN-2008-089	150	MIDW	Knoll 230kV
	GEN-2009-020	49.5	MIDW	Nekoma - Balzine 69kV
	GEN-2009-026	102	MIDW	Spearville - Knoll 345kV
	GEN-2009-043	102	MIDW	Spearville - Knoll 345kV
NORTH KANSAS SUBTOTAL		553.5		
AREA SUBTOTAL		1,278.5		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
NW Arkansas	GEN-2009-027	150	EMDE	Neosho - Morgan 345kV
	GEN-2009-028	150	EMDE	Neosho - Morgan 345kV
NW ARKANSAS AREA SUBTOTAL		300		
AREA SUBTOTAL		300		

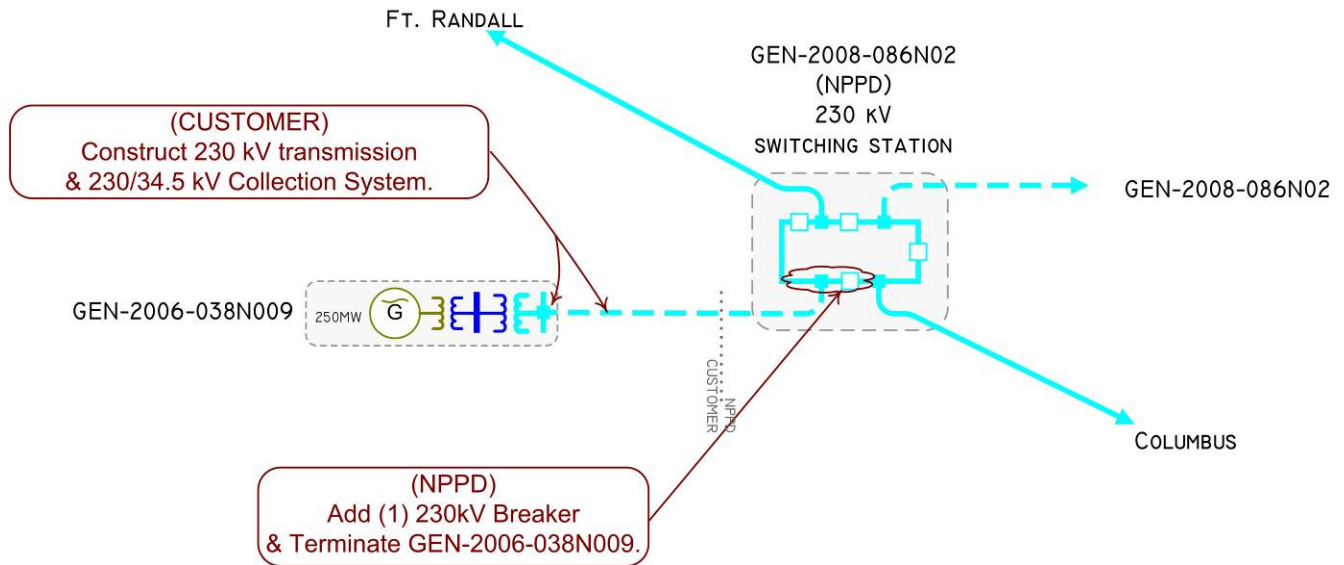
Cluster	Request	Amount	Area	Proposed Point of Interconnection
Prior Queued	Dogwood	265	MIPU	Pleasant Hill 161kV
	AECI-1	400	AECI	Tap Cooper – Fairport 345kV
	AECI-2	99	AECI	Lathrop 161kV
	AECI-3	201	AECI	Osborn 161kV
	AECI-5	100	AECI	Maryville 161kV
	GEN-2006-014	300	MIPU	Tap Maryville – Clarinda & Tie To Midway 161kV
	GEN-2006-017	300	MIPU	Tap Maryville – Clarinda & Tie To Midway 161kV
	GEN-2007-015	135	WERE	Tap Humboldt – Kelly 161kV
	GEN-2007-017	101	MIPU	Tap Maryville – Clarinda & Tie To Midway 161kV
	GEN-2007-053	110	MIPU	Tap Maryville – Clarinda & Tie To Midway 161kV
	GEN-2008-119O	60	OPPD	Tap Humboldt – Kelly 161kV
PRIOR QUEUED SUBTOTAL		2,071		

Cluster	Request	Amount	Area	Proposed Point of Interconnection
Kansas City Kansas	GEN-2008-099	100	WERE	WOLF CREEK – LACYGNE 345KV
	GEN-2009-003O	80	OPPD	S974 69kV
	GEN-2009-012	300	MIPU	Cooper - St. Joseph 345kV
	GEN-2009-029	300	KCPL	Saint Joseph 161kV
	GEN-2009-040	91	WERE	Knob Hill - Baileyville 115kV
KANSAS CITY KANSAS SUBTOTAL		871		
AREA SUBTOTAL		2,942		
***CLUSTERED TOTAL (w/o PRIOR QUEUED)		6,321.9		
***CLUSTERED TOTAL (w/PRIOR QUEUED)		12,179.2		

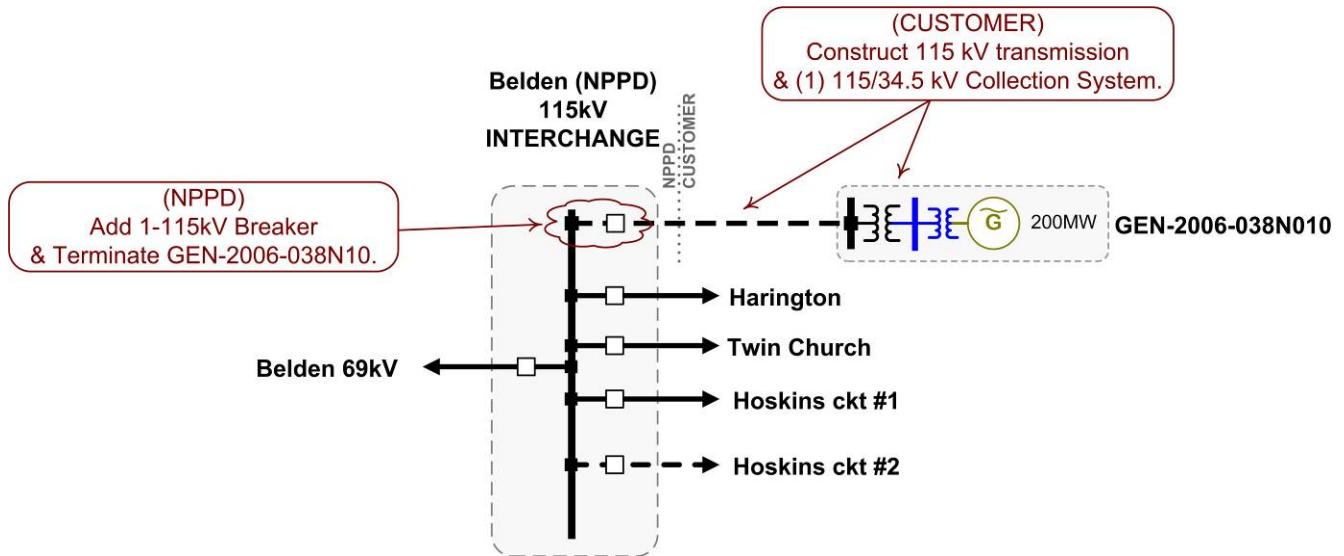
- * Planned Facility
- ^ Proposed Facility
- ** Alternate requests - counted as one request for study purpose
- *** Electrically Remote Interconnection Requests

D: Proposed Point of Interconnection One line Diagrams

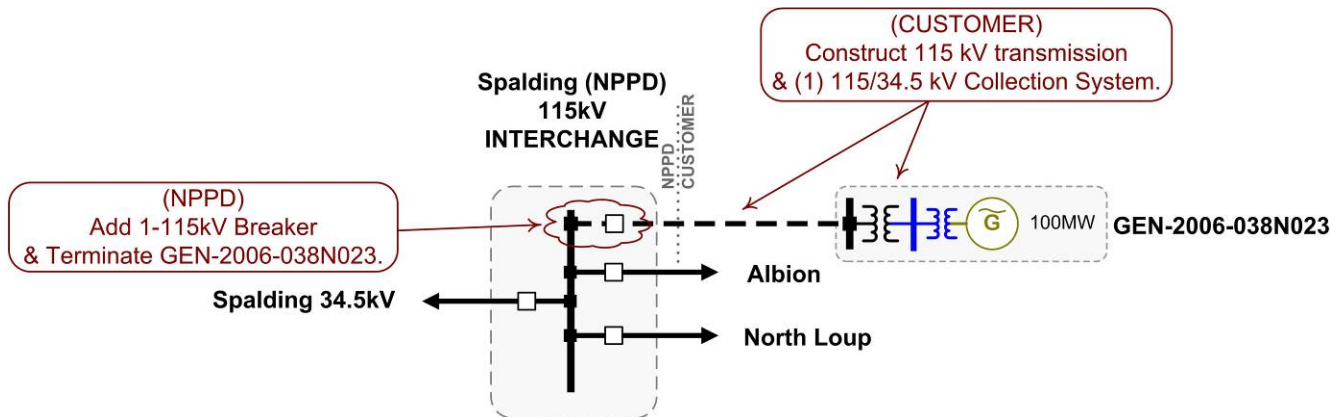
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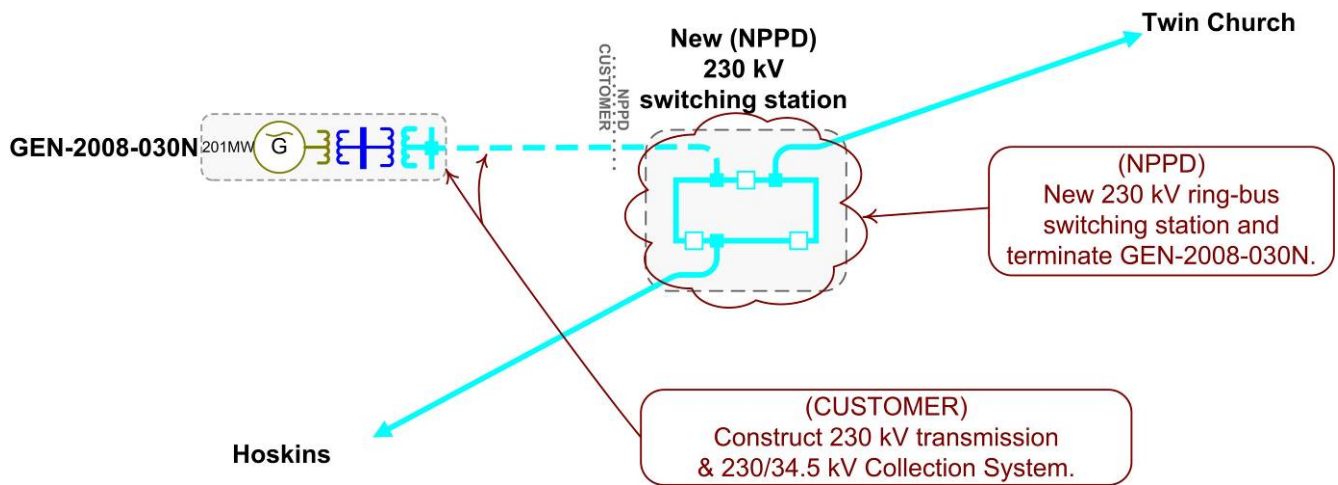
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GEN-2006-038N023

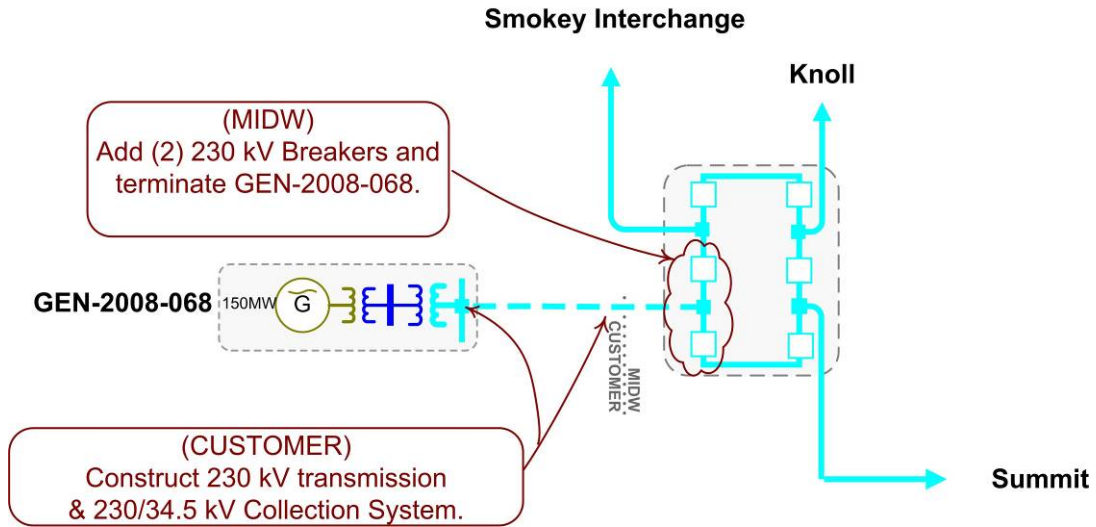


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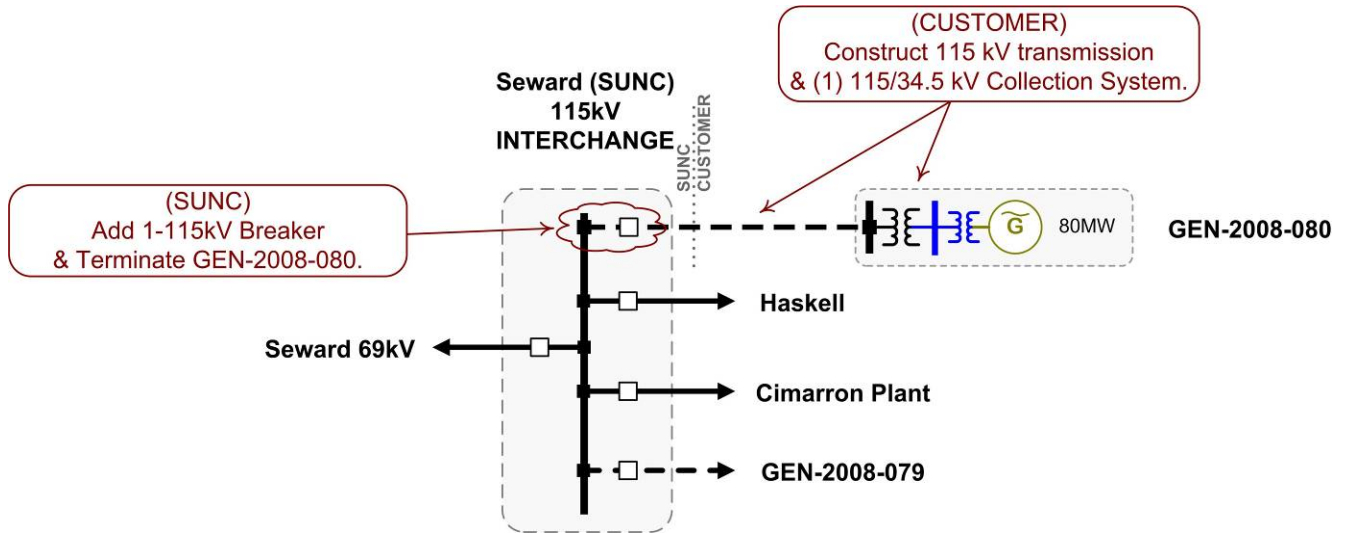


GEN-2008-068

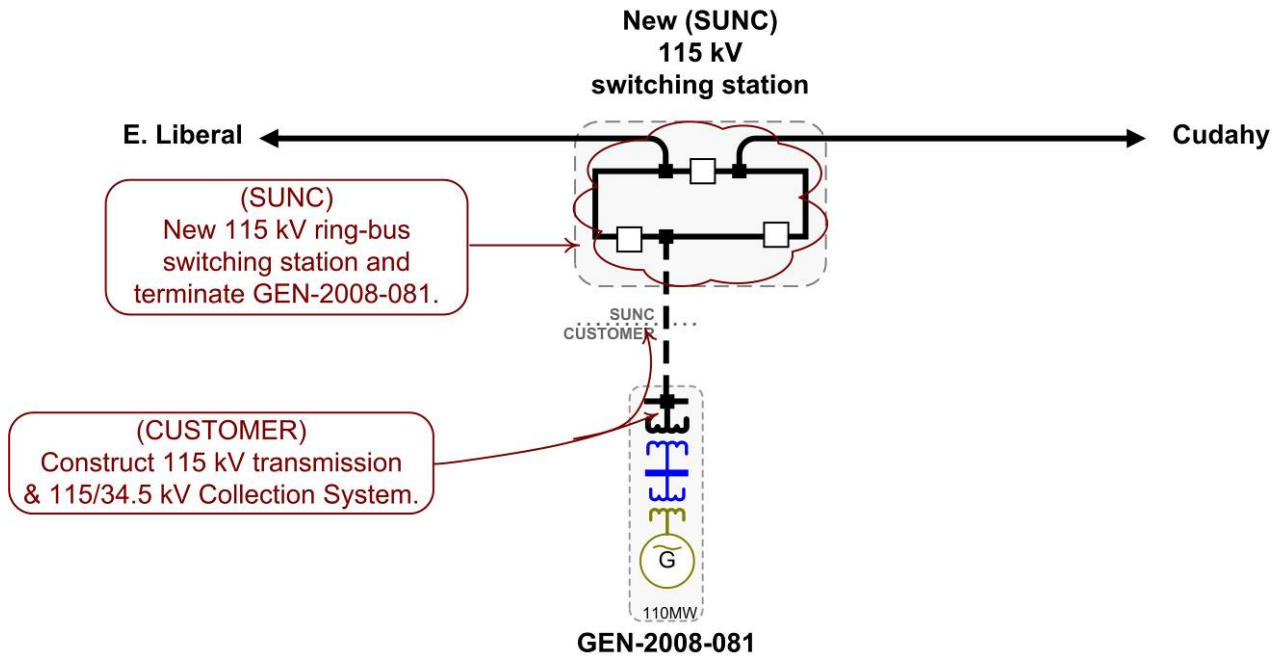
**Smokey Hills (MIDW)
230 kV
switching station**



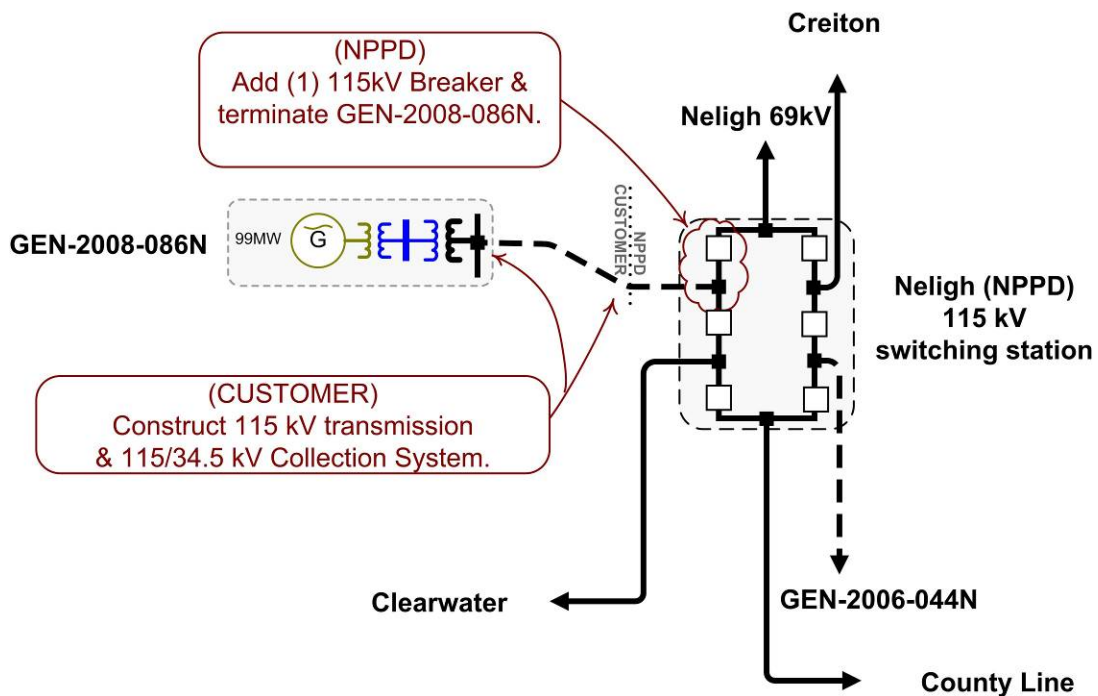
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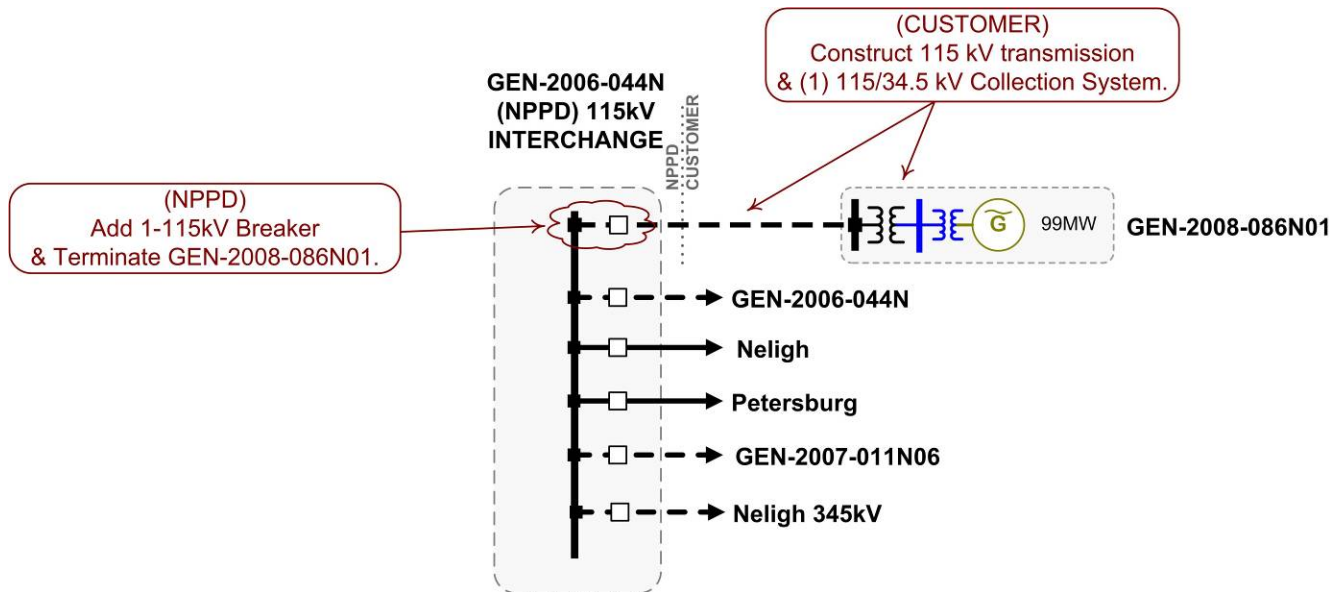
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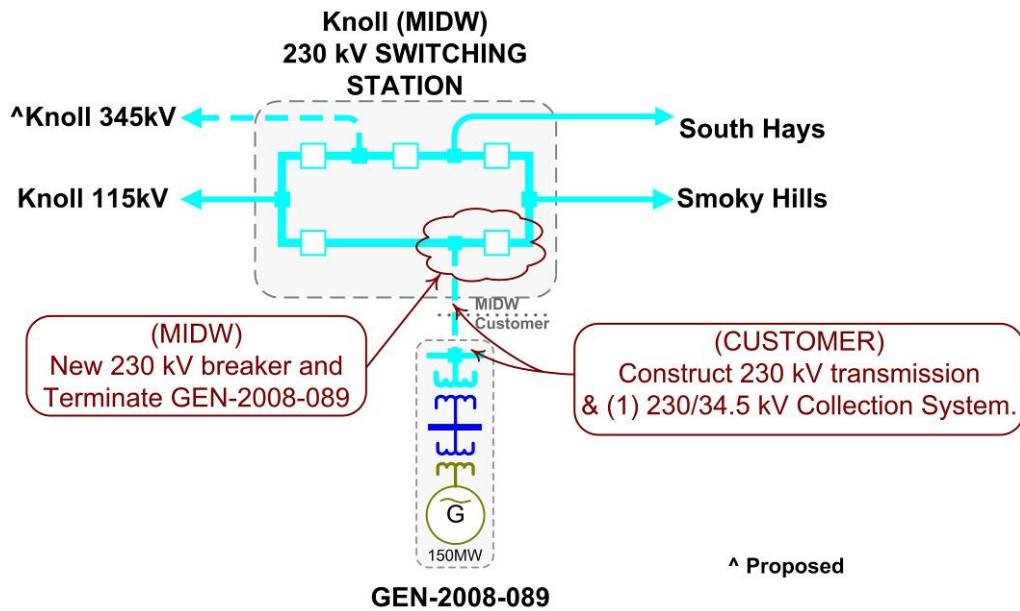
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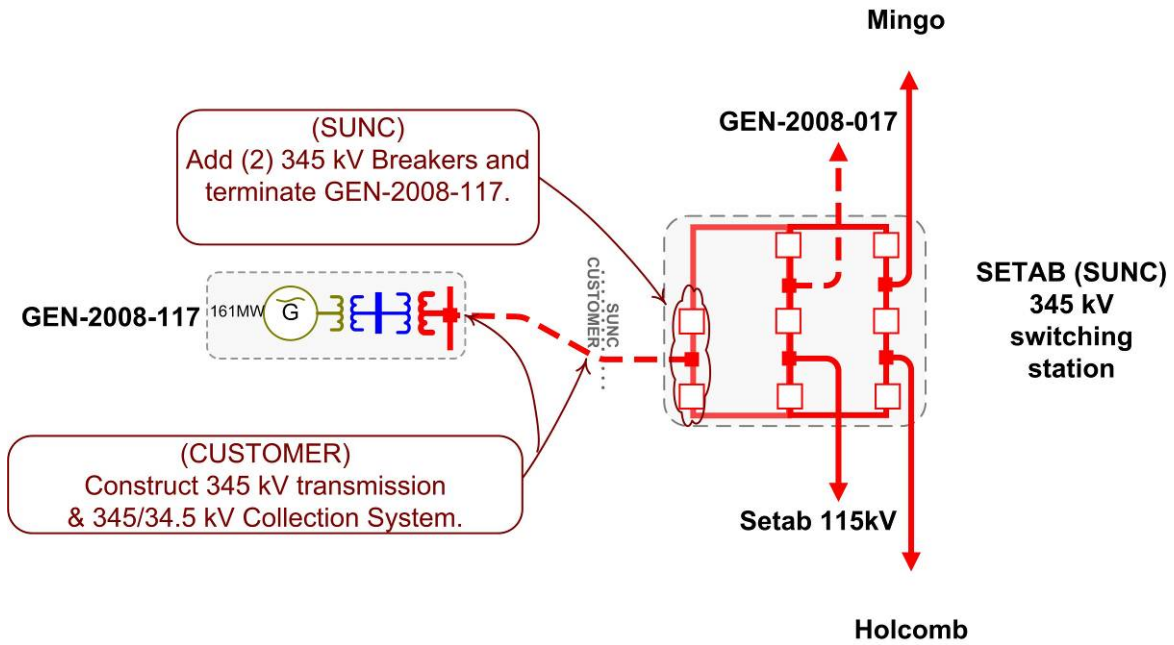
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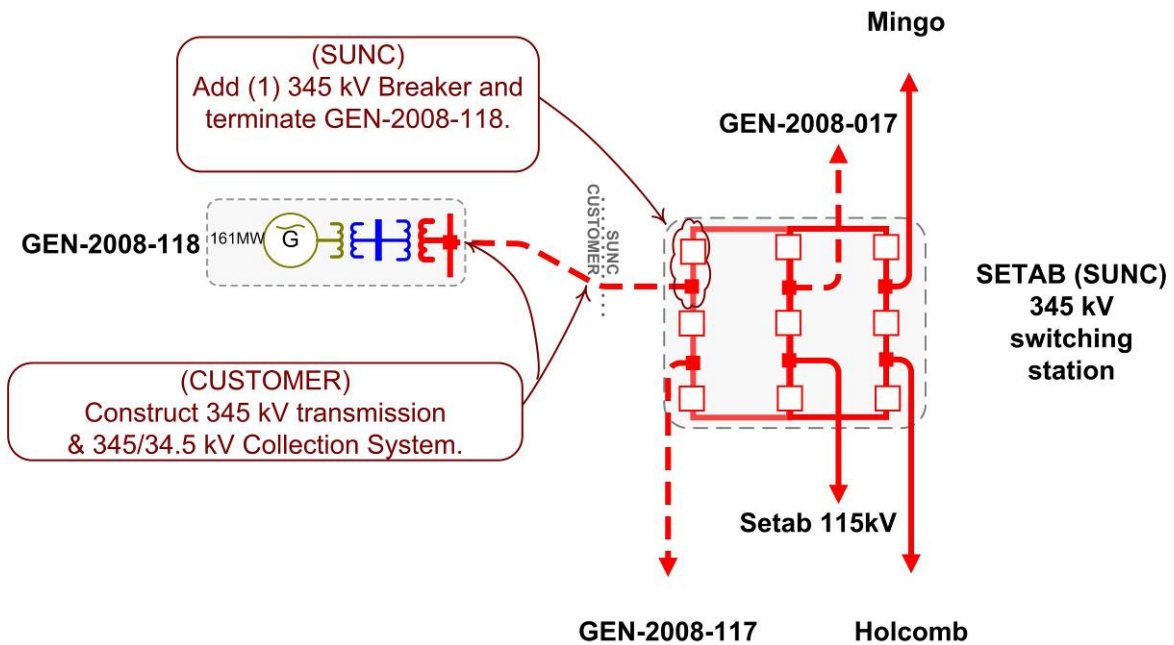
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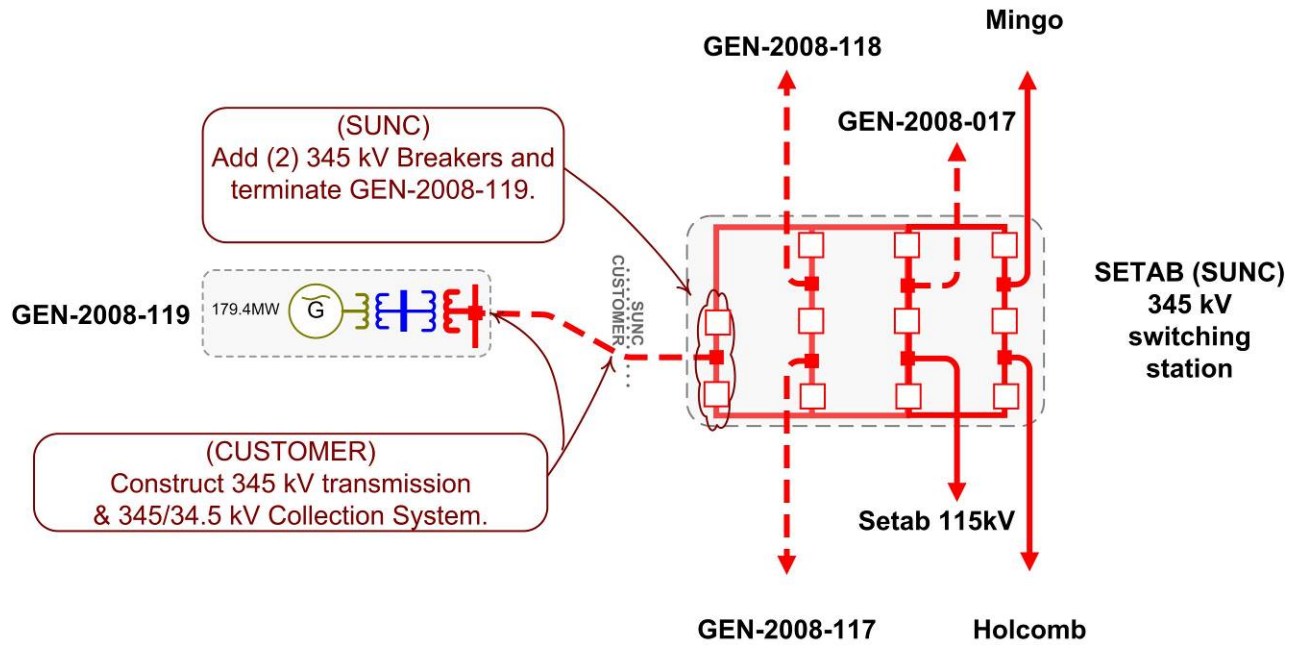
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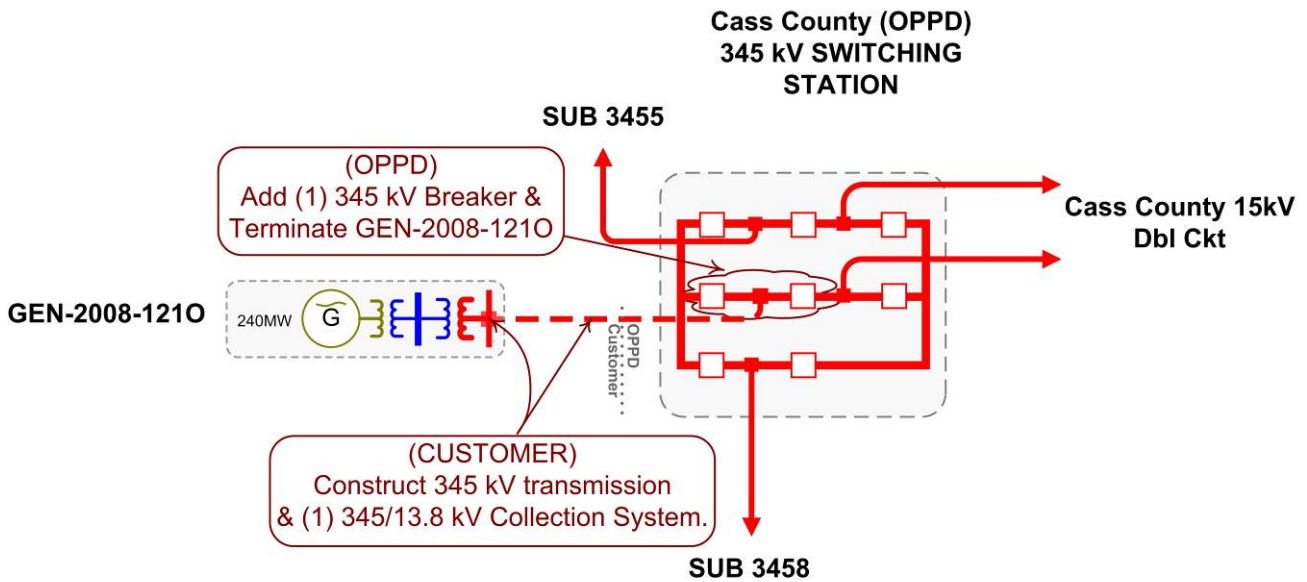
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GEN-2008-119



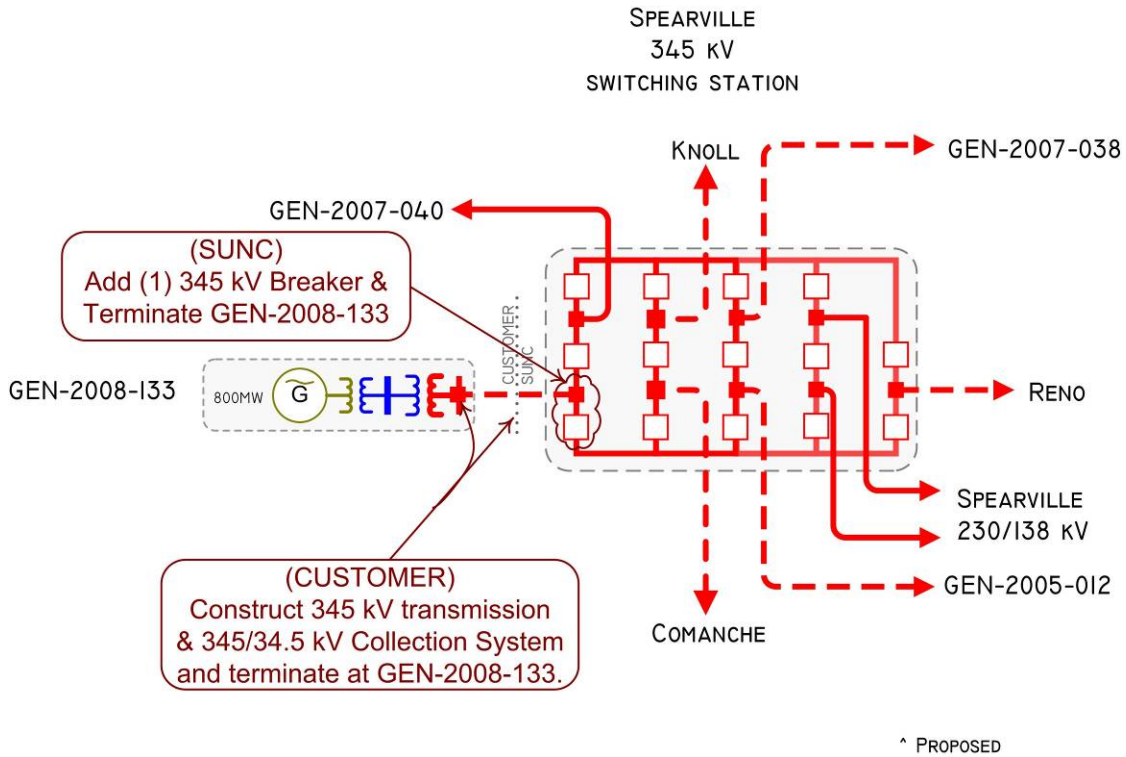
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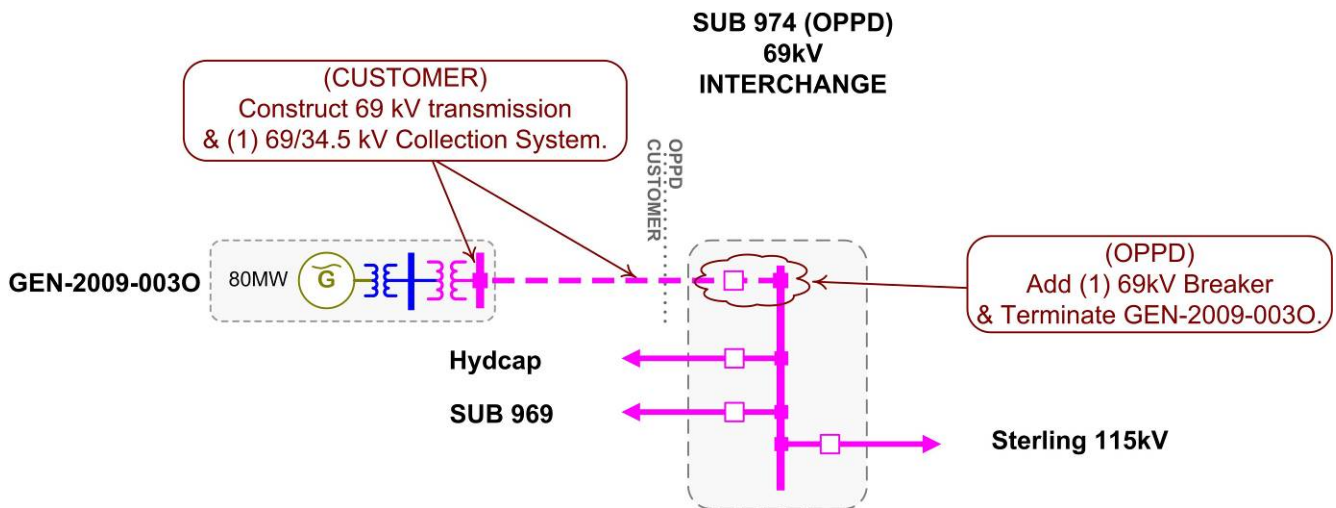
* Planned

^ Proposed

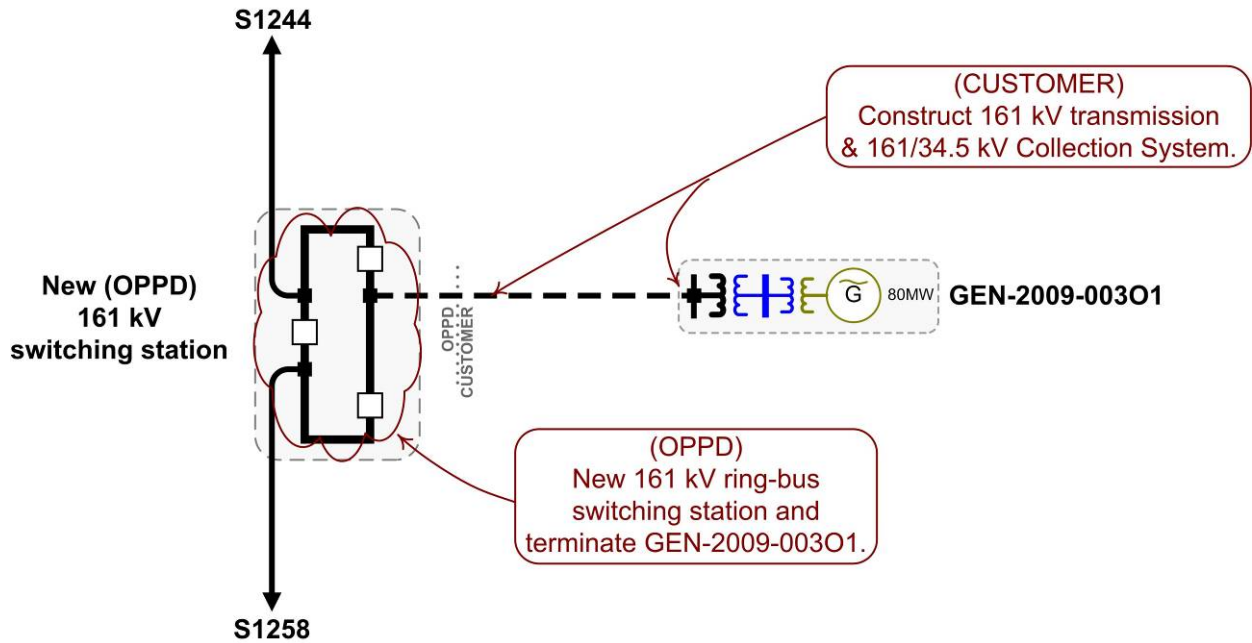
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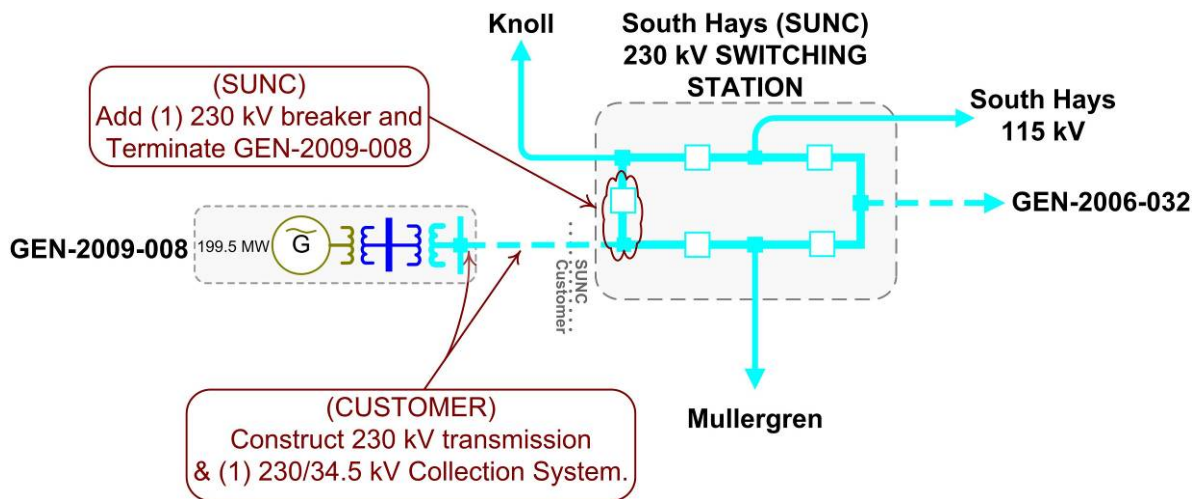
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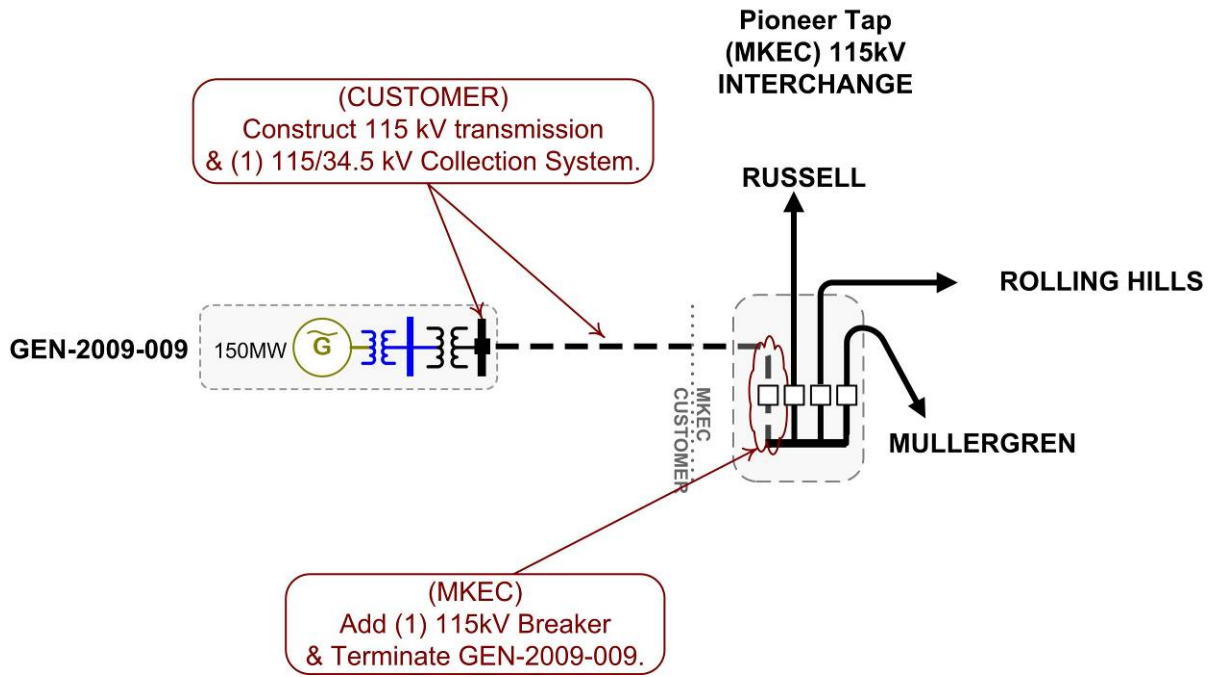
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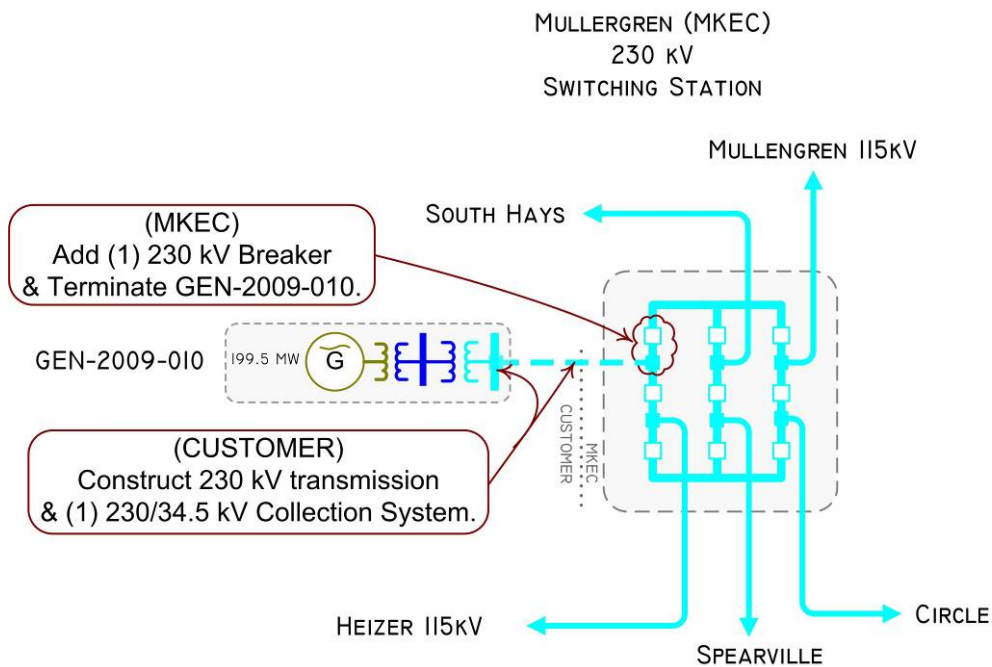
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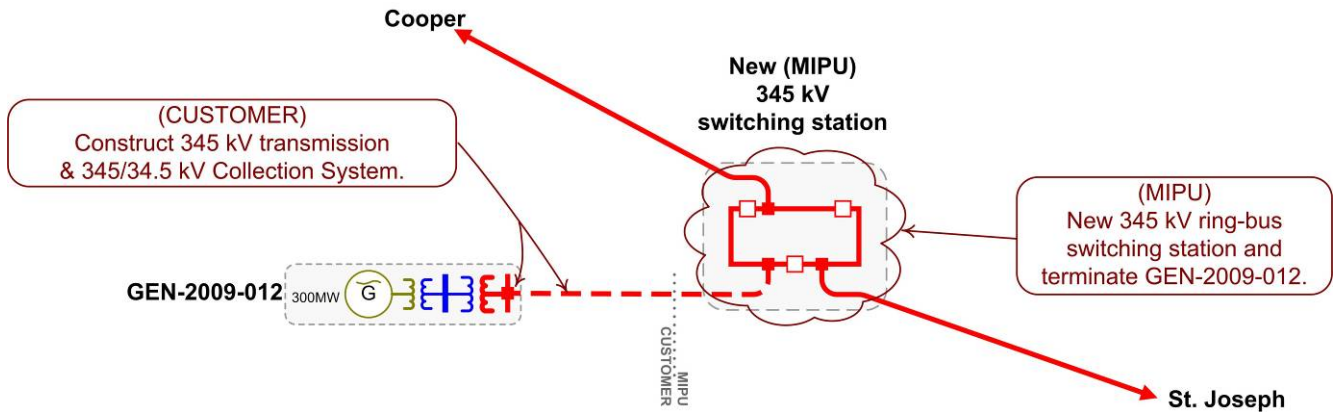
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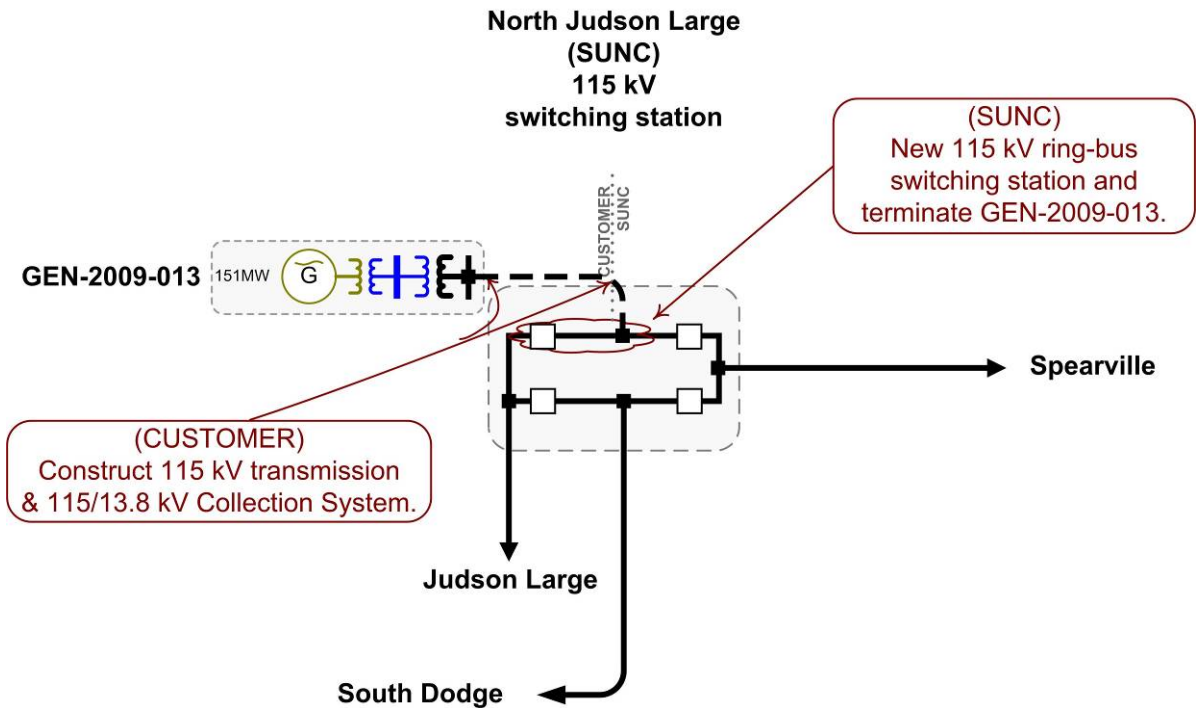
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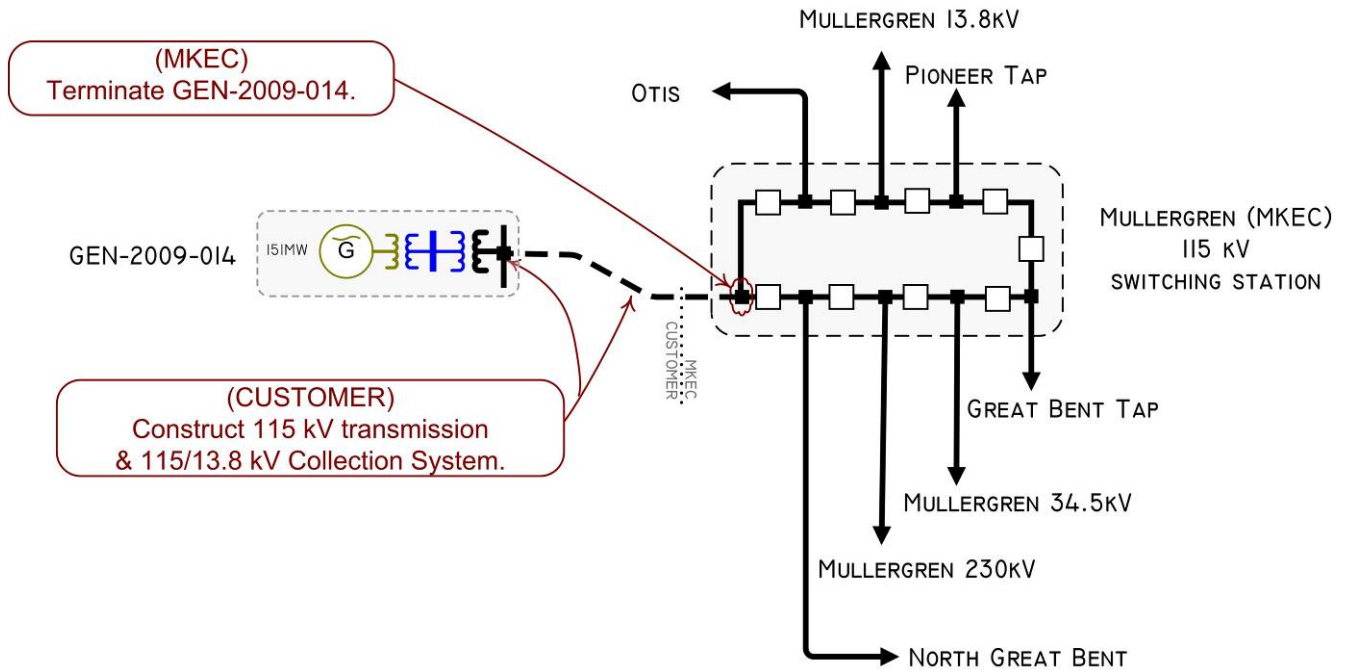
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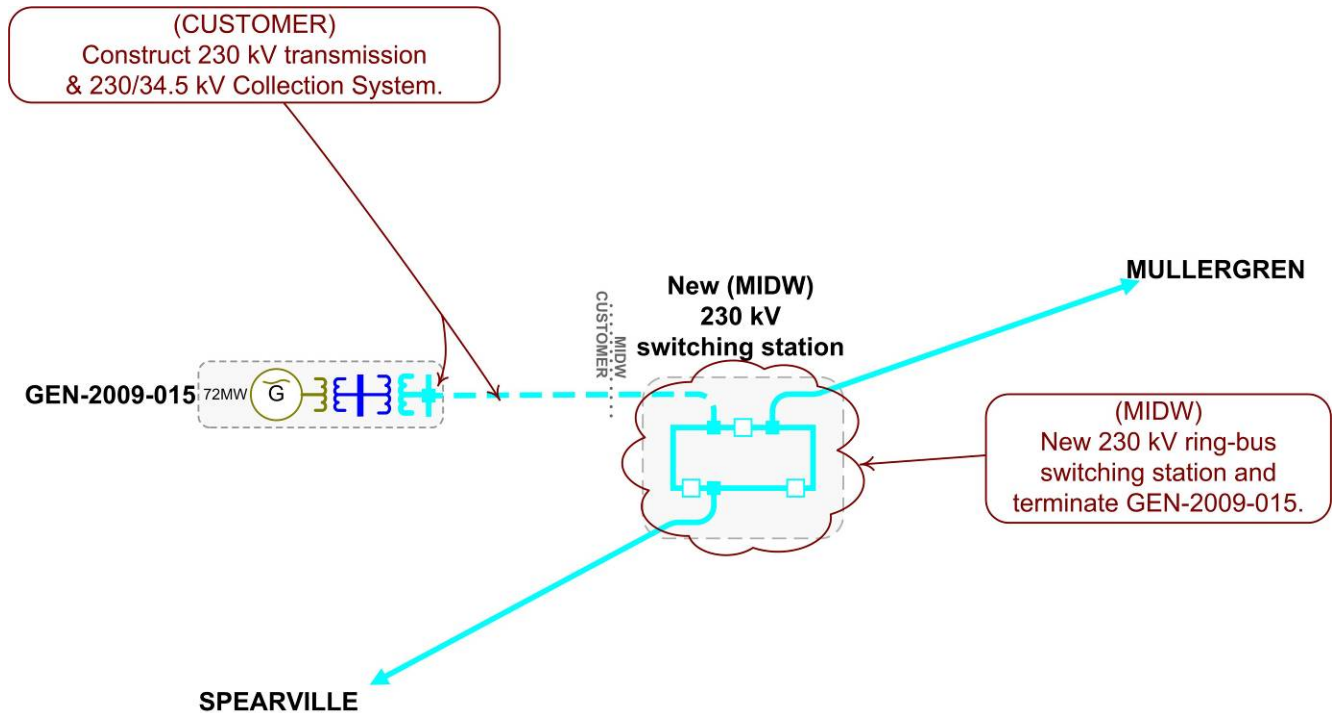
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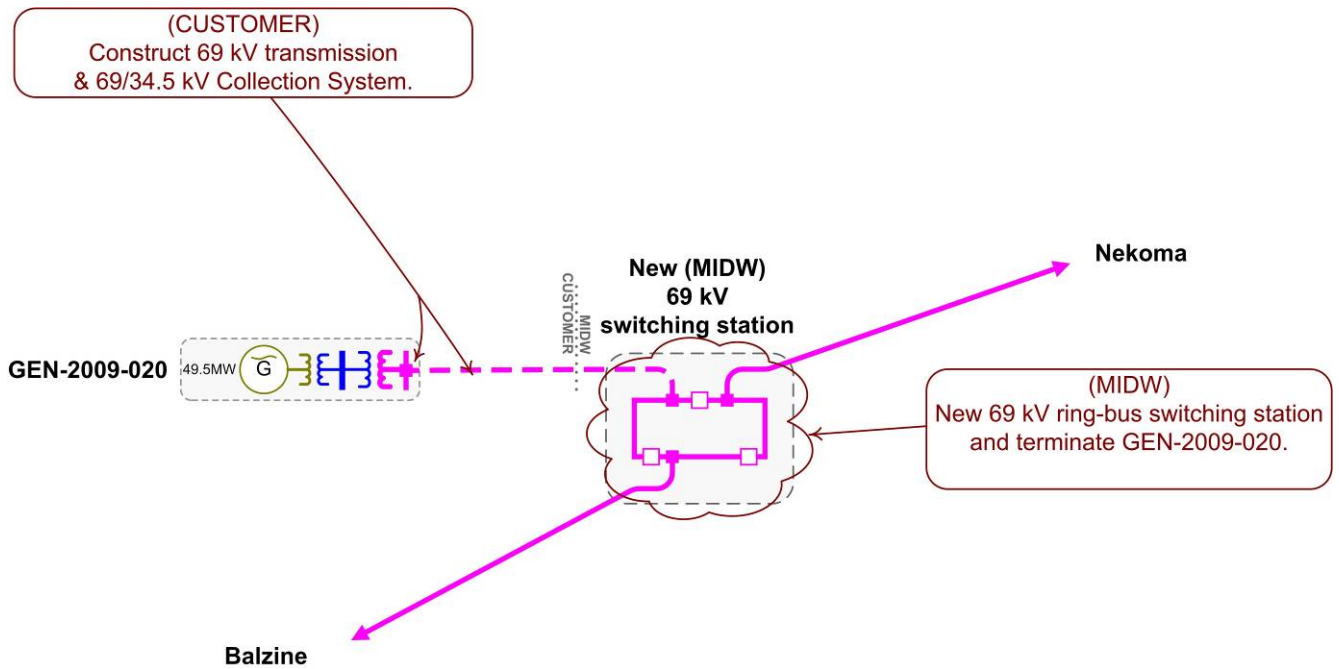
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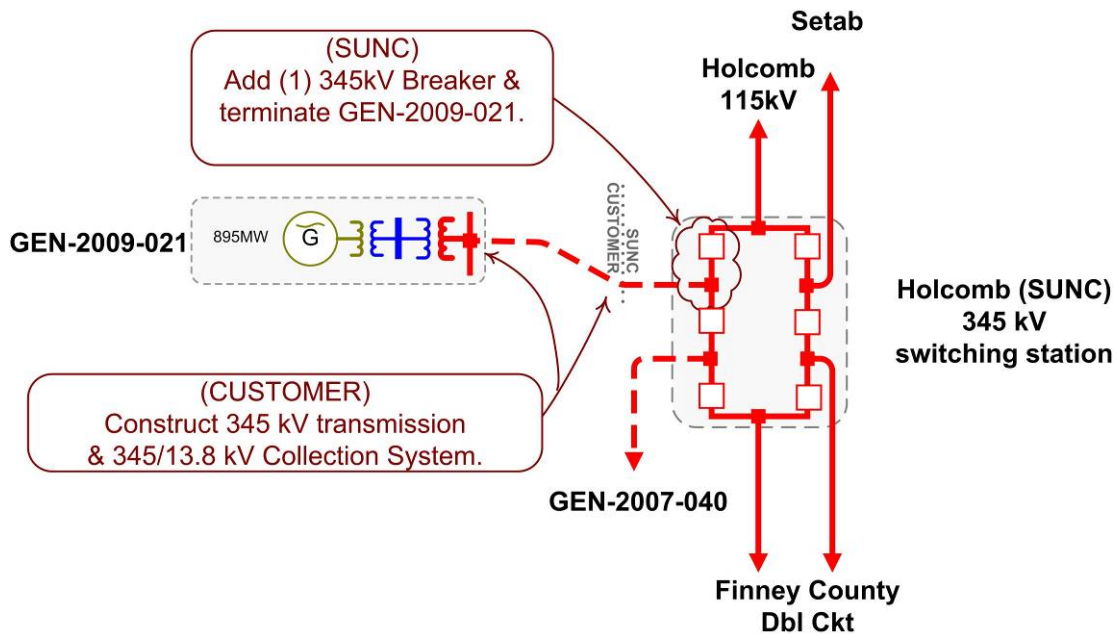
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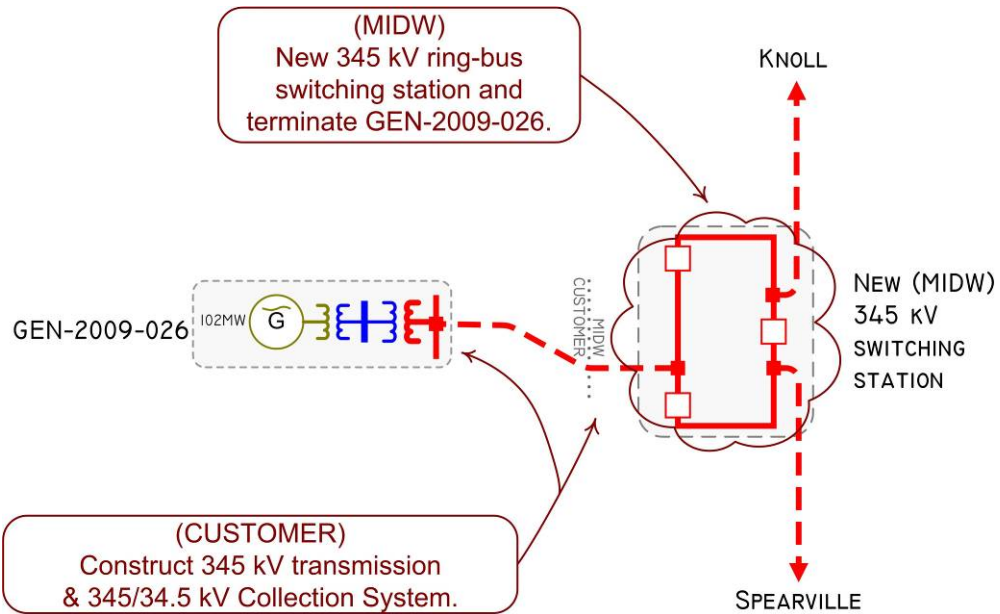
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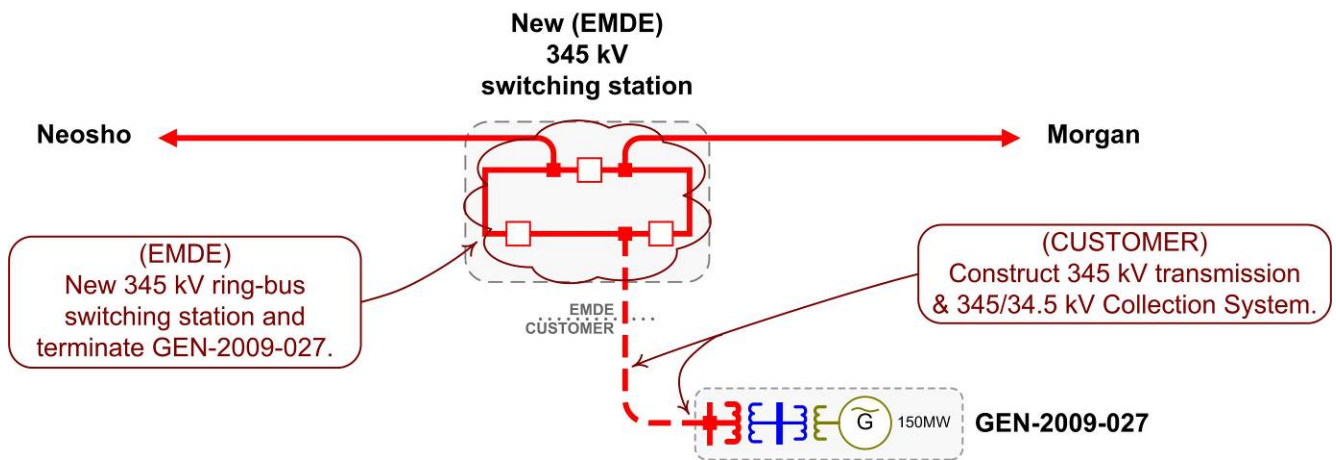
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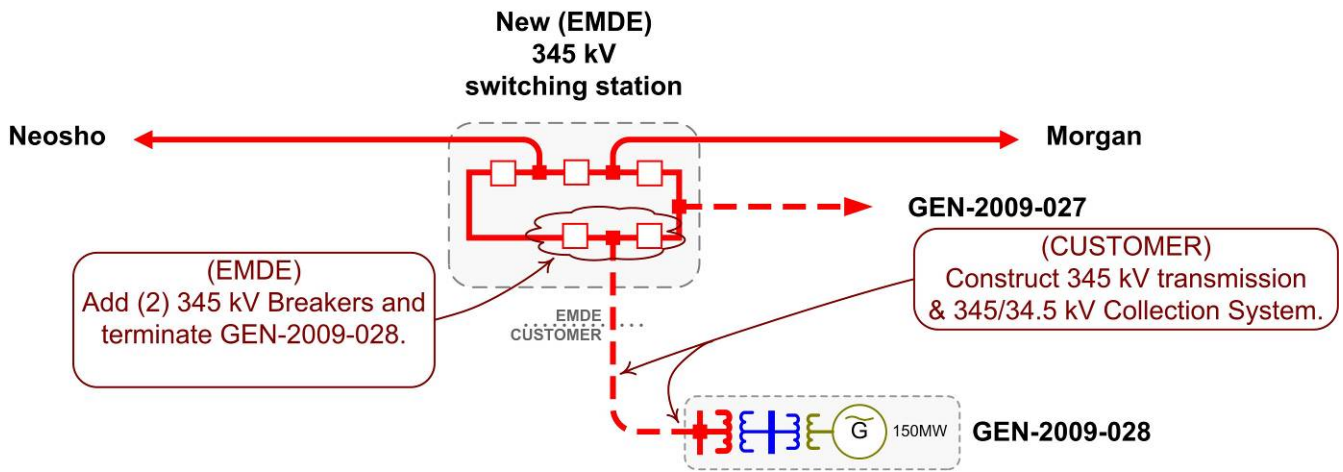
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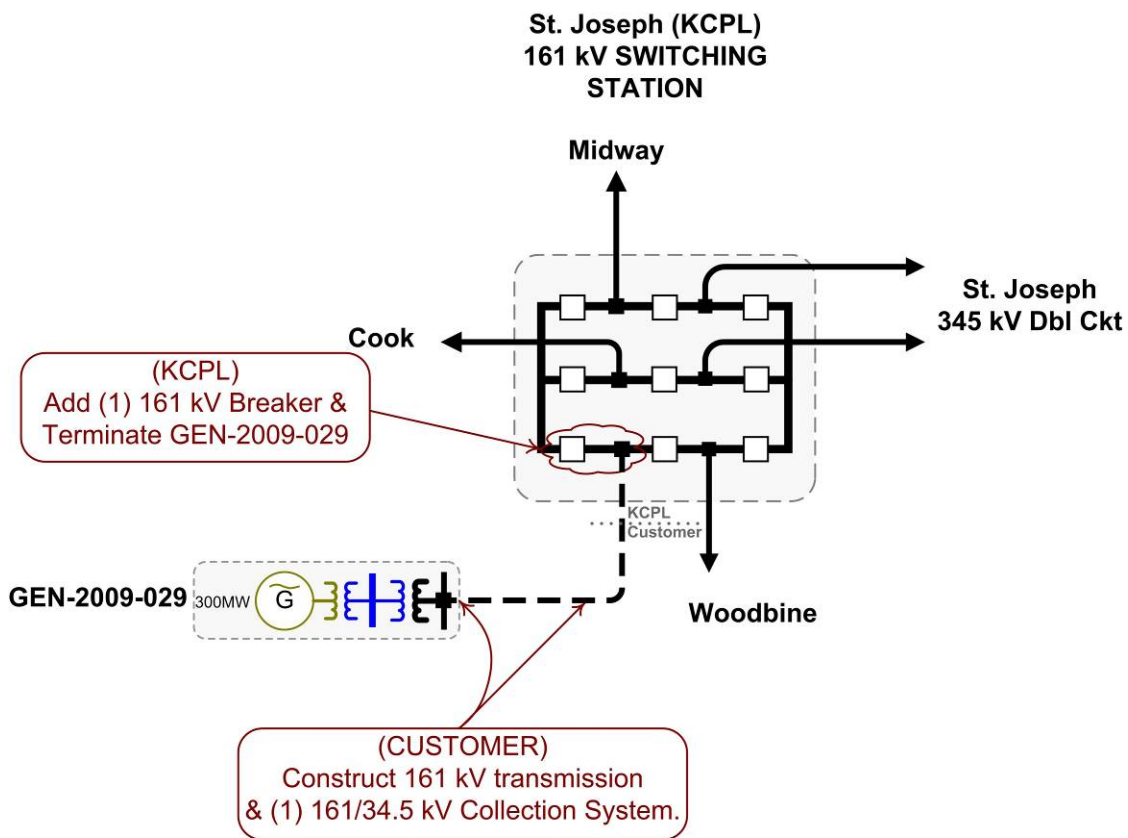
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GEN-2009-028

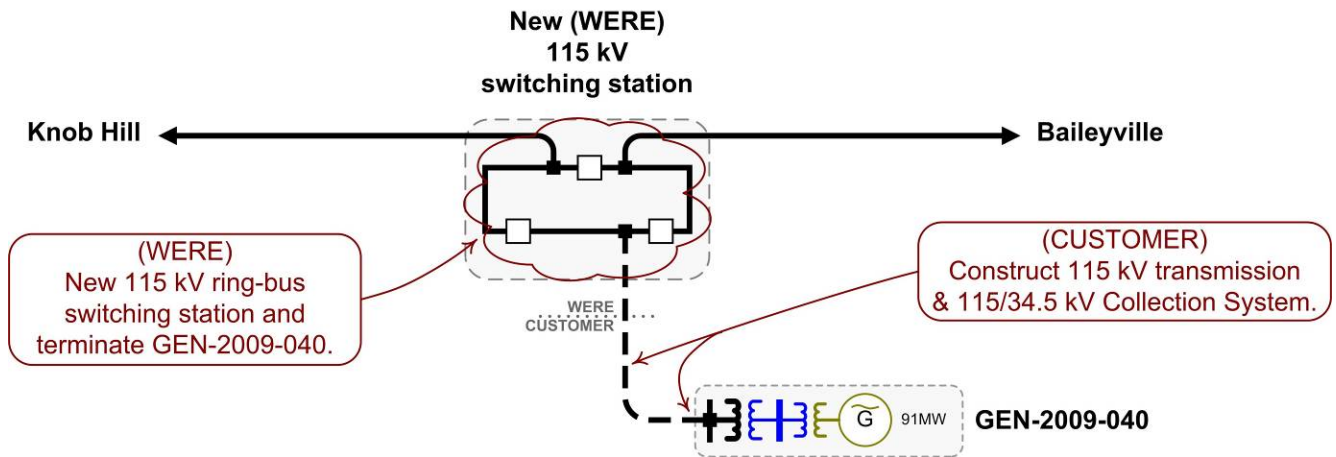


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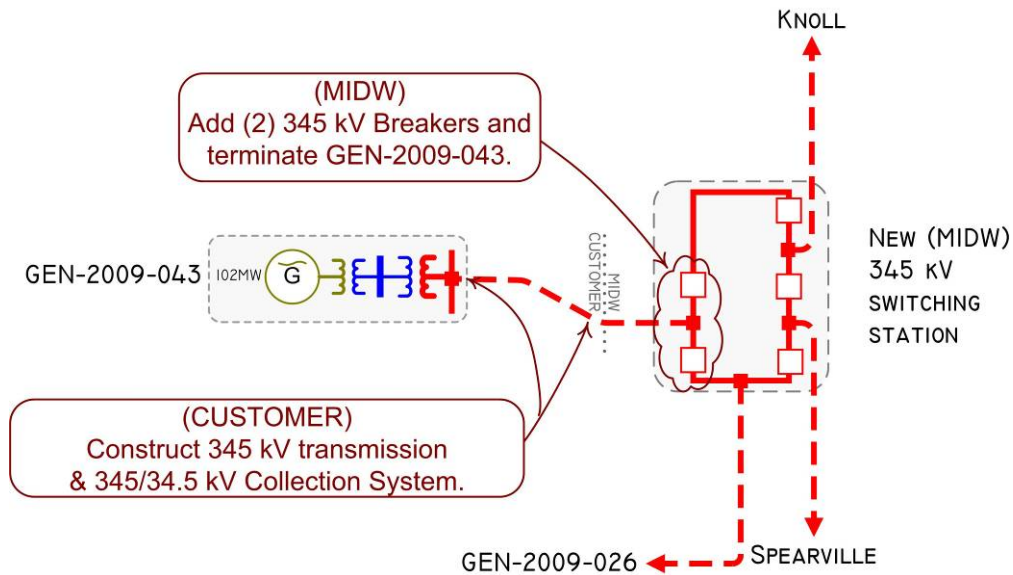


* Planned ^ Proposed

GEN-2009-040



GEN-2009-043



E: Cost Allocation per Interconnection Request

Appendix E.

Generation Interconnection Cost Allocation

<u>Interconnection Request</u>	<u>Allocated Costs</u>
GEN-2006-038N009	\$5,664,634.61
GEN-2006-038N010	\$1,942,934.67
GEN-2006-038N023	\$25,020,056.27
GEN-2008-030N	\$5,000,000.18
GEN-2008-068	\$2,023,294.34
GEN-2008-080	\$17,739,090.40
GEN-2008-081	\$20,001,767.80
GEN-2008-086N	\$13,964,065.50
GEN-2008-086N01	\$24,408,311.76
GEN-2008-089	\$6,367,079.82
GEN-2008-099	\$6,000,000.00
GEN-2008-117	\$11,522,931.86
GEN-2008-118	\$11,522,931.86
GEN-2008-119	\$12,587,607.47
GEN-2008-121O	\$2,500,000.00
GEN-2008-133	\$61,143,973.41
GEN-2009-003O	\$2,000,000.00
GEN-2009-003O1	\$2,500,000.01
GEN-2009-008	\$8,193,672.19
GEN-2009-009	\$16,752,850.21
GEN-2009-010	\$8,315,509.51
GEN-2009-012	\$6,000,000.00
GEN-2009-013	\$1,500,000.00
GEN-2009-014	\$3,279,904.17
GEN-2009-015	\$9,948,084.22
GEN-2009-020	\$3,302,744.79
GEN-2009-021	\$6,000,000.00
GEN-2009-026	\$13,699,279.98
GEN-2009-027	\$6,000,000.00
GEN-2009-028	\$3,000,000.00
GEN-2009-029	\$1,500,000.00
GEN-2009-040	\$3,000,000.00
GEN-2009-043	\$7,699,279.98
All Upgrades Total	\$330,100,005.00



F: Cost Allocation per Interconnection Request with Detail

Appendix F.

Generation Interconnection Cost Allocation

Interconnection Request	E + C Cost	Allocated Costs
GEN-2006-038N009		
GEN-2006-038N009 Interconnection Cost	\$5,000,000.00	\$5,000,000.00
GEN-2006-044N - Hoskins 345kV	\$40,000,000.00	\$531,707.67
GEN-2006-044N - Neligh**	\$1.00	\$0.02
GEN-2006-044N 345 sub and 345/115 kV transform	\$10,000,000.00	\$132,926.92
GEN-2006-038N009	Total	\$5,664,634.61
GEN-2006-038N010		
Belden - Hoskins 115kV ckt 2**	\$1.00	\$0.95
GEN-2006-038N010 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
GEN-2006-044N - Hoskins 345kV	\$40,000,000.00	\$754,346.73
GEN-2006-044N - Neligh**	\$1.00	\$0.13
GEN-2006-044N - Petersburg**	\$1.00	\$0.18
GEN-2006-044N 345 sub and 345/115 kV transform	\$10,000,000.00	\$188,586.68
GEN-2006-038N010	Total	\$1,942,934.67
GEN-2006-038N023		
Albion - Spalding 115kV	\$12,000,000.00	\$12,000,000.00
GEN-2006-038N023 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
GEN-2006-044N - Hoskins 345kV	\$40,000,000.00	\$9,616,045.02
GEN-2006-044N 345 sub and 345/115 kV transform	\$10,000,000.00	\$2,404,011.25
GEN-2006-038N023	Total	\$25,020,056.27
GEN-2008-030N		
Belden - Hoskins 115kV ckt 2**	\$1.00	\$0.03
GEN-2006-044N - Neligh**	\$1.00	\$0.01
GEN-2006-044N - Petersburg**	\$1.00	\$0.14
GEN-2008-030N Interconnection Cost	\$5,000,000.00	\$5,000,000.00
GEN-2008-030N	Total	\$5,000,000.18
GEN-2008-068		
GEN-2008-068 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$134,497.77
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$53,556.41
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$29,038.23

Interconnection Request	E + C Cost	Allocated Costs
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$174,132.20
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$132,069.73
GEN-2008-068 Total		\$2,023,294.34
GEN-2008-080		
Circle - Mullergren 230kV	\$300,000.00	\$5,374.26
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.30
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$6,675,826.38
GEN-2008-080 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
Holcomb 345/115kV transformer #2	\$10,000,000.00	\$4,313,695.68
Judson Large - North Judson Large 115kV**	\$1.00	\$0.37
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$7,430.85
Spearville - Reno County 345kV	\$130,000,000.00	\$5,035,979.45
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$700,783.12
GEN-2008-080 Total		\$17,739,090.40
GEN-2008-081		
Circle - Mullergren 230kV	\$300,000.00	\$7,419.91
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.43
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$5,698,616.91
GEN-2008-081 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
Holcomb 345/115kV transformer #2	\$10,000,000.00	\$5,270,749.72
Judson Large - North Judson Large 115kV**	\$1.00	\$0.54
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$10,250.63
Spearville - Reno County 345kV	\$130,000,000.00	\$6,980,981.80
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$1,033,747.86
GEN-2008-081 Total		\$20,001,767.80
GEN-2008-086N		
Belden - Hoskins 115kV ckt 2**	\$1.00	\$0.00
GEN-2006-044N - Hoskins 345kV	\$40,000,000.00	\$10,371,251.71
GEN-2006-044N - Neligh**	\$1.00	\$0.60
GEN-2006-044N - Petersburg**	\$1.00	\$0.25
GEN-2006-044N 345 sub and 345/115 kV transform	\$10,000,000.00	\$2,592,812.93
GEN-2008-086N Interconnection Cost	\$1,000,000.00	\$1,000,000.00
GEN-2008-086N Total		\$13,964,065.50
GEN-2008-086N01		
Belden - Hoskins 115kV ckt 2**	\$1.00	\$0.02
GEN-2006-044N - Hoskins 345kV	\$40,000,000.00	\$18,726,648.87

Interconnection Request	E + C Cost	Allocated Costs
GEN-2006-044N - Neligh**	\$1.00	\$0.24
GEN-2006-044N - Petersburg**	\$1.00	\$0.41
GEN-2006-044N 345 sub and 345/115 kV transform	\$10,000,000.00	\$4,681,662.22
GEN-2008-086N01 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
GEN-2008-086N01 Total		\$24,408,311.76
GEN-2008-089		
Circle - Mullergren 230kV	\$300,000.00	\$20,256.77
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$132,805.97
GEN-2008-089 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$99,050.57
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$67,641.99
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$53,973.48
Spearville - Reno County 345kV	\$130,000,000.00	\$4,252,363.68
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$240,987.34
GEN-2008-089 Total		\$6,367,079.82
GEN-2008-099		
GEN-2008-099 Interconnection Cost	\$6,000,000.00	\$6,000,000.00
GEN-2008-099 Total		\$6,000,000.00
GEN-2008-117		
Circle - Mullergren 230kV	\$300,000.00	\$10,463.30
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.04
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$838,473.76
GEN-2008-117 Interconnection Cost	\$2,000,000.00	\$2,000,000.00
Holcomb 345/115kV transformer #2	\$10,000,000.00	\$133,541.50
Judson Large - North Judson Large 115kV**	\$1.00	\$0.03
Scott City - Setab 115kV ckt #2	\$1,500,000.00	\$482,035.93
Spearville - Reno County 345kV	\$130,000,000.00	\$8,058,417.31
GEN-2008-117 Total		\$11,522,931.86
GEN-2008-118		
Circle - Mullergren 230kV	\$300,000.00	\$10,463.30
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.04
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$838,473.76
GEN-2008-118 Interconnection Cost	\$2,000,000.00	\$2,000,000.00
Holcomb 345/115kV transformer #2	\$10,000,000.00	\$133,541.50
Judson Large - North Judson Large 115kV**	\$1.00	\$0.03

Interconnection Request	E + C Cost	Allocated Costs
Scott City - Setab 115kV ckt #2	\$1,500,000.00	\$482,035.93
Spearville - Reno County 345kV	\$130,000,000.00	\$8,058,417.31
GEN-2008-118 Total		\$11,522,931.86
GEN-2008-119		
Circle - Mullergren 230kV	\$300,000.00	\$11,633.11
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.05
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$932,216.16
GEN-2008-118 Interconnection Cost	\$2,000,000.00	\$2,000,000.00
Holcomb 345/115kV transformer #2	\$10,000,000.00	\$148,471.60
Judson Large - North Judson Large 115kV**	\$1.00	\$0.03
Scott City - Setab 115kV ckt #2	\$1,500,000.00	\$535,928.14
Spearville - Reno County 345kV	\$130,000,000.00	\$8,959,358.37
GEN-2008-119 Total		\$12,587,607.47
GEN-2008-121O		
GEN-2008-121O Interconnection Cost	\$2,500,000.00	\$2,500,000.00
GEN-2008-121O Total		\$2,500,000.00
GEN-2008-133		
Circle - Mullergren 230kV	\$300,000.00	\$46,260.96
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.07
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$1,405,318.41
GEN-2008-133 Interconnection Cost	\$3,000,000.00	\$3,000,000.00
Spearville - Reno County 345kV	\$130,000,000.00	\$56,692,393.97
GEN-2008-133 Total		\$61,143,973.41
GEN-2009-003O		
GEN-2009-003O Interconnection Cost	\$2,000,000.00	\$2,000,000.00
GEN-2009-003O Total		\$2,000,000.00
GEN-2009-003O1		
GEN-2006-044N - Neligh**	\$1.00	\$0.00
GEN-2006-044N - Petersburg**	\$1.00	\$0.01
GEN-2009-003O1 Interconnection Cost	\$2,500,000.00	\$2,500,000.00
GEN-2009-003O1 Total		\$2,500,000.01
GEN-2009-008		
Circle - Mullergren 230kV	\$300,000.00	\$36,550.82
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$186,661.47

Interconnection Request	E + C Cost	Allocated Costs
GEN-2009-008 Interconnection Cost	\$2,000,000.00	\$2,000,000.00
Spearville - Reno County 345kV	\$130,000,000.00	\$5,430,319.80
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$540,140.10
GEN-2009-008 Total		\$8,193,672.19
GEN-2009-009		
Circle - Mullergren 230kV	\$300,000.00	\$36,121.48
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$165,795.99
GEN-2009-009 Interconnection Cost	\$1,000,000.00	\$1,000,000.00
Judson Large - North Judson Large 115kV**	\$1.00	\$0.00
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$11,508,294.53
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$1,293,852.36
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$18,459.17
Spearville - Reno County 345kV	\$130,000,000.00	\$2,006,794.40
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$723,532.26
GEN-2009-009 Total		\$16,752,850.21
GEN-2009-010		
Circle - Mullergren 230kV	\$300,000.00	\$73,031.22
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$248,693.99
GEN-2009-010 Interconnection Cost	\$2,000,000.00	\$2,000,000.00
Spearville - Reno County 345kV	\$130,000,000.00	\$4,624,273.66
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$1,369,510.62
GEN-2009-010 Total		\$8,315,509.51
GEN-2009-012		
GEN-2009-012 Interconnection Cost	\$6,000,000.00	\$6,000,000.00
GEN-2009-012 Total		\$6,000,000.00
GEN-2009-013		
GEN-2009-013 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
GEN-2009-013 Total		\$1,500,000.00
GEN-2009-014		
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$263,976.54
GEN-2009-014 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$1,515,927.63
GEN-2009-014 Total		\$3,279,904.17

Interconnection Request**E + C Cost****Allocated Costs****GEN-2009-015**

Circle - Mullergren 230kV	\$300,000.00	\$15,722.73
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$156,524.95
GEN-2009-015 Interconnection Cost	\$5,000,000.00	\$5,000,000.00
Spearville - Reno County 345kV	\$130,000,000.00	\$3,757,708.94
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$1,018,127.59

GEN-2009-015**Total****\$9,948,084.22****GEN-2009-020**

Circle - Mullergren 230kV	\$300,000.00	\$12,885.39
GEN-2009-020 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
Judson Large - North Judson Large 115kV**	\$1.00	\$0.01
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$167,579.75
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$29,784.75
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$5,933.20
Spearville - Reno County 345kV	\$130,000,000.00	\$1,345,460.31
Spearville 345/230kV transformer ckt 3	\$6,000,000.00	\$241,101.39

GEN-2009-020**Total****\$3,302,744.79****GEN-2009-021**

GEN-2009-021 Interconnection Cost	\$6,000,000.00	\$6,000,000.00
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GEN-2009-021**Total****\$6,000,000.00****GEN-2009-026**

Circle - Mullergren 230kV	\$300,000.00	\$6,908.38
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$161,058.96
GEN-2009-026 Interconnection Cost	\$6,000,000.00	\$6,000,000.00
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$85,759.37
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$31,877.52
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$14,910.23
Spearville - Reno County 345kV	\$130,000,000.00	\$7,398,765.50

GEN-2009-026**Total****\$13,699,279.98****GEN-2009-027**

GEN-2009-027 Interconnection Cost	\$6,000,000.00	\$6,000,000.00
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GEN-2009-027**Total****\$6,000,000.00****GEN-2009-028**

Interconnection Request	E + C Cost	Allocated Costs
GEN-2009-028 Interconnection Cost	\$3,000,000.00	\$3,000,000.00
GEN-2009-028 Total		\$3,000,000.00
GEN-2009-029		
GEN-2009-029 Interconnection Cost	\$1,500,000.00	\$1,500,000.00
GEN-2009-029 Total		\$1,500,000.00
GEN-2009-040		
GEN-2009-040 Interconnection Cost	\$3,000,000.00	\$3,000,000.00
GEN-2009-040 Total		\$3,000,000.00
GEN-2009-043		
Circle - Mullergren 230kV	\$300,000.00	\$6,908.38
GEN-2008-079 - Judson Large 115kV**	\$1.00	\$0.01
GEN-2008-079 - Seward 115kV	\$18,000,000.00	\$161,058.96
Mullergren - Pioneer Tap 115kV ckt 2	\$12,000,000.00	\$85,759.37
Mullergren 230/115kV transformer ckt 2	\$3,000,000.00	\$31,877.52
Smoky Hills - Summit 230kV ckt 1	\$300,000.00	\$14,910.23
Spearville - Reno County 345kV	\$130,000,000.00	\$7,398,765.50
GEN-2009-043 Total		\$7,699,279.98
All Upgrades Total		\$330,100,005.00

** Constraints to be mitigated by DISIS-2009-001 Interconnection Customers

G: Cost Allocation per Proposed Network Upgrade

Appendix G. - Cost Allocation Per Upgrade

Upgrade	E + C Cost	Allocated Costs
Albion - Spalding 115kV		\$12,000,000.00
Reconductor 15 miles of existing 115kV line		
GEN-2006-038N023	\$12,000,000.00	\$12,000,000.00
Upgrade Total		\$12,000,000.00
Belden - Hoskins 115kV ckt 2**		\$1.00
To be mitigated by DISIS-2009-001 Customers / Build 28 miles of new 115kV line from Belden - Hoskins		
GEN-2006-038N010	\$1.00	\$0.95
GEN-2008-030N	\$1.00	\$0.03
GEN-2008-086N	\$1.00	\$0.00
GEN-2008-086N01	\$1.00	\$0.02
Upgrade Total		\$1.00
Circle - Mullergren 230kV		\$300,000.00
Replace Relaying		
GEN-2008-080	\$300,000.00	\$5,374.26
GEN-2008-081	\$300,000.00	\$7,419.91
GEN-2008-089	\$300,000.00	\$20,256.77
GEN-2008-117	\$300,000.00	\$10,463.30
GEN-2008-118	\$300,000.00	\$10,463.30
GEN-2008-119	\$300,000.00	\$11,633.11
GEN-2008-133	\$300,000.00	\$46,260.96
GEN-2009-008	\$300,000.00	\$36,550.82
GEN-2009-009	\$300,000.00	\$36,121.48
GEN-2009-010	\$300,000.00	\$73,031.22
GEN-2009-015	\$300,000.00	\$15,722.73
GEN-2009-020	\$300,000.00	\$12,885.39
GEN-2009-026	\$300,000.00	\$6,908.38
GEN-2009-043	\$300,000.00	\$6,908.38
Upgrade Total		\$300,000.00
GEN-2006-038N009 Interconnection Cost		\$5,000,000.00
See one-line diagram		
GEN-2006-038N009	\$5,000,000.00	\$5,000,000.00
Upgrade Total		\$5,000,000.00
GEN-2006-038N010 Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2006-038N010	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2006-038N023 Interconnection Cost		\$1,000,000.00
See one-line diagram		

Upgrade	E + C Cost	Allocated Costs
GEN-2006-038N023	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2006-044N - Hoskins 345kV		\$40,000,000.00
Build 40 miles of new 345kV line		
GEN-2006-038N009	\$40,000,000.00	\$531,707.67
GEN-2006-038N010	\$40,000,000.00	\$754,346.73
GEN-2006-038N023	\$40,000,000.00	\$9,616,045.02
GEN-2008-086N	\$40,000,000.00	\$10,371,251.71
GEN-2008-086N01	\$40,000,000.00	\$18,726,648.87
Upgrade Total		\$40,000,000.00
GEN-2006-044N - Neligh**		\$1.00
To be mitigated by DISIS-2009-001 Customers / Reconductor 8 miles of 115kV line		
GEN-2006-038N009	\$1.00	\$0.02
GEN-2006-038N010	\$1.00	\$0.13
GEN-2008-030N	\$1.00	\$0.01
GEN-2008-086N	\$1.00	\$0.60
GEN-2008-086N01	\$1.00	\$0.24
GEN-2009-003O1	\$1.00	\$0.00
Upgrade Total		\$1.00
GEN-2006-044N - Petersburg**		\$1.00
To be mitigated by DISIS-2009-01 Customres / Reconductor 8 miles of 115kV line		
GEN-2006-038N010	\$1.00	\$0.18
GEN-2008-030N	\$1.00	\$0.14
GEN-2008-086N	\$1.00	\$0.25
GEN-2008-086N01	\$1.00	\$0.41
GEN-2009-003O1	\$1.00	\$0.01
Upgrade Total		\$1.00
GEN-2006-044N 345 sub and 345/115 kV transformer		\$10,000,000.00
Install new autotransformer and 345kV sub		
GEN-2006-038N009	\$10,000,000.00	\$132,926.92
GEN-2006-038N010	\$10,000,000.00	\$188,586.68
GEN-2006-038N023	\$10,000,000.00	\$2,404,011.25
GEN-2008-086N	\$10,000,000.00	\$2,592,812.93
GEN-2008-086N01	\$10,000,000.00	\$4,681,662.22
Upgrade Total		\$10,000,000.00
GEN-2008-030N Interconnection Cost		\$5,000,000.00
See one-line diagram		
GEN-2008-030N	\$5,000,000.00	\$5,000,000.00
Upgrade Total		\$5,000,000.00
GEN-2008-068 Interconnection Cost		\$1,500,000.00
See one-line diagram		

Upgrade	E + C Cost	Allocated Costs
GEN-2008-068	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00
GEN-2008-079 - Judson Large 115kV**		\$1.00
To be mitigated by DISIS-2009-001/ CustomersAdd 20 miles of second 115kV circuit		
GEN-2008-068	\$1.00	\$0.01
GEN-2008-080	\$1.00	\$0.30
GEN-2008-081	\$1.00	\$0.43
GEN-2008-089	\$1.00	\$0.01
GEN-2008-117	\$1.00	\$0.04
GEN-2008-118	\$1.00	\$0.04
GEN-2008-119	\$1.00	\$0.05
GEN-2008-133	\$1.00	\$0.07
GEN-2009-008	\$1.00	\$0.01
GEN-2009-009	\$1.00	\$0.01
GEN-2009-010	\$1.00	\$0.01
GEN-2009-015	\$1.00	\$0.01
GEN-2009-026	\$1.00	\$0.01
GEN-2009-043	\$1.00	\$0.01
Upgrade Total		\$1.00
GEN-2008-079 - Seward 115kV		\$18,000,000.00
Build 40 miles new 115kV line		
GEN-2008-068	\$18,000,000.00	\$134,497.77
GEN-2008-080	\$18,000,000.00	\$6,675,826.38
GEN-2008-081	\$18,000,000.00	\$5,698,616.91
GEN-2008-089	\$18,000,000.00	\$132,805.97
GEN-2008-117	\$18,000,000.00	\$838,473.76
GEN-2008-118	\$18,000,000.00	\$838,473.76
GEN-2008-119	\$18,000,000.00	\$932,216.16
GEN-2008-133	\$18,000,000.00	\$1,405,318.41
GEN-2009-008	\$18,000,000.00	\$186,661.47
GEN-2009-009	\$18,000,000.00	\$165,795.99
GEN-2009-010	\$18,000,000.00	\$248,693.99
GEN-2009-014	\$18,000,000.00	\$263,976.54
GEN-2009-015	\$18,000,000.00	\$156,524.95
GEN-2009-026	\$18,000,000.00	\$161,058.96
GEN-2009-043	\$18,000,000.00	\$161,058.96
Upgrade Total		\$18,000,000.00
GEN-2008-080 Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2008-080	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00

Upgrade	E + C Cost	Allocated Costs
GEN-2008-081 Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2008-081	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2008-086N Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2008-086N	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2008-086N01 Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2008-086N01	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2008-089 Interconnection Cost		\$1,500,000.00
See one-line diagram		
GEN-2008-089	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00
GEN-2008-099 Interconnection Cost		\$6,000,000.00
See one-line diagram		
GEN-2008-099	\$6,000,000.00	\$6,000,000.00
Upgrade Total		\$6,000,000.00
GEN-2008-117 Interconnection Cost		\$2,000,000.00
See one-line diagram		
GEN-2008-117	\$2,000,000.00	\$2,000,000.00
Upgrade Total		\$2,000,000.00
GEN-2008-118 Interconnection Cost		\$2,000,000.00
See one-line diagram		
GEN-2008-118	\$2,000,000.00	\$2,000,000.00
GEN-2008-119	\$2,000,000.00	\$2,000,000.00
Upgrade Total		\$2,000,000.00
GEN-2008-121O Interconnection Cost		\$2,500,000.00
See one-line diagram		
GEN-2008-121O	\$2,500,000.00	\$2,500,000.00
Upgrade Total		\$2,500,000.00
GEN-2008-133 Interconnection Cost		\$3,000,000.00
See one-line diagram		
GEN-2008-133	\$3,000,000.00	\$3,000,000.00
Upgrade Total		\$3,000,000.00
GEN-2009-003O Interconnection Cost		\$2,000,000.00
See one-line diagram		

Upgrade	E + C Cost	Allocated Costs
GEN-2009-003O	\$2,000,000.00	\$2,000,000.00
Upgrade Total		\$2,000,000.00
GEN-2009-003O1 Interconnection Cost		\$2,500,000.00
See one-line diagram		
GEN-2009-003O1	\$2,500,000.00	\$2,500,000.00
Upgrade Total		\$2,500,000.00
GEN-2009-008 Interconnection Cost		\$2,000,000.00
See one-line diagram		
GEN-2009-008	\$2,000,000.00	\$2,000,000.00
Upgrade Total		\$2,000,000.00
GEN-2009-009 Interconnection Cost		\$1,000,000.00
See one-line diagram		
GEN-2009-009	\$1,000,000.00	\$1,000,000.00
Upgrade Total		\$1,000,000.00
GEN-2009-010 Interconnection Cost		\$2,000,000.00
See one-line diagram		
GEN-2009-010	\$2,000,000.00	\$2,000,000.00
Upgrade Total		\$2,000,000.00
GEN-2009-012 Interconnection Cost		\$6,000,000.00
GEN-2009-012	\$6,000,000.00	\$6,000,000.00
Upgrade Total		\$6,000,000.00
GEN-2009-013 Interconnection Cost		\$1,500,000.00
See one-line diagram		
GEN-2009-013	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00
GEN-2009-014 Interconnection Cost		\$1,500,000.00
See one-line diagram		
GEN-2009-014	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00
GEN-2009-015 Interconnection Cost		\$5,000,000.00
See one-line diagram		
GEN-2009-015	\$5,000,000.00	\$5,000,000.00
Upgrade Total		\$5,000,000.00
GEN-2009-020 Interconnection Cost		\$1,500,000.00
See one-line diagram		
GEN-2009-020	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00

Upgrade	E + C Cost	Allocated Costs
GEN-2009-021 Interconnection Cost		\$6,000,000.00
See one-line diagram		
GEN-2009-021	\$6,000,000.00	\$6,000,000.00
Upgrade Total		\$6,000,000.00
GEN-2009-026 Interconnection Cost		\$6,000,000.00
See one-line diagram		
GEN-2009-026	\$6,000,000.00	\$6,000,000.00
Upgrade Total		\$6,000,000.00
GEN-2009-027 Interconnection Cost		\$6,000,000.00
See one-line diagram		
GEN-2009-027	\$6,000,000.00	\$6,000,000.00
Upgrade Total		\$6,000,000.00
GEN-2009-028 Interconnection Cost		\$3,000,000.00
See one-line diagram		
GEN-2009-028	\$3,000,000.00	\$3,000,000.00
Upgrade Total		\$3,000,000.00
GEN-2009-029 Interconnection Cost		\$1,500,000.00
See one-line diagram		
GEN-2009-029	\$1,500,000.00	\$1,500,000.00
Upgrade Total		\$1,500,000.00
GEN-2009-040 Interconnection Cost		\$3,000,000.00
See one-line diagram		
GEN-2009-040	\$3,000,000.00	\$3,000,000.00
Upgrade Total		\$3,000,000.00
Holcomb 345/115kV transformer #2		\$10,000,000.00
Add new 345/115kV autotransformer		
GEN-2008-080	\$10,000,000.00	\$4,313,695.68
GEN-2008-081	\$10,000,000.00	\$5,270,749.72
GEN-2008-117	\$10,000,000.00	\$133,541.50
GEN-2008-118	\$10,000,000.00	\$133,541.50
GEN-2008-119	\$10,000,000.00	\$148,471.60
Upgrade Total		\$10,000,000.00
Judson Large - North Judson Large 115kV**		\$1.00
To be mitigated by DISIS-2009-001 Customers / Add 20 miles of second 115kV circuit		
GEN-2008-080	\$1.00	\$0.37
GEN-2008-081	\$1.00	\$0.54
GEN-2008-117	\$1.00	\$0.03
GEN-2008-118	\$1.00	\$0.03
GEN-2008-119	\$1.00	\$0.03
GEN-2009-009	\$1.00	\$0.00

Upgrade	E + C Cost	Allocated Costs
GEN-2009-020	\$1.00	\$0.01
Upgrade Total		\$1.00
Mullergren - Pioneer Tap 115kV ckt 2		\$12,000,000.00
Build 30 miles of new 115kV		
GEN-2008-068	\$12,000,000.00	\$53,556.41
GEN-2008-089	\$12,000,000.00	\$99,050.57
GEN-2009-009	\$12,000,000.00	\$11,508,294.53
GEN-2009-020	\$12,000,000.00	\$167,579.75
GEN-2009-026	\$12,000,000.00	\$85,759.37
GEN-2009-043	\$12,000,000.00	\$85,759.37
Upgrade Total		\$12,000,000.00
Mullergren 230/115kV transformer ckt 2		\$3,000,000.00
Add new autotransformer		
GEN-2008-068	\$3,000,000.00	\$29,038.23
GEN-2008-089	\$3,000,000.00	\$67,641.99
GEN-2009-009	\$3,000,000.00	\$1,293,852.36
GEN-2009-014	\$3,000,000.00	\$1,515,927.63
GEN-2009-020	\$3,000,000.00	\$29,784.75
GEN-2009-026	\$3,000,000.00	\$31,877.52
GEN-2009-043	\$3,000,000.00	\$31,877.52
Upgrade Total		\$3,000,000.00
Scott City - Setab 115kV ckt #2		\$1,500,000.00
Build new 115kV line		
GEN-2008-117	\$1,500,000.00	\$482,035.93
GEN-2008-118	\$1,500,000.00	\$482,035.93
GEN-2008-119	\$1,500,000.00	\$535,928.14
Upgrade Total		\$1,500,000.00
Smoky Hills - Summit 230kV ckt 1		\$300,000.00
Replace Wave Trap at Summitt		
GEN-2008-068	\$300,000.00	\$174,132.20
GEN-2008-080	\$300,000.00	\$7,430.85
GEN-2008-081	\$300,000.00	\$10,250.63
GEN-2008-089	\$300,000.00	\$53,973.48
GEN-2009-009	\$300,000.00	\$18,459.17
GEN-2009-020	\$300,000.00	\$5,933.20
GEN-2009-026	\$300,000.00	\$14,910.23
GEN-2009-043	\$300,000.00	\$14,910.23
Upgrade Total		\$300,000.00
Spearville - Reno County 345kV		\$130,000,000.00
Build 110 miles of new 345kV line		
GEN-2008-080	\$130,000,000.00	\$5,035,979.45

Upgrade	E + C Cost	Allocated Costs
GEN-2008-081	\$130,000,000.00	\$6,980,981.80
GEN-2008-089	\$130,000,000.00	\$4,252,363.68
GEN-2008-117	\$130,000,000.00	\$8,058,417.31
GEN-2008-118	\$130,000,000.00	\$8,058,417.31
GEN-2008-119	\$130,000,000.00	\$8,959,358.37
GEN-2008-133	\$130,000,000.00	\$56,692,393.97
GEN-2009-008	\$130,000,000.00	\$5,430,319.80
GEN-2009-009	\$130,000,000.00	\$2,006,794.40
GEN-2009-010	\$130,000,000.00	\$4,624,273.66
GEN-2009-015	\$130,000,000.00	\$3,757,708.94
GEN-2009-020	\$130,000,000.00	\$1,345,460.31
GEN-2009-026	\$130,000,000.00	\$7,398,765.50
GEN-2009-043	\$130,000,000.00	\$7,398,765.50
Upgrade Total		\$130,000,000.00
Spearville 345/230kV transformer ckt 3		\$6,000,000.00
Add new autotransformer		
GEN-2008-068	\$6,000,000.00	\$132,069.73
GEN-2008-080	\$6,000,000.00	\$700,783.12
GEN-2008-081	\$6,000,000.00	\$1,033,747.86
GEN-2008-089	\$6,000,000.00	\$240,987.34
GEN-2009-008	\$6,000,000.00	\$540,140.10
GEN-2009-009	\$6,000,000.00	\$723,532.26
GEN-2009-010	\$6,000,000.00	\$1,369,510.62
GEN-2009-015	\$6,000,000.00	\$1,018,127.59
GEN-2009-020	\$6,000,000.00	\$241,101.39
Upgrade Total		\$6,000,000.00
All Upgrades Total		\$330,100,005.00

H: FCITC Analysis (No Upgrades)

See Attachment

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03781	52.4	216.0639	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	215.3844	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.99775	112.9	208.4539	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	0.99775	112.9	208.4539	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G09_009	'COVERT 3 115.00 - WALDO 115KV CKT 1'	TO->FROM	1	59.8	207.3579	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G09_009	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'	FROM->TO	1	59.8	207.1906	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04591	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.05266	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03851	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03334	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03381	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.0429	87.8	206.3434	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04518	98.2	201.6433	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.05529	98.2	201.6433	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	51.7	201.4313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	51.7	201.4313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	51.7	201.4313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	51.7	201.4313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03505	51.7	201.4313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03505	51.7	201.4313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03898	51.7	201.4313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03898	51.7	201.4313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	200.6252	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	200.6252	'SPP-MKEC-05'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	200.6252	'SPP-WERE-34'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	200.6252	'SPP-WERE-34a'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04518	87.8	200.2435	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.05529	87.8	200.2435	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	52.4	198.9313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	52.4	198.9313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	52.4	198.9313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	52.4	198.9313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03505	52.4	198.9313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03505	52.4	198.9313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03898	52.4	198.9313	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03898	52.4	198.9313	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	197.5517	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	197.5517	'SPP-MKEC-05'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	197.5517	'SPP-WERE-34'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	197.5517	'SPP-WERE-34a'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05812	51.7	188.3814	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.08434	87.8	186.7637	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.10507	87.8	186.7637	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03125	87.8	186.7637	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03497	87.8	186.7637	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	186.2219	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05812	52.4	186.0557	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.08434	87.8	185.8525	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.10507	87.8	185.8525	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03125	87.8	185.8525	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03497	87.8	185.8525	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04801	51.7	183.4445	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	183.1484	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04801	52.4	181.1847	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.05529	98.2	180.226	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	180.0491	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04518	98.2	177.7132	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	176.9756	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.05529	87.8	176.2892	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	174.1033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	174.1033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	174.1033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	174.1033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	174.1033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03008	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_008	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03432	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07981	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06491	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04494	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.08589	84.7	173.6299	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04518	87.8	173.4788	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04591	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.05266	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03851	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.0334	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03381	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.0429	95.6	170.5748	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03524	98.2	170.4837	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04167	98.2	170.4837	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03169	98.2	170.4837	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03472	98.2	170.4837	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	51.7	170.2998	'BASE CASE'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	51.7	170.2998	'BASE CASE'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03451	51.7	170.2998	'BASE CASE'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03758	51.7	170.2998	'BASE CASE'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03534	98.2	169.6876	'WOLF CREEK 345/25.0KV TRANSFORMER CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04182	98.2	169.6876	'WOLF CREEK 345/25.0KV TRANSFORMER CKT 1'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03168	98.2	169.6876	'WOLF CREEK 345/25.0KV TRANSFORMER CKT 1'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03474	98.2	169.6876	'WOLF CREEK 345/25.0KV TRANSFORMER CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.04052	112.9	169.2475	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	-0.2314	112.9	169.2475	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.10135	112.9	169.2475	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.40088	112.9	169.2475	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.54752	112.9	169.2475	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.04052	112.9	169.0703	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	-0.2314	112.9	169.0703	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.10135	112.9	169.0703	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.40088	112.9	169.0703	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETR SBG7 115.00 115KV CKT 1'	TO->FROM	0.54752	112.9	169.0703	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03534	87.8	168.4889	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04182	87.8	168.4889	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03168	87.8	168.4889	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03474	87.8	168.4889	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	52.4	168.2157	'BASE CASE'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	52.4	168.2157	'BASE CASE'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03451	52.4	168.2157	'BASE CASE'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03758	52.4	168.2157	'BASE CASE'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	167.7279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	167.7279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	167.7279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	167.7279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	167.7279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	167.6098	'SPP-MKEC-05'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	167.6098	'SPP-MKEC-05'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	167.6098	'SPP-MKEC-05'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	167.6098	'SPP-MKEC-05'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	167.6098	'SPP-MKEC-05'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	167.4918	'SPP-WERE-34a'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	167.4918	'SPP-WERE-34'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	167.4918	'SPP-WERE-34a'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	167.4918	'SPP-WERE-34'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	167.4918	'SPP-WERE-34a'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	167.4918	'SPP-WERE-34'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	167.4918	'SPP-WERE-34a'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	167.4918	'SPP-WERE-34'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	167.4918	'SPP-WERE-34a'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	167.4918	'SPP-WERE-34'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03086	84.7	167.3335	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06556	84.7	167.3335	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04179	84.7	167.3335	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03446	84.7	167.3335	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07045	84.7	167.3335	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04052	112.9	166.9445	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.2314	112.9	166.9445	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.10135	112.9	166.9445	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.40088	112.9	166.9445	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.54752	112.9	166.9445	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	51.7	166.8615	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	51.7	166.8615	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04518	95.6	164.9725	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.05529	95.6	164.9725	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03222	98.2	164.8483	'CUDAHY - G08-79T 115.00 115KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03476	98.2	164.8483	'CUDAHY - G08-79T 115.00 115KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	52.4	164.8233	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04466	52.4	164.8233	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03222	98.2	164.3391	'CUDAHY - KISMET 3 115.00 115KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03476	98.2	164.3391	'CUDAHY - KISMET 3 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	51.7	163.3439	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	51.7	163.3439	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03534	98.2	163.2722	'BASE CASE'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04182	98.2	163.2722	'BASE CASE'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03168	98.2	163.2722	'BASE CASE'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03474	98.2	163.2722	'BASE CASE'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	162.5331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	162.5331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	162.5331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	162.5331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	162.5331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	52.4	161.3527	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	52.4	161.3527	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.13345	119.8	161.1018	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.50188	119.8	161.1018	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.50188	119.8	161.1018	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.13345	119.8	160.5175	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.50188	119.8	160.5175	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.50188	119.8	160.5175	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	160.2899	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06795	84.7	160.2899	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	160.2899	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	160.2899	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07258	84.7	160.2899	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_009	'COVERT 3 115.00 - WALDO 115KV CKT 1'	TO->FROM	1	59.8	159.1163	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G09_009	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'	FROM->TO	1	59.8	158.949	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03222	98.2	157.6334	'G08-79T 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03476	98.2	157.6334	'G08-79T 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'	FROM->TO	1	112.9	157.5755	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	1	112.9	157.5755	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G09_029	'MARYVILLE - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.0642	167.8	157.5447	'CLRND 5 161.00 - WFARMS 161.00 161KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03534	87.8	157.3271	'BASE CASE'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04182	87.8	157.3271	'BASE CASE'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03168	87.8	157.3271	'BASE CASE'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03474	87.8	157.3271	'BASE CASE'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.26802	112.9	156.8564	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.07043	112.9	156.8564	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.30177	112.9	156.8564	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.47389	112.9	156.8564	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.13345	119.8	155.5927	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.50188	119.8	155.5927	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.50188	119.8	155.5927	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_081	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.04778	72.9	155.0565	'SPP-MKEC-08'
10G	G08_080	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.10329	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.10556	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_089	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.13468	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.09178	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.09178	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.09178	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.11281	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.16596	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.19335	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.28635	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.21367	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.21723	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.12723	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.12723	317.4	154.7716	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.0334	98.2	154.4603	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04591	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.05266	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03851	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.0334	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03381	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.0429	101.1	153.679	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03469	98.2	153.6349	'SPP-MKEC-06'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04202	98.2	153.6349	'SPP-MKEC-06'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03469	98.2	153.6072	'SEWARD - ST JOHN 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04202	98.2	153.6072	'SEWARD - ST JOHN 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.05266	98.2	153.5566	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.08434	95.6	152.5926	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.10507	95.6	152.5926	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03125	95.6	152.5926	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03497	95.6	152.5926	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_080	'NINNES3 115.00 - ST JOHN 115KV CKT 1'	FROM->TO	0.03769	72.9	151.9155	'SPP-MKEC-08'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.08434	95.6	151.6512	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.10507	95.6	151.6512	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03125	95.6	151.6512	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03497	95.6	151.6512	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04591	98.2	151.398	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03222	87.8	151.0205	'G08-79T 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_020	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03476	87.8	151.0205	'G08-79T 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04518	101.1	148.3816	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.05529	101.1	148.3816	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	148.0447	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'
10G	G09_009	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'	FROM->TO	1	89.6	147.8795	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G09_010	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.0334	87.8	147.4715	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N010	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	-0.03538	119.8	146.9334	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.17276	119.8	146.9334	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.11945	119.8	146.9334	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.45664	119.8	146.9334	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.34197	119.8	146.9334	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03469	87.8	146.5484	'SPP-MKEC-06'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04202	87.8	146.5484	'SPP-MKEC-06'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03469	87.8	146.5174	'SEWARD - ST JOHN 115KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04202	87.8	146.5174	'SEWARD - ST JOHN 115KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.05266	87.8	146.4608	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N010	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	-0.03538	119.8	146.3491	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.17276	119.8	146.3491	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.11945	119.8	146.3491	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.45664	119.8	146.3491	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.34197	119.8	146.3491	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.07898	84.7	145.9144	'NINNES3 115.00 - PRATT 115KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04766	84.7	145.9144	'NINNES3 115.00 - PRATT 115KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03131	84.7	145.9144	'NINNES3 115.00 - PRATT 115KV CKT 1'
10G	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.08276	84.7	145.9144	'NINNES3 115.00 - PRATT 115KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	144.581	'RUSSELL - WALDO 115KV CKT 1'
10G	G09_009	'RUSSELL - WALDO 115KV CKT 1'	FROM->TO	1	89.6	144.4196	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04591	87.8	144.0465	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.05529	95.6	142.9727	'NINNES3 115.00 - ST JOHN 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.99775	112.9	142.8497	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	0.99775	112.9	142.8497	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G09_015	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03381	87.8	142.6359	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03876	95.6	142.3651	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04522	95.6	142.3651	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03221	95.6	142.3651	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03614	95.6	142.3651	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03876	95.6	142.2605	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04522	95.6	142.2605	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03221	95.6	142.2605	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03614	95.6	142.2605	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04522	98.2	141.5216	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04522	98.2	141.5216	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N010	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	-0.03538	119.8	141.4242	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.17276	119.8	141.4242	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.11945	119.8	141.4242	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.45664	119.8	141.4242	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.34197	119.8	141.4242	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04548	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05808	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13493	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10579	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0674	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1412	78.8	140.7243	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04518	95.6	140.3916	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04919	112.9	140.216	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.26579	112.9	140.216	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.30917	112.9	140.216	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.47951	112.9	140.216	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04919	112.9	139.9503	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.26579	112.9	139.9503	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.30917	112.9	139.9503	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.47951	112.9	139.9503	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03624	51.7	139.7447	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03876	98.2	139.6139	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	138.5475	'COVERT 3 115.00 - WALDO 115KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	138.4358	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03624	52.4	138.0687	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05549	51.7	137.5317	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04999	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05674	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03093	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04259	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03748	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03789	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04698	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03277	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03277	53.1	137.052	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.08434	101.1	136.6751	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.10507	101.1	136.6751	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03125	101.1	136.6751	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03497	101.1	136.6751	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.1346	119.8	136.5506	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.50303	119.8	136.5506	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.50303	119.8	136.5506	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04999	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05674	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03093	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04259	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03748	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03789	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04698	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03277	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03277	53.3	136.5377	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.10791	51.7	136.3058	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.52391	112.9	136.2037	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.67403	112.9	136.2037	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03524	98.2	136.1703	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.1346	119.8	135.9662	'G06-44NT 115.00 - PSTRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.50303	119.8	135.9662	'G06-44NT 115.00 - PSTRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.50303	119.8	135.9662	'G06-44NT 115.00 - PSTRSBG7 115.00 115KV CKT 1'
10G	G07_011N05	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03097	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.62511	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07803	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07898	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.21415	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07332	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07332	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07332	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08927	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18801	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07765	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09703	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09991	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08433	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.11753	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.11753	317.6	135.9549	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05549	52.4	135.8853	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03534	95.6	135.8088	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04182	95.6	135.8088	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03168	95.6	135.8088	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03474	95.6	135.8088	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.08434	101.1	135.7849	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.10507	101.1	135.7849	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03125	101.1	135.7849	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03497	101.1	135.7849	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PSTRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04233	112.9	135.5576	'COLMBUS4 230.00 - G08-86N2T 230.00 230KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PSTRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.28828	112.9	135.5576	'COLMBUS4 230.00 - G08-86N2T 230.00 230KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PSTRSBG7 115.00 115KV CKT 1'	TO->FROM	0.0626	112.9	135.5576	'COLMBUS4 230.00 - G08-86N2T 230.00 230KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PSTRSBG7 115.00 115KV CKT 1'	TO->FROM	0.25213	112.9	135.5576	'COLMBUS4 230.00 - G08-86N2T 230.00 230KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PSTRSBG7 115.00 115KV CKT 1'	TO->FROM	0.43584	112.9	135.5576	'COLMBUS4 230.00 - G08-86N2T 230.00 230KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	135.0224	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03534	95.6	134.8674	'MILAN 4 - MILAN TAP 138KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04182	95.6	134.8674	'MILAN 4 - MILAN TAP 138KV CKT 1'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03168	95.6	134.8674	'MILAN 4 - MILAN TAP 138KV CKT 1'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03474	95.6	134.8674	'MILAN 4 - MILAN TAP 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.10791	51.7	134.7584	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.10791	52.4	134.6758	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04972	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05647	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03066	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03722	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03762	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04671	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0325	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0325	52.7	134.451	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	134.0877	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	134.0877	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	134.0877	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	134.0877	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	134.0877	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04972	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05647	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03066	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03722	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03762	52.9	133.9427	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_009	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.18059	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_010	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.25448	334.9	133.0402	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_010	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.25448	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.50943	334.9	133.0402	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.50943	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.1773	334.9	133.0402	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.1773	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_026	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.10443	334.9	133.0402	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_026	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.10443	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_043	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.10443	334.9	133.0402	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G09_043	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.10443	334.9	133.0402	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04522	87.8	133.0002	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04692	112.9	132.338	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04692	112.9	132.338	'SPIRITM7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.28599	112.9	132.338	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.28599	112.9	132.338	'SPIRITM7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.0616	112.9	132.338	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.0616	112.9	132.338	'SPIRITM7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.25511	112.9	132.338	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.25511	112.9	132.338	'SPIRITM7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.4387	112.9	132.338	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.4387	112.9	132.338	'SPIRITM7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04182	87.8	132.2326	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_088	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.69301	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03289	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03238	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.34463	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03255	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03255	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03255	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03019	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.29713	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.11236	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.13187	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08482	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10083	317.6	132.1906	'KNOLL345 345.00 345/230KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04874	52.4	131.6779	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	-0.07025	96.2	131.0795	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_081	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	-0.06782	96.2	131.0795	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_117	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	131.0795	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	131.0795	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_119	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	131.0795	'HOLCOMB - SETAB 345KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.07	119.8	131.0514	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.11233	119.8	131.0514	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.06745	119.8	131.0514	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.29272	119.8	131.0514	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.2203	119.8	131.0514	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.1346	119.8	131.0414	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.50303	119.8	131.0414	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.50303	119.8	131.0414	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'
10G	G06_038N010	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	-0.03183	112.9	130.9725	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	0.49859	112.9	130.9725	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	-0.14756	112.9	130.9725	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'	FROM->TO	0.74985	112.9	130.9725	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.07	119.8	130.8844	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.11233	119.8	130.8844	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.06745	119.8	130.8844	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.29272	119.8	130.8844	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.2203	119.8	130.8844	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03876	87.8	130.8665	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.04182	98.2	130.8556	'BASE CASE'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03665	51.7	130.8294	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03534	87.8	130.2132	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.61019	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0602	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06063	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.21032	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0585	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0585	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0585	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06469	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19147	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09406	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.12806	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10153	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10107	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09071	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09071	317.6	129.6324	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_081	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	129.5033	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G07_011N05	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.03141	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.62555	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07847	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07943	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.2146	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07376	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07376	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07376	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08972	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18845	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07809	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09748	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10035	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08478	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.11797	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.11797	317.9	129.4126	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.07	119.8	129.3819	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.11233	119.8	129.3819	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.06745	119.8	129.3819	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.29272	119.8	129.3819	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.2203	119.8	129.3819	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03665	52.4	129.2725	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - HARPER 138KV CKT 1'	FROM->TO	0.03534	98.2	129.0501	'BASE CASE'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.0592	119.8	128.6651	'ALBION 7 115.00 - PETERSBG7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.05023	119.8	128.6651	'ALBION 7 115.00 - PETERSBG7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.23771	119.8	128.6651	'ALBION 7 115.00 - PETERSBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.23771	119.8	128.6651	'ALBION 7 115.00 - PETERSBG7 115.00 115KV CKT 1'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	128.647	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_080	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	-0.07025	95.3	128.6448	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_081	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	-0.06782	95.3	128.6448	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_117	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	128.6448	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	128.6448	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_119	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	128.6448	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	128.5289	'SPP-MKEC-05'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	128.4109	'SPP-WERE-34'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	128.4109	'SPP-WERE-34a'
10G	G09_009	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.0603	84.7	128.2925	'BASE CASE'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.03529	84.7	128.2925	'BASE CASE'
10G	G09_020	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.06418	84.7	128.2925	'BASE CASE'
10G	G06_038N009	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.03125	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G06_038N023	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.03976	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G07_011N05	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.04787	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	-0.07701	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_081	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	-0.07012	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_086N	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.03263	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_086N01	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.03405	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_117	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.26658	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.26658	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_119	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	0.26658	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_133	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	-0.04673	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_020	'SCOTT CITY - SETAB 115KV CKT 1'	TO->FROM	-0.11002	197.7	128.2449	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	127.8651	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	127.6438	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	127.6438	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	127.6438	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	127.6438	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	127.6438	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03216	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03984	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10691	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06876	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04676	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11162	78.8	127.5972	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.05529	101.1	127.5785	'NINNESCS3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	127.5245	'SPP-MKEC-05'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	127.5245	'SPP-MKEC-05'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	127.5245	'SPP-MKEC-05'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	127.5245	'SPP-MKEC-05'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	127.5245	'SPP-MKEC-05'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	127.4051	'SPP-WERE-34a'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	127.4051	'SPP-WERE-34'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	127.4051	'SPP-WERE-34a'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	127.4051	'SPP-WERE-34'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	127.4051	'SPP-WERE-34a'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	127.4051	'SPP-WERE-34'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	127.4051	'SPP-WERE-34a'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	127.4051	'SPP-WERE-34'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	127.4051	'SPP-WERE-34a'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	127.4051	'SPP-WERE-34'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04874	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.05549	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04135	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03624	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03665	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04573	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03152	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03152	103	127.2898	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03086	83.8	127.2452	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06556	83.8	127.2452	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04179	83.8	127.2452	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03446	83.8	127.2452	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07045	83.8	127.2452	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.15088	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.07593	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.07722	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.15088	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.06982	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.06982	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.06982	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.0778	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.17577	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.18272	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.27347	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.18584	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.20239	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.09305	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGRENN 230KV CKT 1'	TO->FROM	0.09305	317.4	127.1293	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03842	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04653	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11712	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07714	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0536	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.12182	78.8	127.0618	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03876	101.1	127.004	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04522	101.1	127.004	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03221	101.1	127.004	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03614	101.1	127.004	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03876	101.1	126.905	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04522	101.1	126.905	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03221	101.1	126.905	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03614	101.1	126.905	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N010	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.04176	112.9	126.8517	'BASE CASE'
10G	G06_038N023	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	-0.28756	112.9	126.8517	'BASE CASE'
10G	G07_011N05	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.06029	112.9	126.8517	'BASE CASE'
10G	G08_086N	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.25151	112.9	126.8517	'BASE CASE'
10G	G08_086N01	'ALBION 7 115.00 - PETRSBG7 115.00 115KV CKT 1'	TO->FROM	0.43589	112.9	126.8517	'BASE CASE'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.08718	51.7	126.8364	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_068	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04024	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04024	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04712	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11394	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07336	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04659	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11769	78.8	126.5468	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.63015	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0579	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05877	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.22275	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05077	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05077	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05077	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06582	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19367	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07402	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09271	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08492	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07603	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10322	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10322	317.6	126.2425	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.25294	119.8	125.8851	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.11984	119.8	125.8851	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.4293	119.8	125.8851	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.37817	119.8	125.8851	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G09_010	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.06491	84.7	125.8347	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03534	95.6	125.5578	'BASE CASE'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04182	95.6	125.5578	'BASE CASE'
10G	G09_009	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03168	95.6	125.5578	'BASE CASE'
10G	G09_020	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03474	95.6	125.5578	'BASE CASE'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.08718	52.4	125.3328	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.25294	119.8	125.3008	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.11984	119.8	125.3008	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.4293	119.8	125.3008	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.37817	119.8	125.3008	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.08718	51.7	125.289	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.63335	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04223	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04175	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.2462	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04524	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04524	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04524	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04882	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.24348	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08215	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08215	317.6	125.2275	'MULLERGREN - S HAYS6 230.00 230KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04518	101.1	125.1379	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03903	101.1	124.5312	'SPP-WERE-78'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04596	101.1	124.5312	'SPP-WERE-78'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04277	101.1	124.5312	'SPP-WERE-78'
10G	G09_010	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03145	101.1	124.5312	'SPP-WERE-78'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04655	101.1	124.5312	'SPP-WERE-78'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.25294	119.8	124.4661	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.11984	119.8	124.4661	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.4293	119.8	124.4661	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.37817	119.8	124.4661	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03903	101.1	124.4323	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04596	101.1	124.4323	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04277	101.1	124.4323	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_010	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03145	101.1	124.4323	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04655	101.1	124.4323	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.25294	119.8	123.8818	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.11984	119.8	123.8818	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.4293	119.8	123.8818	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.37817	119.8	123.8818	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_080	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.15963	129.1	123.8666	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.20156	129.1	123.8666	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G06_038N010	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'	FROM->TO	0.54018	98.8	123.8106	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_030N	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'	FROM->TO	-0.03658	98.8	123.8106	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'	FROM->TO	0.05557	98.8	123.8106	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N01	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'	FROM->TO	0.04164	98.8	123.8106	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.08718	52.4	123.8061	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.07701	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0782	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.10765	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08045	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.13902	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.16983	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.25936	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.17977	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.19213	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08873	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08873	317.4	123.662	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.07701	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0782	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.10765	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.0698	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08045	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.13902	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.16983	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.25936	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.17977	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.19213	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08873	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREY 230KV CKT 1'	TO->FROM	0.08873	317.4	123.6305	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'CLIFTON - GREENLEAF 115KV CKT 1'	FROM->TO	0.09619	88.8	123.5674	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G09_040	'CLIFTON - GREENLEAF 115KV CKT 1'	FROM->TO	-0.21158	88.8	123.5674	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	123.4522	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03216	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03984	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10691	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06876	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04676	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11162	78.8	123.2825	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.60932	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.60932	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0563	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0563	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05641	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05641	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19191	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19191	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.055	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06271	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06271	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16584	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16584	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05822	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05822	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07484	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07484	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07218	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07218	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06362	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06362	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08613	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08613	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08613	317.6	123.1897	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08613	317.6	123.1897	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	123.1279	'HARPER - MILAN TAP 138KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06271	438.5	123.1121	'KCPL-OPGD06a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06246	438.5	123.1121	'KCPL-OPGD06a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06149	438.5	123.1121	'KCPL-OPGD06a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05618	438.5	123.1121	'KCPL-OPGD06a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0629	438.5	123.1121	'KCPL-OPGD06a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06196	438.5	123.1121	'KCPL-OPGD06a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06233	438.5	123.1121	'KCPL-OPGD06a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	438.5	123.1121	'KCPL-OPGD06a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0771	438.5	123.1121	'KCPL-OPGD06a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	438.5	123.1121	'KCPL-OPGD06a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	438.5	123.1121	'KCPL-OPGD06a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	438.5	123.1121	'KCPL-OPGD06a'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	123.0726	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	123.0726	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	123.0726	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	123.0726	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	123.0726	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	123.0098	'SPP-MKEC-05'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	122.8917	'SPP-WERE-34a'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	122.8917	'SPP-WERE-34'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06271	439.5	122.832	'KCPL-OPGD06a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06246	439.5	122.832	'KCPL-OPGD06a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06149	439.5	122.832	'KCPL-OPGD06a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05618	439.5	122.832	'KCPL-OPGD06a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0629	439.5	122.832	'KCPL-OPGD06a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06196	439.5	122.832	'KCPL-OPGD06a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06233	439.5	122.832	'KCPL-OPGD06a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	439.5	122.832	'KCPL-OPGD06a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0771	439.5	122.832	'KCPL-OPGD06a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	439.5	122.832	'KCPL-OPGD06a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	439.5	122.832	'KCPL-OPGD06a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	439.5	122.832	'KCPL-OPGD06a'
10G	G08_068	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	-0.04314	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G08_089	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	-0.11548	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_008	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.35152	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_009	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.07509	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_010	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.1557	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_015	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.08416	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_020	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.10649	88	122.7222	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03008	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_008	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03432	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07981	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06491	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04494	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.08589	87.4	122.6138	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.15963	129.1	122.5498	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.20156	129.1	122.5498	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G06_038N010	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'	FROM->TO	0.54018	98.8	122.5061	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	122.3932	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	122.3932	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	122.3932	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	122.3932	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	122.3932	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.7259	89.5	122.2179	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04801	103	122.1871	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.05812	103	122.1871	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_008	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.35152	88	122.1636	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03216	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03984	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10691	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06876	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04676	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11162	78.8	121.8866	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.6114	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.6114	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04546	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04546	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04561	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04561	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18703	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18703	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04977	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04977	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16114	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16114	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05612	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05612	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07073	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07073	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06331	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06331	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05891	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05891	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.7417	'JEFFERY ENERGY CENTER 345/26.0KV TRANSFORMER CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03241	78.8	121.6866	'SPP-MKEC-09B'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04009	78.8	121.6866	'SPP-MKEC-09B'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10715	78.8	121.6866	'SPP-MKEC-09B'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06901	78.8	121.6866	'SPP-MKEC-09B'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04701	78.8	121.6866	'SPP-MKEC-09B'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11187	78.8	121.6866	'SPP-MKEC-09B'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06271	438.5	121.6525	'KCPL-OPGD01a'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06246	438.5	121.6525	'KCPL-OPGD01a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06149	438.5	121.6525	'KCPL-OPGD01a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05618	438.5	121.6525	'KCPL-OPGD01a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0629	438.5	121.6525	'KCPL-OPGD01a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06196	438.5	121.6525	'KCPL-OPGD01a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06233	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0771	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	438.5	121.6525	'KCPL-OPGD01a'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	121.4897	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.6114	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04546	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04561	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18703	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04977	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16114	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05612	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07073	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06331	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05891	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	121.4087	'JEFFREY ENERGY CENTER 230/26.0KV TRANSFORMER CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06271	439.5	121.3757	'KCPL-OPGD01a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06246	439.5	121.3757	'KCPL-OPGD01a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06149	439.5	121.3757	'KCPL-OPGD01a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05618	439.5	121.3757	'KCPL-OPGD01a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0629	439.5	121.3757	'KCPL-OPGD01a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06196	439.5	121.3757	'KCPL-OPGD01a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06233	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0771	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	439.5	121.3757	'KCPL-OPGD01a'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	121.3716	'SPP-MKEC-05'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	121.2536	'SPP-WERE-34'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	121.2536	'SPP-WERE-34a'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04132	84.7	121.209	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_068	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	-0.10758	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07638	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07767	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.15133	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07028	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07028	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07028	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07825	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.17622	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.18318	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.27392	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.18629	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.20285	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0935	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0935	317.4	121.0819	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G08_081	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.04182	87.8	121.0708	'BASE CASE'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.25294	119.8	120.3759	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.11984	119.8	120.3759	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.4293	119.8	120.3759	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.37817	119.8	120.3759	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	120.2452	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	120.2452	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	120.2452	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	120.2452	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	120.2452	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03241	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04009	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10715	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06901	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04701	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11187	78.8	119.6138	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.54369	89.5	119.0542	'MULLERGREN (MULGREN6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'HARPER - MILAN TAP 138KV CKT 1'	FROM->TO	0.03534	87.8	119.0515	'BASE CASE'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.25294	119.8	118.9569	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.11984	119.8	118.9569	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.4293	119.8	118.9569	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.37817	119.8	118.9569	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04179	84.7	118.8406	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	1	79.1	118.8369	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G06_038N010	'BELDEN 7 115.00 - HOSKINS 7 115.00 115KV CKT 1'	FROM->TO	0.6286	113	118.6903	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.17265	119.8	118.6678	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.45884	119.8	118.6678	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.34369	119.8	118.6678	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G09_008	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03432	84.7	118.6116	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03818	103	118.4932	'FLATRDG3 138.00 - FLATRDW3 138.00 138KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03818	103	118.4932	'FLATRDW3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04466	103	118.4932	'FLATRDG3 138.00 - FLATRDW3 138.00 138KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04466	103	118.4932	'FLATRDW3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03451	103	118.4932	'FLATRDG3 138.00 - FLATRDW3 138.00 138KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03451	103	118.4932	'FLATRDW3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03758	103	118.4932	'FLATRDG3 138.00 - FLATRDW3 138.00 138KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03758	103	118.4932	'FLATRDW3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G06_038N010	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.04277	112.9	118.4783	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	-0.22914	112.9	118.4783	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G07_011N05	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.1036	112.9	118.4783	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.40313	112.9	118.4783	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.54977	112.9	118.4783	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.17265	119.8	118.2505	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.45884	119.8	118.2505	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.34369	119.8	118.2505	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G06_038N010	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.04277	112.9	118.2126	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	-0.22914	112.9	118.2126	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G07_011N05	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.1036	112.9	118.2126	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.40313	112.9	118.2126	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETERSBG7 115.00 115KV CKT 1'	FROM->TO	0.54977	112.9	118.2126	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_068	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.05136	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.10918	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.11414	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.04558	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.07981	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.07981	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.07981	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.13598	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.08917	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.17453	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.25473	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.47692	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.16226	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.13156	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_040	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	-0.0302	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.13156	354	118.1919	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G07_011N05	'MISSION7 115.00 - ST.FRANC 115.00 115KV CKT 1'	TO->FROM	0.45711	79.8	118.1612	'AINSWRT7 115.00 - STUART 7 115.00 115KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.17265	119.8	118.0835	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.45884	119.8	118.0835	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.34369	119.8	118.0835	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G06_038N010	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'	FROM->TO	0.6286	113	118.0585	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'
10G	G08_086N	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'	FROM->TO	0.04503	113	118.0585	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'
10G	G08_086N01	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'	FROM->TO	0.03184	113	118.0585	'BELDEN 7 115.00 - TWIN CH7 115.00 115KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	117.9331	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.17265	119.8	117.6662	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.45884	119.8	117.6662	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.34369	119.8	117.6662	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.08206	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.08239	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.11048	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07757	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07757	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07757	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.08095	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.14207	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.17548	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.26303	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.1785	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.19727	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.08379	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.08379	317.4	117.5891	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.05866	119.8	117.3451	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.05076	119.8	117.3451	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.23824	119.8	117.3451	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.23824	119.8	117.3451	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	116.8942	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	116.8942	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	116.8942	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	116.8942	'HARPER - MILAN TAP 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	116.8942	'HARPER - MILAN TAP 138KV CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	116.7798	'SPP-MKEC-05'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	116.7798	'SPP-WERE-34'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	116.7798	'SPP-WERE-34a'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	116.7798	'SPP-MKEC-05'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	116.7798	'SPP-WERE-34'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	116.7798	'SPP-WERE-34a'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	116.7798	'SPP-MKEC-05'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	116.7798	'SPP-WERE-34'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	116.7798	'SPP-WERE-34a'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	116.7798	'SPP-MKEC-05'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	116.7798	'SPP-WERE-34'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	116.7798	'SPP-WERE-34a'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	116.7798	'SPP-MKEC-05'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	116.7798	'SPP-WERE-34'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	116.7798	'SPP-WERE-34a'
10G	G09_009	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.04128	79.6	116.7626	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_020	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.0427	79.6	116.7626	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03086	87.4	116.6264	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06556	87.4	116.6264	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04179	87.4	116.6264	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03446	87.4	116.6264	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07045	87.4	116.6264	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03718	78.8	116.5498	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1039	78.8	116.5498	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06618	78.8	116.5498	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04069	78.8	116.5498	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10704	78.8	116.5498	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G09_010	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.0334	95.6	116.5063	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	116.2949	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G06_038N010	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'	FROM->TO	0.04277	112.9	116.0868	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'	FROM->TO	-0.22914	112.9	116.0868	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G07_011N05	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'	FROM->TO	0.1036	112.9	116.0868	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'	FROM->TO	0.40313	112.9	116.0868	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETR SBG7 115.00 115KV CKT 1'	FROM->TO	0.54977	112.9	116.0868	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_009	'MULLERGRE - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	115.8118	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'
10G	G08_080	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.15963	129.2	115.7212	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.20156	129.2	115.7212	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03263	84.7	115.6898	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03616	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04533	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11776	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07992	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05016	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.12181	78.8	115.6835	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'	FROM->TO	1	89.6	115.6825	'MULLERGRE - PIONTP 3 115.00 115KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.05266	95.6	115.578	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G07_011N05	'MISSION7 115.00 - ST.FRANC 115.00 115KV CKT 1'	TO->FROM	0.45711	79.8	115.279	'ATKINSN7 115.00 - STUART 7 115.00 115KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.08237	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.0827	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.11079	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07788	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07788	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07788	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.08126	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.14238	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.17579	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.26334	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.17881	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.19758	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.0841	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.0841	317.4	115.1142	'FINNEY SWITCHING STATION - STEVENS CO 345.00 345KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07129	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07299	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.1243	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.06099	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.06099	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.06099	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.07432	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.15388	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.17877	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.26831	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.18237	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.19723	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.09183	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGRE 230KV CKT 1'	TO->FROM	0.09183	317.4	114.9278	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.10507	95.6	114.9139	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.6114	317.6	114.8586	'BASE CASE'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04546	317.6	114.8586	'BASE CASE'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04561	317.6	114.8586	'BASE CASE'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.18703	317.6	114.8586	'BASE CASE'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	114.8586	'BASE CASE'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	114.8586	'BASE CASE'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04509	317.6	114.8586	'BASE CASE'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.04977	317.6	114.8586	'BASE CASE'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16114	317.6	114.8586	'BASE CASE'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05612	317.6	114.8586	'BASE CASE'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07073	317.6	114.8586	'BASE CASE'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06331	317.6	114.8586	'BASE CASE'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05891	317.6	114.8586	'BASE CASE'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	114.8586	'BASE CASE'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07378	317.6	114.8586	'BASE CASE'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	51.7	114.6743	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	51.7	114.6743	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N023	'CANADAY4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.03877	99.5	114.5448	'C.CREEK4 230.00 - RIVERDL4 230.00 230KV CKT 1'
10G	G07_011N05	'CANADAY4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.03235	99.5	114.5448	'C.CREEK4 230.00 - RIVERDL4 230.00 230KV CKT 1'
10G	G08_080	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.06948	129.1	114.4601	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.08254	129.1	114.4601	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03008	84.7	114.4142	'CIRCLE - MULLERGRE 230KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_080	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.15963	129.2	114.4054	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.20156	129.2	114.4054	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04494	84.7	114.3278	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03058	84.7	114.0517	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.10507	95.6	113.9725	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03263	83.8	113.7995	'SPP-MKEC-08'
10G	G09_009	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.06795	83.8	113.7995	'SPP-MKEC-08'
10G	G09_010	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.04132	83.8	113.7995	'SPP-MKEC-08'
10G	G09_015	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.03058	83.8	113.7995	'SPP-MKEC-08'
10G	G09_020	'HUNTSVILLE - ST_JOHN 115KV CKT 1'	TO->FROM	0.07258	83.8	113.7995	'SPP-MKEC-08'
10G	G07_011N05	'MISSION7 115.00 - ST.FRANC 115.00 115KV CKT 1'	TO->FROM	0.45711	79.8	113.6499	'ATKINSN7 115.00 - EMMET 7 115.00 115KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04591	95.6	113.3607	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04536	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05796	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13481	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10566	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06728	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.14107	78.6	113.3576	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	52.4	113.3332	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04806	52.4	113.3332	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.17265	119.8	113.1586	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.45884	119.8	113.1586	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.34369	119.8	113.1586	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.70762	79.1	113.0999	'LOUPCTY7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03086	84.7	112.9806	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.17265	119.8	112.7413	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.45884	119.8	112.7413	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.34369	119.8	112.7413	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G07_011N05	'MISSION7 115.00 - ST.FRANC 115.00 115KV CKT 1'	TO->FROM	0.45711	79.8	112.6474	'EMMET 7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.15963	128.3	112.6358	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.20156	128.3	112.6358	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_029	'BROOKST5 161.00 - CRESTON5 161.00 161KV CKT 1'	FROM->TO	0.03041	125.1	112.5683	'MARYVILLE - WFARMS 161.00 161KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.61139	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0614	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06183	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.21151	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0597	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0597	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0597	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06588	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19266	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09525	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.12926	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10273	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.10227	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0919	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0919	317.9	112.4555	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'CLIFTON - GREENLEAF 115KV CKT 1'	FROM->TO	0.09619	88.8	112.4195	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G09_009	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	112.3481	'RUSSELL - WALDO 115KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04676	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05936	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13621	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10707	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06868	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.14247	79.4	112.3451	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'RUSSELL - WALDO 115KV CKT 1'	FROM->TO	1	89.6	112.2227	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'
10G	G09_015	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03381	95.6	112.0652	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.25998	177.3	112.0271	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G08_081	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.33195	177.3	112.0271	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.06619	119.8	111.9813	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.11938	119.8	111.9813	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.04366	119.8	111.9813	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.20327	119.8	111.9813	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.17895	119.8	111.9813	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	111.9743	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	111.9743	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	111.9743	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	111.9743	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	111.9743	'CLEARWATER - MILAN TAP 138KV CKT 1'
10G	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03446	84.7	111.9022	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07033	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_081	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.07239	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_089	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.10675	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_117	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06138	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_118	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06138	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_119	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06138	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06838	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_008	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.1398	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_009	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.18764	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_010	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.26635	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_015	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.17734	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_020	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.20787	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_026	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0776	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G09_043	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0776	317.4	111.63	'HUNTSVILLE - ST_JOHN 115KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.06619	119.8	111.397	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.11938	119.8	111.397	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.04366	119.8	111.397	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.20327	119.8	111.397	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.17895	119.8	111.397	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.15963	128.3	111.2328	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.20156	128.3	111.2328	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_119	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	111.1962	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03534	101.1	111.111	'BASE CASE'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.04182	101.1	111.111	'BASE CASE'
10G	G09_009	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03168	101.1	111.111	'BASE CASE'
10G	G09_020	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.03474	101.1	111.111	'BASE CASE'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.69333	89.5	110.9492	'PIONTP 3 115.00 - ROLLHLS3 115.00 115KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.06288	119.8	110.8984	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.08741	119.8	110.8984	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.22625	119.8	110.8984	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.17107	119.8	110.8984	'CLRWATR7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	51.7	110.8859	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	51.7	110.8859	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.69333	89.5	110.8374	'EAST HALL TAP - ROLLHLS3 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04256	53.1	110.8256	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04256	53.1	110.8256	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04902	53.1	110.8256	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04902	53.1	110.8256	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03601	53.1	110.8256	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03601	53.1	110.8256	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03994	53.1	110.8256	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03994	53.1	110.8256	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.06288	119.8	110.648	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.08741	119.8	110.648	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.22625	119.8	110.648	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.17107	119.8	110.648	'CLRWATR7 115.00 - ONEILL 7 115.00 115KV CKT 1'
10G	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03045	84.7	110.6139	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03899	53.1	110.6037	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03899	53.1	110.6037	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04547	53.1	110.6037	'FLATRWD3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04547	53.1	110.6037	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03532	53.1	110.6037	'FLATRWD3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03532	53.1	110.6037	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03839	53.1	110.6037	'FLATRWD3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03839	53.1	110.6037	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'FLATRWDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.08718	103	110.5995	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_081	'FLATRWDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.10791	103	110.5995	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G09_009	'FLATRWDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03409	103	110.5995	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03781	103	110.5995	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.7	110.4704	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.7	110.4704	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04879	52.7	110.4704	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04879	52.7	110.4704	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03578	52.7	110.4704	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03578	52.7	110.4704	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03971	52.7	110.4704	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03971	52.7	110.4704	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04256	53.3	110.4097	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04256	53.3	110.4097	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04902	53.3	110.4097	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04902	53.3	110.4097	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03601	53.3	110.4097	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03601	53.3	110.4097	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03994	53.3	110.4097	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03994	53.3	110.4097	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.36845	112.9	110.3716	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.07929	112.9	110.3716	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.26916	112.9	110.3716	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.36886	112.9	110.3716	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G09_003O	'NC SYRAB 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.5081	43	110.3442	'STERLING7 115.00 115/69KV TRANSFORMER CKT 1'
10G	G09_003O	'NC SYRAB 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.5081	43	110.3442	'FIRTH 7 115.00 - STERLING7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.36845	112.9	110.1945	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.07929	112.9	110.1945	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.26916	112.9	110.1945	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.36886	112.9	110.1945	'BATTLER7 115.00 - CO.LINE7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03899	53.3	110.1887	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03899	53.3	110.1887	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04547	53.3	110.1887	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04547	53.3	110.1887	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03532	53.3	110.1887	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03532	53.3	110.1887	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03839	53.3	110.1887	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03839	53.3	110.1887	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	438.5	110.1786	'KCPCL-OPGD06a'
10G	G09_009	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.69333	89.5	110.167	'EAST HALL TAP - ELLSWORTH 115KV CKT 1'
10G	G09_009	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.69333	89.5	110.167	'ELLSWORTH (ELLSWTH3) 115/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_040	'CLIFTON - CONCORDIA 115KV CKT 1'	FROM->TO	0.99851	88.6	110.1178	'BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	FROM->TO	0.04189	79.7	110.1117	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_080	'PRATT - SAWYER 3 115.00 115KV CKT 1'	TO->FROM	0.04189	79.7	110.1117	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'	FROM->TO	0.05198	79.7	110.1117	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G08_081	'PRATT - SAWYER 3 115.00 115KV CKT 1'	TO->FROM	0.05198	79.7	110.1117	'FLATRDG3 138.00 - HARPER 138KV CKT 1'
10G	G09_009	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.04128	79.6	110.1043	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_020	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.0427	79.6	110.1043	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G08_080	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.16109	129.1	110.0621	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G08_081	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'	FROM->TO	0.20302	129.1	110.0621	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.9	110.0527	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04233	52.9	110.0527	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04879	52.9	110.0527	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04879	52.9	110.0527	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03578	52.9	110.0527	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03578	52.9	110.0527	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03971	52.9	110.0527	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03971	52.9	110.0527	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_068	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.07561	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.05845	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.06052	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.08482	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.05003	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.05003	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.05003	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.06085	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_008	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.09494	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.113	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.13455	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.10502	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.12032	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.07105	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'CIRCLE - RENO COUNTY 115KV CKT 2'	FROM->TO	0.07105	190.4	110.0307	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.70762	79.1	109.9393	'GR ISLD7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	439.5	109.9279	'KCPL-OPGD06a'
10G	G08_117	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	109.903	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'SYRACUSE - WILLIAMSON 115KV CKT 1'	FROM->TO	0.06911	96.2	109.903	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.08434	95.6	109.882	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.08718	103	109.8228	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.10791	103	109.8228	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03409	103	109.8228	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03781	103	109.8228	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	109.8003	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	109.8003	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	109.8003	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	109.8003	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	109.8003	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'
10G	G09_009	'MULLERGREEN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.73592	89.5	109.7073	'PHILLIPSBURG - SMITH CENTER 115KV CKT 1'
10G	G06_038N010	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.05714	119.8	109.7026	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.14037	119.8	109.7026	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.10448	119.8	109.7026	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.37526	119.8	109.7026	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.28003	119.8	109.7026	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	52.4	109.5954	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0416	52.4	109.5954	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61577	79.1	109.3262	'N.LOUP 7 115.00 - ORD 7 115.00 115KV CKT 1'
10G	G08_133	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.13598	354.5	109.1633	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N010	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.05714	119.8	109.1183	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.14037	119.8	109.1183	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.10448	119.8	109.1183	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.37526	119.8	109.1183	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.28003	119.8	109.1183	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61577	79.1	108.9469	'ORD 7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.08434	95.6	108.9406	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.99297	317.6	108.8305	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.36845	112.9	108.7773	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.07929	112.9	108.7773	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.26916	112.9	108.7773	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.3686	112.9	108.7773	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	438.5	108.7562	'KCPL-OPGD06a'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03202	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0397	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10677	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06862	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04662	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11148	78.6	108.7212	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	438.5	108.719	'KCPL-OPGD01a'
10G	G09_009	'GREENLEAF - KNOB HILL 115KV CKT 1'	FROM->TO	0.09619	91.1	108.7024	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G09_040	'GREENLEAF - KNOB HILL 115KV CKT 1'	FROM->TO	-0.21158	91.1	108.7024	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G06_038N023	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'	TO->FROM	0.52391	137	108.6672	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_086N01	'COLMBUS7 115.00 - GENOA 7 115.00 115KV CKT 1'	TO->FROM	0.67403	137	108.6672	'G06-44NT 115.00 - NELIGH 7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03886	53.1	108.6519	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04529	53.1	108.6519	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03531	53.1	108.6519	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03835	53.1	108.6519	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_133	'G09-15T 230.00 - MULLERGREEN 230KV CKT 1'	FROM->TO	0.13598	354	108.6395	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03554	89.5	108.6252	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.04543	89.5	108.6252	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.16105	89.5	108.6252	'CIRCLE - MULLERGREEN 230KV CKT 1'
10G	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.08252	89.5	108.6252	'CIRCLE - MULLERGREEN 230KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05182	89.5	108.6252	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.06013	89.5	108.6252	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_119	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	108.5737	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_040	'CLIFTON - CONCORDIA 115KV CKT 1'	FROM->TO	0.99851	88.6	108.5377	'BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	439.5	108.5088	'KCPL-OPGD06a'
10G	G09_029	'MARYVILLE - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.03388	167.8	108.5006	'AECI-7_SIS2 161.00 161/34.5KV TRANSFORMER CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14311	439.5	108.4717	'KCPL-OPGD01a'
10G	G08_068	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	TO->FROM	0.99297	319	108.3528	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61522	79.1	108.2453	'AINSWND7 115.00 - AINSWRT7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03886	53.3	108.2442	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04529	53.3	108.2442	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03531	53.3	108.2442	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03835	53.3	108.2442	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_029	'MARYVILLE - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.03388	167.8	108.2026	'MARYVL 161.00 - AECI-7_SIS2 161.00 161KV CKT 1'
10G	G09_015	'ST JOHN - ST JOHN 115KV CKT 1'	FROM->TO	0.03131	84.7	107.9744	'NINNESCS3 115.00 - PRATT 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03988	53.1	107.9379	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04637	53.1	107.9379	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03643	53.1	107.9379	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03	53.1	107.9379	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03955	53.1	107.9379	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03988	53.3	107.5328	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04637	53.3	107.5328	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03643	53.3	107.5328	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03	53.3	107.5328	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03955	53.3	107.5328	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.22441	119.8	107.4057	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.1048	119.8	107.4057	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.39246	119.8	107.4057	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.31093	119.8	107.4057	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04123	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04775	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04108	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0373	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03133	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04479	53.3	107.3735	'CIRCLE - MULLERGREN 230KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0444	52.7	107.3255	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0506	52.7	107.3255	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03753	52.7	107.3255	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03099	52.7	107.3255	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04146	52.7	107.3255	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	438.5	107.2967	'KCPL-OPGD01a'
10G	G08_117	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	107.2683	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'FLETCHER - WILLIAMSON 115KV CKT 1'	TO->FROM	0.06911	95.3	107.2683	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.25998	177.3	107.2329	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G08_081	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.33195	177.3	107.2329	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12232	439.5	107.0526	'KCPL-OPGD01a'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03882	52.7	106.9482	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03882	52.7	106.9482	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0453	52.7	106.9482	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0453	52.7	106.9482	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.7	106.9482	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.7	106.9482	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03822	52.7	106.9482	'FLATRDG3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03822	52.7	106.9482	'FLATRDG3 138.00 - FLATRDG3 138.00 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0444	52.9	106.9197	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0506	52.9	106.9197	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03753	52.9	106.9197	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03099	52.9	106.9197	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04146	52.9	106.9197	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61568	79.1	106.9128	'STEGALL3 345.00 - STEGALTY 345.00 345KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61568	79.1	106.9128	'NEB01Wapa.B3'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61568	79.1	106.9128	'STEGALTY 345.00 345/230KV TRANSFORMER CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61568	79.1	106.9128	'STEGALL4 230.00 - STGXFMR4 230.00 230KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03895	53.1	106.8485	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0454	53.1	106.8485	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03538	53.1	106.8485	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03843	53.1	106.8485	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_009	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.04128	79.6	106.8379	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_020	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.0427	79.6	106.8379	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G06_038N023	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.22441	119.8	106.8214	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.1048	119.8	106.8214	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.39246	119.8	106.8214	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.31093	119.8	106.8214	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G09_040	'BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SMITTYVILLE N.M. COOP (NEMAHA MARSHALL R.E. 115KV CKT 1'	TO->FROM	0.99851	91.4	106.7444	'CLIFTON - CONCORDIA 115KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.63142	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05918	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06004	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.22403	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05204	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05204	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05204	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06709	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19495	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07529	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.09398	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0862	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07731	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.1045	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.1045	317.9	106.5879	'AXTELL 3 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03882	52.9	106.5439	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03882	52.9	106.5439	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0453	52.9	106.5439	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0453	52.9	106.5439	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.9	106.5439	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.9	106.5439	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03822	52.9	106.5439	'FLATRWD3 138.00 (FLATRDG3) 138/34.5/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03822	52.9	106.5439	'FLATRDG3 138.00 - FLATRWD3 138.00 138KV CKT 1'
10G	G06_038N023	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.14228	119.8	106.3581	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G07_011N05	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.10424	119.8	106.3581	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.37769	119.8	106.3581	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N01	'CO.LINE7 115.00 - NELIGH 7 115.00 115KV CKT 1'	TO->FROM	0.28239	119.8	106.3581	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_080	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.06948	129.2	106.322	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.08254	129.2	106.322	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MULLERGREY - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	106.3146	'COVERT 3 115.00 - WALDO 115KV CKT 1'
10G	G09_009	'MULLERGREY - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	106.2028	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'
10G	G09_009	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.04277	79.6	106.0955	'SPP-MKEC-09B'
10G	G09_010	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.03133	79.6	106.0955	'SPP-MKEC-09B'
10G	G09_020	'NINNES3 115.00 - PRATT 115KV CKT 1'	FROM->TO	0.04419	79.6	106.0955	'SPP-MKEC-09B'
10G	G09_029	'BROOKST5 161.00 - CLRNDA 5 161.00 161KV CKT 1'	TO->FROM	0.03041	147.9	106.0331	'MARYVILLE - WFARMS 161.00 161KV CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'	FROM->TO	-0.26577	112.9	105.978	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'	FROM->TO	0.02268	112.9	105.978	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'	FROM->TO	0.30402	112.9	105.978	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETRSBG7 115.00 115KV CKT 1'	FROM->TO	0.47614	112.9	105.978	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G06_038N023	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.03105	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G07_011N05	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.03317	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	-0.37269	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.08022	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.08118	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.21635	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.07551	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.07551	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.07551	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.09147	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.1902	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.07984	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.09923	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.1021	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_020	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.08653	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.11973	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'KNOLL 230 - SMOKYHLLS6 230.00 230KV CKT 1'	FROM->TO	0.11973	318.7	105.7895	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'BATTLCLR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.14228	119.8	105.7738	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLCLR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.10424	119.8	105.7738	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLCLR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.37769	119.8	105.7738	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLCLR7 115.00 - CO.LINE7 115.00 115KV CKT 1'	TO->FROM	0.28239	119.8	105.7738	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G09_040	'BAILEYVILLE N.M. STATION (NEMAHA MARSHALL R - SOUTH SENECA 115KV CKT 1'	FROM->TO	0.99851	91.4	105.2127	'CLIFTON - CONCORDIA 115KV CKT 1'
10G	G08_068	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	-0.04314	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G08_089	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	-0.11548	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_008	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.35152	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_009	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.07509	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_010	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.1557	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_015	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.08416	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G09_020	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.10649	87.7	105.126	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05104	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05063	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05027	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.04586	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0509	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05039	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05076	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05995	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06289	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.10247	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07555	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03133	438.5	105.0968	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_080	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.25998	177.3	104.9769	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G08_081	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'	FROM->TO	0.33195	177.3	104.9769	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0806	79.4	104.9512	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04929	79.4	104.9512	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03294	79.4	104.9512	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.08438	79.4	104.9512	'NINNES3 115.00 - ST JOHN 115KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05104	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05063	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05027	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.04586	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0509	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05039	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05076	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05995	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06289	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.10247	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07555	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03133	439.5	104.8577	'HAWTHORN - PAOLA 345KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.61058	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05757	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05767	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19318	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06398	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.1671	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05948	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0761	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07345	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06489	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08739	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08739	317.9	104.6429	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.61058	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05757	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05767	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19318	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05627	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06398	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.1671	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.05948	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.0761	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07345	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06489	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08739	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08739	317.9	104.6114	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0387	52.7	104.5745	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04513	52.7	104.5745	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.7	104.5745	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	52.7	104.5745	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_008	'HAYS PLANT - VINE STREET 115KV CKT 1'	FROM->TO	0.35152	87.7	104.5656	'KNOLL 230 - S HAYS6 230.00 230KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0502	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05695	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03114	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04281	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0377	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0381	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04719	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03298	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03298	53.4	104.5026	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03202	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0397	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10677	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06862	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04662	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11148	78.6	104.3955	'GREENSBURG - SUN CITY 115KV CKT 1'
10G	G09_029	'SMARYVL 161.00 - CRESTON5 161.00 161KV CKT 1'	FROM->TO	0.03204	220.7	104.3552	'CLRND4 5 161.00 - WFARMS 161.00 161KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0502	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05695	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03114	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04281	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0377	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0381	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04719	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03298	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03298	53.6	104.2992	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.03506	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G07_011N05	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.04293	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.54386	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_081	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.48151	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_117	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_119	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_133	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.08899	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_020	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07708	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_026	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.03291	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_043	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.03291	335.9	104.2964	'HOLCOMB - SETAB 345KV CKT 1'
10G	G06_038N023	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.03506	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G07_011N05	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.04293	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_080	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.54386	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_081	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.48151	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_117	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_118	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_119	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.24001	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G08_133	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.08899	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_020	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07708	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_026	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.03291	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G09_043	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	-0.03291	336	104.2653	'HOLCOMB - SETAB 345KV CKT 1'
10G	G06_038N010	'BATTLCR7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.05714	119.8	104.1934	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.14037	119.8	104.1934	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.10448	119.8	104.1934	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.37526	119.8	104.1934	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.28003	119.8	104.1934	'BELDEN 7 115.00 - HOSKINS7 115.00 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.0387	52.9	104.1791	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04513	52.9	104.1791	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03515	52.9	104.1791	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03818	52.9	104.1791	'COWSKIN - EVANS ENERGY CENTER SOUTH 138KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.69333	83.8	104.0567	'BASE CASE'
10G	G08_080	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06371	317.4	103.9626	'BASE CASE'
10G	G08_081	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06496	317.4	103.9626	'BASE CASE'
10G	G08_089	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.102	317.4	103.9626	'BASE CASE'
10G	G08_117	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0577	317.4	103.9626	'BASE CASE'
10G	G08_118	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0577	317.4	103.9626	'BASE CASE'
10G	G08_119	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0577	317.4	103.9626	'BASE CASE'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.06446	317.4	103.9626	'BASE CASE'
10G	G09_008	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.1336	317.4	103.9626	'BASE CASE'
10G	G09_009	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.16774	317.4	103.9626	'BASE CASE'
10G	G09_010	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.25471	317.4	103.9626	'BASE CASE'
10G	G09_015	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.169	317.4	103.9626	'BASE CASE'
10G	G09_020	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.18669	317.4	103.9626	'BASE CASE'
10G	G09_026	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0735	317.4	103.9626	'BASE CASE'
10G	G09_043	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.0735	317.4	103.9626	'BASE CASE'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0383	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04641	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.117	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07702	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05348	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1217	78.6	103.8922	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.7259	89.5	103.7412	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G09_040	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	0.07998	89.5	103.7412	'EAST MANHATTAN - ELMCREK6 230.00 230KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.70762	79.1	103.717	'LOUPCTY7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	-0.06784	79.1	103.717	'LOUPCTY7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	-0.11235	79.1	103.717	'LOUPCTY7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G09_008	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.0727	88	103.6818	'KNOLL 230 230/115KV TRANSFORMER CKT 1'
10G	G08_081	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03263	87.4	103.6201	'SPP-MKEC-08'
10G	G09_009	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.06795	87.4	103.6201	'SPP-MKEC-08'
10G	G09_010	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.04132	87.4	103.6201	'SPP-MKEC-08'
10G	G09_015	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.03058	87.4	103.6201	'SPP-MKEC-08'
10G	G09_020	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'	FROM->TO	0.07258	87.4	103.6201	'SPP-MKEC-08'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03088	78.8	103.4515	'BASE CASE'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03905	78.8	103.4515	'BASE CASE'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11113	78.8	103.4515	'BASE CASE'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06982	78.8	103.4515	'BASE CASE'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04342	78.8	103.4515	'BASE CASE'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11474	78.8	103.4515	'BASE CASE'
10G	G08_133	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.12057	354.5	103.3162	'G09-026T 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04522	95.6	103.2157	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_133	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.12057	354.5	103.1752	'G09-026T 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.06948	128.3	103.1707	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE - SUN CITY 115KV CKT 1'	TO->FROM	0.08254	128.3	103.1707	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04522	95.6	103.1111	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G06_038N010	'G06-44NT 115.00 - PETRSG7 115.00 115KV CKT 1'	FROM->TO	0.04401	112.9	102.9786	'PETRSG7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G06_038N023	'G06-44NT 115.00 - PETRSG7 115.00 115KV CKT 1'	FROM->TO	-0.28531	112.9	102.9786	'PETRSG7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G07_011N05	'G06-44NT 115.00 - PETRSG7 115.00 115KV CKT 1'	FROM->TO	0.06254	112.9	102.9786	'PETRSG7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G08_086N	'G06-44NT 115.00 - PETRSG7 115.00 115KV CKT 1'	FROM->TO	0.25376	112.9	102.9786	'PETRSG7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G08_086N01	'G06-44NT 115.00 - PETRSG7 115.00 115KV CKT 1'	FROM->TO	0.43814	112.9	102.9786	'PETRSG7 115.00 115/34.5KV TRANSFORMER CKT 1'
10G	G08_133	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'	FROM->TO	0.12057	354	102.7842	'G09-026T 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03879	52.7	102.7494	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04523	52.7	102.7494	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03521	52.7	102.7494	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03826	52.7	102.7494	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03202	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0397	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10677	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06862	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04662	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11148	78.6	102.7416	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
10G	G09_0030	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.5081	50.9	102.6483	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'
10G	G09_0030	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.5081	50.9	102.6483	'FIRTH 7 115.00 - STERLNG7 115.00 115KV CKT 1'
10G	G08_133	'G09-15T 230.00 - MULLERGREEN 230KV CKT 1'	FROM->TO	0.12057	354	102.6429	'G09-026T 345.00 - KNOLL345 345.00 345KV CKT 1'
10G	G09_010	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.0334	101.1	102.5519	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03227	78.6	102.5357	'SPP-MKEC-09B'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03995	78.6	102.5357	'SPP-MKEC-09B'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10701	78.6	102.5357	'SPP-MKEC-09B'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06887	78.6	102.5357	'SPP-MKEC-09B'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04687	78.6	102.5357	'SPP-MKEC-09B'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11173	78.6	102.5357	'SPP-MKEC-09B'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04182	95.6	102.5107	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03879	52.9	102.361	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04523	52.9	102.361	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03521	52.9	102.361	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03826	52.9	102.361	'EVANS ENERGY CENTER SOUTH - LAKERIDGE 138KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05017	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05692	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03111	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04278	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03767	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03808	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04716	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03295	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03295	53.3	102.2833	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.05136	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.10918	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.11414	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.04558	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.07981	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.07981	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.07981	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.13598	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.08917	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.17453	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.25473	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.52308	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.16226	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.13156	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_040	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	-0.0302	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'G09-15T 230.00 - SPEARVILLE 230KV CKT 1'	TO->FROM	0.13156	354.5	102.2215	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07834	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06702	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06805	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.10466	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07544	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.11962	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12019	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.17809	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.13579	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.13057	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.08794	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.08794	306.7	102.1864	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_068	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07834	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06702	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06805	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_089	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.10466	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_118	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06182	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.07544	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_008	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.11962	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12019	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.17809	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.13579	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.13057	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.08794	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'CIRCLE (CIRCLE1X) 230/115/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.08794	306.9	102.185	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.08789	103	102.0896	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.10862	103	102.0896	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.0348	103	102.0896	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03852	103	102.0896	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06419	438.7	101.9469	'KCPL-OPGD06a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06394	438.7	101.9469	'KCPL-OPGD06a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06297	438.7	101.9469	'KCPL-OPGD06a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05766	438.7	101.9469	'KCPL-OPGD06a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06438	438.7	101.9469	'KCPL-OPGD06a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06344	438.7	101.9469	'KCPL-OPGD06a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06381	438.7	101.9469	'KCPL-OPGD06a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07436	438.7	101.9469	'KCPL-OPGD06a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07527	438.7	101.9469	'KCPL-OPGD06a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.1238	438.7	101.9469	'KCPL-OPGD06a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14459	438.7	101.9469	'KCPL-OPGD06a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03572	438.7	101.9469	'KCPL-OPGD06a'
10G	G08_080	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.16109	129.2	101.9274	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G08_081	'GREENSBURG - SUN CITY 115KV CKT 1'	FROM->TO	0.20302	129.2	101.9274	'JUDSON LARGE - NORTH JUDSON LARGE SUB 115KV CKT 1'
10G	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05017	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05692	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03111	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04278	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03767	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03808	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04716	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03295	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03295	53.5	101.9009	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.22441	119.8	101.813	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.1048	119.8	101.813	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.39246	119.8	101.813	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.31093	119.8	101.813	'N.LOUP 7 115.00 - SPALDNG7 115.00 115KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06419	439.5	101.7613	'KCPL-OPGD06a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06394	439.5	101.7613	'KCPL-OPGD06a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06297	439.5	101.7613	'KCPL-OPGD06a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05766	439.5	101.7613	'KCPL-OPGD06a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06438	439.5	101.7613	'KCPL-OPGD06a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06344	439.5	101.7613	'KCPL-OPGD06a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06381	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07436	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07527	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.1238	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14459	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03572	439.5	101.7613	'KCPL-OPGD06a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	438.5	101.7173	'KCPL-OPGD06a'
10G	G06_038N023	'CANADAY4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.03877	99.5	101.6854	'C.CREEK4 230.00 - RIVERDL4 230.00 230KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.05266	101.1	101.6742	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.04182	95.6	101.5692	'MILAN 4 - MILAN TAP 138KV CKT 1'
10G	G08_080	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.09693	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_080	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.09693	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_081	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12761	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_081	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12761	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.46646	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.46646	333.3	101.5073	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	439.5	101.4859	'KCPL-OPGD06a'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03876	95.6	101.2561	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03876	95.6	101.1515	'MED-LDG5 345.00 - WICHITA 345KV CKT 1'
10G	G08_080	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.0416	103	101.1068	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G08_081	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.04806	103	101.1068	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_009	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03505	103	101.1068	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_020	'FLATRDG3 138.00 - MEDICINE LODGE 138KV CKT 1'	TO->FROM	0.03898	103	101.1068	'COMANCH5 345.00 - MED-LDG5 345.00 345KV CKT 1'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	438.5	101.0983	'KCPL-OPGD06a'
10G	G08_080	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.03881	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_081	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.03297	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_117	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05252	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_118	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05252	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_119	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05252	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G08_133	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.04762	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.03498	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_010	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.04294	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_020	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.18595	96.9	101.0927	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.54369	89.5	101.0897	'MULLERGREN (MULGREN6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.04672	89.5	101.0897	'MULLERGREN (MULGREN6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.10507	101.1	101.0462	'NORTH JUDSON LARGE SUB - SPEARVILLE 115KV CKT 1'
10G	G08_080	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.09693	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_080	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.09693	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_081	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12761	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G08_081	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12761	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.46646	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G09_015	'SPEARVILLE (SPEARVL2) 345/230/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.46646	334.9	101.0223	'G09-15T 230.00 - MULLERGREN 230KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.61577	79.1	100.9823	'BASE CASE'
10G	G06_038N009	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03304	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G06_038N010	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03345	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G06_038N023	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03179	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G08_030N	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03388	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G08_086N	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03274	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G08_086N01	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03272	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G09_003O	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.03659	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G09_003O1	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.04023	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G09_012	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.05781	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G09_029	'ALABAMA - LAKE ROAD 161KV CKT 1'	TO->FROM	0.15814	195.8	100.8767	'PAOLA - ST JOE 345KV CKT 1'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03424	439.5	100.8682	'KCPL-OPGD06a'
10G	G06_038N023	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.34209	112.9	100.8574	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G07_011N05	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.0572	112.9	100.8574	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.19791	112.9	100.8574	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - GENOA 7 115.00 115KV CKT 1'	FROM->TO	0.31565	112.9	100.8574	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'
10G	G06_038N023	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.14228	119.8	100.8489	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G07_011N05	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.10424	119.8	100.8489	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.37769	119.8	100.8489	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G08_086N01	'BATTLER7 115.00 - NORFK.N7 115.00 115KV CKT 1'	FROM->TO	0.28239	119.8	100.8489	'GAVINS 7 115.00 - YANKTON7 115.00 115KV CKT 1'
10G	G09_029	'BROOKST5 161.00 - CRESTON5 161.00 161KV CKT 1'	FROM->TO	0.03041	125.1	100.8177	'SMARYVL 161.00 - MARYVILLE 161KV CKT 1'
10G	G08_080	'CLEARWATER - MILAN TAP 138KV CKT 1'	TO->FROM	0.03534	95.6	100.6561	'HARPER (HARPER 4) 138/34.5/8.66KV TRANSFORMER CKT 1'
10G	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	TO->FROM	0.03227	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03995	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10701	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06887	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04687	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11173	78.6	100.6527	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
10G	G08_133	'CIRCLE - MULLERGREN 230KV CKT 1'	TO->FROM	0.11281	317.4	100.6137	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
10G	G09_003O	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'	TO->FROM	0.69144	55.8	100.5649	'ENRONTAP'
10G	G09_003O	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'	TO->FROM	0.69144	55.8	100.5649	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'
10G	G06_038N023	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	0.70762	79.1	100.5564	'GR ISLD7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G08_086N	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	-0.06784	79.1	100.5564	'GR ISLD7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G08_086N01	'ALBION 7 115.00 - SPALDNG7 115.00 115KV CKT 1'	TO->FROM	-0.11235	79.1	100.5564	'GR ISLD7 115.00 - ST.LIB 7 115.00 115KV CKT 1'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06419	438.7	100.488	'KCPL-OPGD01a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06394	438.7	100.488	'KCPL-OPGD01a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06297	438.7	100.488	'KCPL-OPGD01a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05766	438.7	100.488	'KCPL-OPGD01a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06438	438.7	100.488	'KCPL-OPGD01a'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06344	438.7	100.488	'KCPL-OPGD01a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06381	438.7	100.488	'KCPL-OPGD01a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07436	438.7	100.488	'KCPL-OPGD01a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07527	438.7	100.488	'KCPL-OPGD01a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.1238	438.7	100.488	'KCPL-OPGD01a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14459	438.7	100.488	'KCPL-OPGD01a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03572	438.7	100.488	'KCPL-OPGD01a'
10G	G06_038N010	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	-0.06905	119.8	100.441	'BASE CASE'
10G	G06_038N023	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.06932	119.8	100.441	'BASE CASE'
10G	G07_011N05	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.036	119.8	100.441	'BASE CASE'
10G	G08_086N	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.17834	119.8	100.441	'BASE CASE'
10G	G08_086N01	'BLMFLD 7 115.00 - GAVINS 7 115.00 115KV CKT 1'	FROM->TO	0.13483	119.8	100.441	'BASE CASE'
10G	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06419	439.5	100.3051	'KCPL-OPGD01a'
10G	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06394	439.5	100.3051	'KCPL-OPGD01a'
10G	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06297	439.5	100.3051	'KCPL-OPGD01a'
10G	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05766	439.5	100.3051	'KCPL-OPGD01a'
10G	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06438	439.5	100.3051	'KCPL-OPGD01a'
10G	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06344	439.5	100.3051	'KCPL-OPGD01a'
10G	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06381	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07436	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07527	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.1238	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.14459	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.03572	439.5	100.3051	'KCPL-OPGD01a'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	438.5	100.2578	'KCPL-OPGD01a'
10G	G08_068	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.61782	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_080	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06182	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06124	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_089	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.19553	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_117	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06267	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_118	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06267	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_119	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06267	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_133	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06465	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_008	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.16963	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_009	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06402	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_010	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07911	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_015	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.07262	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_020	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.06908	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_026	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08372	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G09_043	'SMOKYHLLS6 230.00 - SUMMIT 230KV CKT 1'	FROM->TO	0.08372	317.9	100.161	'HITCHLAND 7 345.00 - STEVENS CO 345.00 345KV CKT 1'
10G	G08_081	'CLEARWATER - GILL ENERGY CENTER WEST 138KV CKT 1'	FROM->TO	0.10507	101.1	100.156	'SPEARVILLE (SPEARVL6) 230/115/13.8KV TRANSFORMER CKT 1'
10G	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.07288	439.5	100.0297	'KCPL-OPGD01a'
14SP	G09_009	'COVERT 3 115.00 - WALDO 115KV CKT 1'	TO->FROM	1	59.7	188.4422	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
14SP	G09_009	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'	FROM->TO	1	59.8	188.1271	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.34831	89.6	150.239	'CIMARRON RIVER PLANT - HAYNE 3 115.00 115KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03266	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04036	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10799	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06937	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13888	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04722	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11271	79	145.1516	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04635	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05898	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13601	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10683	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1746	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06835	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.14233	79	144.5327	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.34831	89.6	141.8684	'HAYNE 3 115.00 - NORTH LIBERAL TAP 115KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03274	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04044	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10808	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06945	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13897	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0473	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11279	79	141.1603	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_009	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'	FROM->TO	1	89.4	139.4855	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
14SP	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	139.3296	'PIONTP 3 115.00 - RUSSELL 115KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03266	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04036	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10799	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06937	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13888	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04722	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11271	79	139.0756	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03274	79	137.7223	'SPP-MKEC-09B'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04044	79	137.7223	'SPP-MKEC-09B'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10808	79	137.7223	'SPP-MKEC-09B'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06945	79	137.7223	'SPP-MKEC-09B'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13897	79	137.7223	'SPP-MKEC-09B'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0473	79	137.7223	'SPP-MKEC-09B'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11279	79	137.7223	'SPP-MKEC-09B'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03902	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04711	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11784	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07766	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1507	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.05428	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1226	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_026	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03028	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_043	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03028	79	137.5577	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03266	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04036	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10799	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.06937	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13888	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04722	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11271	79	137.4301	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_009	'RUSSELL - WALDO 115KV CKT 1'	FROM->TO	1	89.5	134.4134	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'
14SP	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	134.4134	'RUSSELL - WALDO 115KV CKT 1'
14SP	G08_080	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.27342	89.6	131.8902	'CIMARRON RIVER PLANT - HAYNE 3 115.00 115KV CKT 1'
14SP	G08_089	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03624	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.04615	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.16181	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.08334	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.21007	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05258	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.05925	89.4	127.6035	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03188	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14051	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05473	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18292	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03632	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.0818	89.4	127.0715	'G01-39AT 115.00 - GREENSBURG 115KV CKT 1'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03757	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10457	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0667	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.13448	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.0412	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10781	79	126.1365	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	125.6983	'COVERT 3 115.00 - WALDO 115KV CKT 1'
14SP	G09_009	'MULLERGREN - PIONTP 3 115.00 115KV CKT 1'	TO->FROM	1	89.5	125.6983	'COVERT 3 115.00 - SMITH CENTER 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.08123	79	124.6986	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04985	79	124.6986	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10506	79	124.6986	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03369	79	124.6986	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.08495	79	124.6986	'MEDICINE LODGE - SAWYER 3 115.00 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.71884	89.4	124.5468	'MULLERGREN (MULGREN6) 230/115/13.8KV TRANSFORMER CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03194	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14057	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05479	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18298	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03638	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.08174	89.4	124.4477	'G01-39AT 115.00 - JUDSON LARGE 115KV CKT 1'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.08123	79	124.3189	'PRATT - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04985	79	124.3189	'PRATT - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.10506	79	124.3189	'PRATT - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03369	79	124.3189	'PRATT - SAWYER 3 115.00 115KV CKT 1'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.08495	79	124.3189	'PRATT - SAWYER 3 115.00 115KV CKT 1'
14SP	G08_080	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.27342	89.6	123.5196	'HAYNE 3 115.00 - NORTH LIBERAL TAP 115KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03188	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14051	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05473	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18292	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03632	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.0818	89.4	123.1565	'GREENSBURG - SUN CITY 115KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03194	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14057	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05479	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18298	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03638	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.08174	89.4	122.2617	'SPP-MKEC-09B'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03188	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14051	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05473	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18292	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03632	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.0818	89.4	122.1498	'MEDICINE LODGE - SUN CITY 115KV CKT 1'
14SP	G08_089	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03016	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.0366	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14755	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.06058	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.19137	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.04118	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.07477	89.4	121.5613	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.34831	89.6	120.7747	'SPP-MKEC-07'
14SP	G09_0030	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.21822	50	119.3152	'S963 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_0030	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.21822	42.6	118.6798	'S963 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G08_089	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03381	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.04358	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14562	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.0808	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18901	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.04807	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.30164	89.4	118.2641	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_0030	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'	TO->FROM	0.08304	54.5	118.2444	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03113	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14313	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05522	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18644	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03376	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.07995	89.4	118.1621	'MULLERGREN - NORTH WEST GREAT BEND 115KV CKT 1'
14SP	G09_0030	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.21822	50	117.9152	'NCU903 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_0030	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'	TO->FROM	0.08304	54.5	117.6939	'ENRONTAP'
14SP	G09_0030	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'	TO->FROM	0.08304	54.5	117.5105	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'
14SP	G06_038N009	'FTRANDL4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.05702	126.1	117.4108	'FTRANDL4 230.00 230/115KV TRANSFORMER CKT 2'
14SP	G09_0030	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.21822	42.6	117.0366	'NCU903 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_0030	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.21822	50.4	115.7889	'S963 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.13795	89.4	114.8897	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05275	89.4	114.8897	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.17962	89.4	114.8897	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03189	89.4	114.8897	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.08545	89.4	114.8897	'CIRCLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.21822	50.4	114.4	'NCU903 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_008	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03113	83.7	113.0668	'BASE CASE'
14SP	G09_009	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14313	83.7	113.0668	'BASE CASE'
14SP	G09_010	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.05522	83.7	113.0668	'BASE CASE'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18644	83.7	113.0668	'BASE CASE'
14SP	G09_015	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.03376	83.7	113.0668	'BASE CASE'
14SP	G09_020	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	-0.07995	83.7	113.0668	'BASE CASE'
14SP	G09_003O	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'	TO->FROM	0.08304	54.5	112.3728	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'
14SP	G08_089	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03117	79	112.3367	'BASE CASE'
14SP	G09_008	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.03933	79	112.3367	'BASE CASE'
14SP	G09_009	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11157	79	112.3367	'BASE CASE'
14SP	G09_010	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.07004	79	112.3367	'BASE CASE'
14SP	G09_014	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.1437	79	112.3367	'BASE CASE'
14SP	G09_015	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.04372	79	112.3367	'BASE CASE'
14SP	G09_020	'SEWARD - ST JOHN 115KV CKT 1'	FROM->TO	0.11524	79	112.3367	'BASE CASE'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.50831	50	111.9296	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.50831	50	111.5296	'FIRTH 7 115.00 - STERLNG7 115.00 115KV CKT 1'
14SP	G06_038N009	'FTRANDL4 230.00 230/115KV TRANSFORMER CKT 2'	FROM->TO	0.05702	133.1	111.2359	'FTRANDL4 230.00 230/115KV TRANSFORMER CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.23343	50	111.1488	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - HAYNE 3 115.00 115KV CKT 1'	FROM->TO	0.30395	115.3	110.6977	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.50831	42.6	110.0113	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.50831	42.6	109.5418	'FIRTH 7 115.00 - STERLNG7 115.00 115KV CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.23343	42.6	109.0948	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'
14SP	G09_003O	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'	TO->FROM	0.08304	54.5	108.8866	'NC SYRA8 69.000 - S971 8 69.000 69KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.39461	89.6	108.8249	'HOLCOMB (HOLCOMB) 345/115/13.8KV TRANSFORMER CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.30379	50	108.6064	'S1263T1 AUTO'
14SP	G06_038N009	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03637	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G06_038N010	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03889	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G06_038N023	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03249	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G07_011N05	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03401	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_030N	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.0395	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_086N	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03666	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_086N01	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03541	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_121O	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03233	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G09_003O1	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03233	367.1	108.469	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.50831	50.4	108.4619	'STERLNG7 115.00 115/69KV TRANSFORMER CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.50831	50.4	108.2635	'FIRTH 7 115.00 - STERLNG7 115.00 115KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.23343	50.4	107.8857	'S963 8 69.000 - W BROCK8 69.000 69KV CKT 1'
14SP	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05359	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_080	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05359	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.06091	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_081	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.06091	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03363	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_133	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03363	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_008	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03145	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_008	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03145	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04612	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_009	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04612	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04054	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_010	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04054	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_013	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.10728	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_013	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.10728	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05665	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05665	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04102	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_015	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.04102	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05077	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_020	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.05077	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03556	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_026	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03556	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03556	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_043	'MEDICINE LODGE (MED-LDG4) 138/115/2.72KV TRANSFORMER CKT 1'	FROM->TO	0.03556	55.9	107.719	'COMANCH5 345.00 - SPEARVILLE 345KV CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.18901	89.4	107.316	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G09_029	'CLRND 5 161.00 - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.06125	167	106.7515	'CBLUFFS3 345.00 345/26.0KV TRANSFORMER CKT 1'
14SP	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05652	438.5	106.6922	'KCPL-OPGD06a'
14SP	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05637	438.5	106.6922	'KCPL-OPGD06a'
14SP	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05553	438.5	106.6922	'KCPL-OPGD06a'
14SP	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0507	438.5	106.6922	'KCPL-OPGD06a'
14SP	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05679	438.5	106.6922	'KCPL-OPGD06a'
14SP	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0559	438.5	106.6922	'KCPL-OPGD06a'
14SP	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05625	438.5	106.6922	'KCPL-OPGD06a'
14SP	G08_121O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	438.5	106.6922	'KCPL-OPGD06a'
14SP	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06581	438.5	106.6922	'KCPL-OPGD06a'
14SP	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	438.5	106.6922	'KCPL-OPGD06a'
14SP	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.11062	438.5	106.6922	'KCPL-OPGD06a'
14SP	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12948	438.5	106.6922	'KCPL-OPGD06a'
14SP	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.04116	438.5	106.6922	'KCPL-OPGD06a'
14SP	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05652	439.5	106.4495	'KCPL-OPGD06a'
14SP	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05637	439.5	106.4495	'KCPL-OPGD06a'
14SP	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05553	439.5	106.4495	'KCPL-OPGD06a'
14SP	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0507	439.5	106.4495	'KCPL-OPGD06a'
14SP	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05679	439.5	106.4495	'KCPL-OPGD06a'
14SP	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0559	439.5	106.4495	'KCPL-OPGD06a'
14SP	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05625	439.5	106.4495	'KCPL-OPGD06a'
14SP	G08_121O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06581	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.11062	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12948	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.04116	439.5	106.4495	'KCPL-OPGD06a'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.30379	42.6	106.1108	'S1263T1 AUTO'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.31317	50	105.7072	'S969 8 69.000 - S974 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.22037	50	105.4592	'S904 8 69.000 - S906 S 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.30379	50.4	105.3635	'S1263T1 AUTO'
14SP	G09_003O	'NC SYRA8 69.000 - S971 8 69.000 69KV CKT 1'	FROM->TO	0.21822	42.9	105.2625	'S963 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G06_038N009	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04299	1199.3	105.0369	'SERCW-21'
14SP	G06_038N010	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04386	1199.3	105.0369	'SERCW-21'
14SP	G06_038N023	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04131	1199.3	105.0369	'SERCW-21'
14SP	G07_011N05	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04158	1199.3	105.0369	'SERCW-21'
14SP	G08_030N	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04406	1199.3	105.0369	'SERCW-21'
14SP	G08_068	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.03023	1199.3	105.0369	'SERCW-21'
14SP	G08_086N	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04299	1199.3	105.0369	'SERCW-21'
14SP	G08_086N01	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04252	1199.3	105.0369	'SERCW-21'
14SP	G08_089	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.03023	1199.3	105.0369	'SERCW-21'
14SP	G08_121O	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04227	1199.3	105.0369	'SERCW-21'
14SP	G09_003O	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04104	1199.3	105.0369	'SERCW-21'
14SP	G09_003O1	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.04227	1199.3	105.0369	'SERCW-21'
14SP	G09_012	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.03964	1199.3	105.0369	'SERCW-21'
14SP	G09_029	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.0385	1199.3	105.0369	'SERCW-21'
14SP	G09_040	'WELLS - WELLS 230KV CKT 1'	TO->FROM	0.03682	1199.3	105.0369	'SERCW-21'
14SP	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05652	438.5	104.8678	'KCPL-OPGD01a'
14SP	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05637	438.5	104.8678	'KCPL-OPGD01a'
14SP	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05553	438.5	104.8678	'KCPL-OPGD01a'
14SP	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0507	438.5	104.8678	'KCPL-OPGD01a'
14SP	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05679	438.5	104.8678	'KCPL-OPGD01a'
14SP	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.0559	438.5	104.8678	'KCPL-OPGD01a'
14SP	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05625	438.5	104.8678	'KCPL-OPGD01a'
14SP	G08_121O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06581	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.06981	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.11062	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.12948	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.04116	438.5	104.8678	'KCPL-OPGD01a'
14SP	G09_029	'CLRND 5 161.00 - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.06125	167	104.8353	'CBLUFFS3 345.00 345/24.0KV TRANSFORMER CKT 1'
14SP	G09_014	'SEWARD 115/69KV TRANSFORMER CKT 1'	FROM->TO	0.04628	42.3	104.7004	'MULLERGREN 230/115KV TRANSFORMER CKT 1'
14SP	G06_038N009	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 11'	FROM->TO	0.05652	439.5	104.6292	'KCPL-OPGD01a'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G06_038N010	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.05637	439.5	104.6292	'KCPL-OPGD01a'
14SP	G06_038N023	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.05553	439.5	104.6292	'KCPL-OPGD01a'
14SP	G07_011N05	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.0507	439.5	104.6292	'KCPL-OPGD01a'
14SP	G08_030N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.05679	439.5	104.6292	'KCPL-OPGD01a'
14SP	G08_086N	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.0559	439.5	104.6292	'KCPL-OPGD01a'
14SP	G08_086N01	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.05625	439.5	104.6292	'KCPL-OPGD01a'
14SP	G08_121O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06981	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_003O	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06581	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_003O1	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.06981	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_012	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.11062	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_029	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.12948	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_040	'PAOLA (NASH 11) 345/161/13.8KV TRANSFORMER CKT 1'	FROM->TO	0.04116	439.5	104.6292	'KCPL-OPGD01a'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.31317	50	104.5072	'S968 8 69.000 - S969 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'	TO->FROM	0.22673	50	104.2768	'S914 8 69.000 - S914A 8 69.000 69KV CKT 1'
14SP	G08_081	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.34831	89.6	104.0336	'EAST LIBERAL - NORTH LIBERAL TAP 115KV CKT 1'
14SP	G08_081	'HAYNE 3 115.00 - NORTH LIBERAL TAP 115KV CKT 1'	FROM->TO	0.30395	115.2	104.023	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S971 8 69.000 69KV CKT 1'	FROM->TO	0.21822	42.9	103.6308	'NCU903 8 69.000 - S977 8 69.000 69KV CKT 1'
14SP	G09_009	'GREAT BEND TAP - MULLERGREN 115KV CKT 1'	TO->FROM	0.54335	119.4	102.7047	'MULLERGREN (MULGRE6) 230/115/13.8KV TRANSFORMER CKT 1'
14SP	G09_014	'GREAT BEND TAP - MULLERGREN 115KV CKT 1'	TO->FROM	0.71884	119.4	102.7047	'MULLERGREN (MULGRE6) 230/115/13.8KV TRANSFORMER CKT 1'
14SP	G09_020	'GREAT BEND TAP - MULLERGREN 115KV CKT 1'	TO->FROM	-0.04628	119.4	102.7047	'MULLERGREN (MULGRE6) 230/115/13.8KV TRANSFORMER CKT 1'
14SP	G08_081	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03201	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_008	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.03699	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_009	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.08192	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_010	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.06714	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_013	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.0478	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_014	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.10586	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_015	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.04734	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G09_020	'ST JOHN - ST_JOHN 115KV CKT 1'	FROM->TO	0.08785	87.9	102.6612	'CIRCLE - MULLERGREN 230KV CKT 1'
14SP	G08_030N	'HOSKINS4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.07005	186.9	102.504	'HOSKINS3 345.00 (HOSKN T4) 345/115/13.8KV TRANSFORMER CKT 1'
14SP	G08_030N	'HOSKINS4 230.00 230/115KV TRANSFORMER CKT 1'	FROM->TO	0.07005	186.9	102.504	'TRF-HOSKINS'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.31317	42.6	102.4732	'S969 8 69.000 - S974 8 69.000 69KV CKT 1'
14SP	G08_080	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.27342	89.6	102.4259	'SPP-MKEC-07'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.22037	42.6	102.4169	'S904 8 69.000 - S906 S 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.31317	50.4	102.2889	'S969 8 69.000 - S974 8 69.000 69KV CKT 1'
14SP	G09_029	'CLRND4 5 161.00 - WFARMS 161.00 161KV CKT 1'	TO->FROM	0.06962	167	102.1473	'SMARYVL 161.00 - CRESTON5 161.00 161KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.22037	50.4	102.0429	'S904 8 69.000 - S906 S 8 69.000 69KV CKT 1'
14SP	G08_121O	'S1221 5 161.00 - S1255 5 161.00 161KV CKT 1'	TO->FROM	0.03954	332.5	101.3671	'S1233 5 161.00 - S1255 5 161.00 161KV CKT 1'
14SP	G09_008	'HAYS PLANT - SOUTH HAYS 115KV CKT 1'	TO->FROM	0.07388	88	101.3364	'KNOLL 230 230/115KV TRANSFORMER CKT 1'
14SP	G08_080	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.0344	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_081	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03361	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_117	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_118	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_119	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_133	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03314	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G09_021	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03767	347.1	101.3304	'TOLK STATION WEST 230/24.0KV TRANSFORMER CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.31317	42.6	101.2995	'S968 8 69.000 - S969 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.31317	50.4	101.2968	'S968 8 69.000 - S969 8 69.000 69KV CKT 1'
14SP	G09_021	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.05094	89.6	101.1064	'GRAY CO 345.00 - HOLCOMB 345KV CKT 1'
14SP	G09_021	'CIMARRON RIVER PLANT - CIMARRON RIVER TAP 115KV CKT 1'	FROM->TO	0.05094	89.6	101.1064	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_003O	'NC SYRA8 69.000 - S970 8 69.000 69KV CKT 1'	TO->FROM	0.22673	42.6	101.0291	'S914 8 69.000 - S914A 8 69.000 69KV CKT 1'
14SP	G09_003O	'HYDCAP 8 69.000 - S970 8 69.000 69KV CKT 1'	FROM->TO	0.22673	50.4	100.8698	'S914 8 69.000 - S914A 8 69.000 69KV CKT 1'
14SP	G08_080	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.04054	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_081	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.03465	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_117	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05404	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_118	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05404	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_119	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.05404	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G08_133	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.04908	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_009	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.03335	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_010	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.04143	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.0415	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_020	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	-0.1844	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_021	'DIGHTON TAP - MANNING TAP 115KV CKT 1'	TO->FROM	0.04908	97.6	100.7058	'GRAY CO 345.00 - SPEARVILLE 345KV CKT 1'
14SP	G09_014	'GREAT BEND TAP - SEWARD 115KV CKT 1'	FROM->TO	0.14518	89.4	100.6959	'HUNTSVILLE - HUTCHINSON ENERGY CENTER 115KV CKT 1'
14SP	G09_009	'SEWARD 115/69KV TRANSFORMER CKT 1'	FROM->TO	0.03498	42.3	100.5839	'MULLERGREN 230/115KV TRANSFORMER CKT 1'

Appendix H.

Season	Source	MontCommonName	Direction	TDF	Rating	Contingency Loading %	Contname
14SP	G06_038N009	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03637	367.1	100.4883	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_080	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.0344	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_081	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03361	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_117	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_118	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_119	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03534	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G08_133	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03314	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G09_021	'DEAF SMITH COUNTY INTERCHANGE - G06-39T 230.00 230KV CKT 1'	TO->FROM	0.03767	347.1	100.258	'TOLK STATION EAST 230/24.0KV TRANSFORMER CKT 1'
14SP	G09_003O	'S963 8 69.000 - S977 8 69.000 69KV CKT 1'	FROM->TO	0.04028	53.7	100.2279	'HYDCAP 8 69.000 - S974 8 69.000 69KV CKT 1'
14SP	G08_121O	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03233	367.1	100.2043	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G08_030N	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.0395	367.1	100.1742	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
14SP	G06_038N010	'7PALMYRA 345.00 345/161KV TRANSFORMER CKT 1'	FROM->TO	0.03889	367.1	100.1302	'7MONTGMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'