



**AFFECTED SYSTEM
LIMITED OPERATION
IMPACT STUDY**

ASGI-2018-001
(AECI GIA-61)

Published August 2019

By SPP Generator Interconnections Dept.

REVISION HISTORY

Date	Author	Change Description
2/4/2019	SPP	Affected System Limited Operation Impact Study for Generator Interconnection ASGI-2018-001 (AECI GIA-61) Report Issued
2/15/2019	SPP	Additional scenario added. Additional information was added as Table 2.
2/22/2019	SPP	Scenario 5 added.
3/8/2019	SPP	Report updated to account for change in facility capacity.
3/21/2019	SPP	J611 – Maryville 161 kV CKT 1 constraint cost allocated to GIA-61.
6/18/2019	SPP	Additional scenario completed to account for in-service date updates for current study network upgrades assigned by AECI and SPP.
7/1/2019	SPP	Scenario 6 updated to account for GIA-53 not being in-service until 9/1/2020
8/7/2019	SPP	Table 20 updated for clarity.

TABLE OF CONTENTS

Revision History	i
Table of Contents	2
Executive Summary	3
Scenario 1 (242 MW)	3
Scenario 2 (230 MW)	3
Scenario 3 (230 MW)	3
Scenario 4 (242 MW)	3
Scenario 5 (242 MW)	4
Scenario 6 (242 MW)	4
Transient Stability & Short Circuit Analysis	4
Introduction	5
Purpose	5
Study Assumptions	5
Power Flow Analysis	7
Model Selection	7
Base Case Network Upgrades.....	7
Interconnection Requests Included in the Analysis	7
Higher Queued SPP and AECI Requests	7
Higher Queued MISO Requests.....	8
Current Study AECI Requests.....	8
Dispatch of Requests	9
SPP & AECI Requests.....	9
MISO Requests.....	9
Transmission Reinforcement Mitigation Criteria	10
Thermal Overloads	10
Voltage Criteria	11
Curtailed and System Reliability	12
Results	13
Limited Operation Scenarios	13
Stability Analysis.....	17
Conclusion	18
Appendix A-T: Thermal Constraints for Mitigation	20
Appendix B-T: Thermal Constraints Not for Mitigation	21

EXECUTIVE SUMMARY

Affected System Interconnection Customer “GIA-61” (ASGI-2018-001) has requested an Affected System Limited Operation System Impact Study (AS-LOIS) consistent with Southwest Power Pool Open Access Transmission Tariff (OATT) for 242¹ MW of wind generation to be interconnected with 242¹ MW of Energy Resource interconnection Service (ERIS) and Network Resource Interconnection Service (NRIS) to the Associated Electric Cooperative, Inc. (AECI) transmission system footprint. The generator is planned to interconnect into the transmission system in Nodaway County, MO.

SPP was provided with the estimated in-service dates for the AECI and SPP network upgrades identified in the GIA-61 impact and affected system impact studies. A limited operation affected system impact study has been performed to determine the operating limit per season until all assigned network upgrades are in-service. All previously conducted scenarios (with the exception of Scenarios 1 & 4, which did not include any AECI or SPP network upgrades) are now invalid.

SCENARIO 1 (242 MW)

Power flow results from this analysis indicate that GIA-61 may have **143¹ MW ERIS** and **143¹ MW NRIS** prior to the estimated in-service dates of either the AECI or SPP current study assigned network upgrades. If neither the AECI nor SPP current study network upgrades are in service by summer 2021, GIA-61 will need to reduce to **54 MW ERIS and 54 MW NRIS**. If the network upgrades are still not in-service by summer 2026, GIA-61 will need to reduce to **19 MW ERIS and 19 MW NRIS**.

SCENARIO 2 (230 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the AECI assigned network upgrades are in-service but the SPP assigned network upgrades are not. Power flow analysis from this scenario has determined that if the AECI assigned network upgrades are in-service by summer 2021 but the SPP network upgrades are not yet complete, GIA-61 can interconnect **95 MW ERIS** and **95 MW NRIS**. If the SPP network upgrades are still not in service by summer 2026, GIA-61 will need to reduce to **64 MW ERIS** and **64 MW NRIS**.~~

SCENARIO 3 (230 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the AECI assigned network upgrades and the SPP Maryville—Maryville 161 kV rebuild are in-service but the SPP Creston—Maryville 161 kV reconductor is not. Power flow analysis from this scenario has determined that GIA-61 can interconnect **200 MW ERIS** and **200 MW NRIS** prior to summer 2026. However, if the Creston—Maryville 161 kV reconductor is still not in service by summer 2026, GIA-61 will need to reduce to **160 MW ERIS** and **160 MW NRIS**.~~

SCENARIO 4 (242 MW)

Prior to the in-service date of the higher queued GIA-53 request, GIA-61 may have **242¹ MW ERIS** and **242¹ MW NRIS**. No current study GIA-61 network upgrades were included in this analysis (AECI or SPP).

¹ While GIA-61 intends to limit the injection at the Point of Interconnection to 230 MW, SPP must study the full request at full capacity.

SCENARIO 5 (242 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the Maryville – Maryville 161 kV rebuild was in-service but the reconductor of Creston – Maryville 161 kV and J611 – Maryville 161 kV were not. Under these assumptions GIA-61 may have **196 MW ERIS and 196 MW NRIS** until the end of summer 2021. After summer 2021, GIA-61 will need to reduce to **156 MW ERIS and 156 MW NRIS**.~~

SCENARIO 6 (242 MW)

SPP included the AECI and SPP required network upgrades in the seasonal cases as the network upgrades are expected to be in-service per Table 18.

TRANSIENT STABILITY & SHORT CIRCUIT ANALYSIS

Transient stability and short circuit analysis was not performed for this AS-LOIS.

INTRODUCTION

PURPOSE

The purpose of an affected system limited operation impact study is to determine the amount of interconnection capacity available to an affected system interconnection request prior to the in-service dates of network upgrades identified in the affected system impact study.

STUDY ASSUMPTIONS

SPP seasonal cases have a defined “start” and “end”. If SPP does not have a seasonal case which spans the time period in which the network upgrade will be placed in-service, the network upgrade is added to the next available seasonal case.

Table 1: SPP Seasonal Case Definitions

Season	Start	End
Light	4/1	6/1
Spring	4/1	6/1
Summer	6/1	10/1
Winter	12/1	4/1

AECI has assigned an upgrade “ID” to assist in breaking out the in-service dates of each network upgrade. AECI Network upgrade IDs are defined in Table 2 while network upgrades assigned by SPP are defined in Table 3.

Table 2: AECI Network Upgrades for GIA-61

Table 1	Description
A1	Rebuild Gentry-Fairport with 1192 ACSR, 100C (9.9 mi)
A2	Rebuild Nodaway-Gentry section 2 with 1192 ACSR, 100C (20.7mi)
A3	Upgrade Maryville 161/69 kV transformer #1 to 56 MVA unit
A4	Uprate Darlington to Stanberry 69 kV to 100 C (10.2 miles)
A5	Rebuild Darlington to Fairport with 336 ACSR, 100C (12.5 miles)
A6	Add bus tie breaker and associated switches at Maryville
A7	Replace strain bus, jumpers and upgrade four (4) 161 kV switches to 3000 Amps at the Nodaway substation
A8	Replace transfer bus and jumpers at the Fairport substation

Table 3: SPP Network Upgrades for GIA-61

SPP Transmission Owner	Network Upgrade Key	Description	Lead Time (Months)
KCPL	K1	Maryville-AECI line rebuild: KCP&L will replace existing wood structures and 795 ACSR conductor with new steel structures and 1192 ACSS conductor. Line has a total of four dead-end structures.	27
KCPL	K2	Maryville sub bus upgrades: upgrade 161kV strain bus, breaker disconnects, CTs, and breaker jumpers for 2000-amp capability. Bus will be limited to 1415 amps by 1.25” copper tube bus.	27
KCPL	K3	Maryville relaying upgrades: install new line differential relay panels for Line #11 and differential relays for transformer #33.	27
KCPL	K4	Maryville-Clarinda line rebuild: KCP&L will replace existing wood structures and 397.5 ACSR conductor with new steel structures and 1192 ACSS conductor on its portion of transmission line in Missouri.	27
WAPA	W1	62.4 miles of the Creston – Maryville 161kV transmission line using 556.5 ACSS Parakeet conductor, including new insulators assemblies and hardware to accommodate the higher temperature conductor. The proposed use of the ACSS type conductor eliminates the need to replace the existing transmission line structures previously identified in the earlier conceptual cost estimates.	29

Please note that the Iatan – Stranger Creek 345 kV voltage conversion (assigned by 2015 ITP) is already in-service and was included in the base case study assumptions. Please also note that the network upgrade in-service dates provided by KCPL & WAPA are subject to execution of facilities construction agreement, advance funding being provided, outage availability, and may be subject to completion of an Environmental Review prior to the start of construction. According to good business practice, the KCPL & WAPA engineering and procurement process cannot begin until the parties have executed a mutually agreeable Engineering & Construction Agreement.

Only power flow analysis was conducted for this Affected System Limited Operation Interconnection Study. Limited Operation Studies are conducted under GIA Section 5.9.

The AS-LOIS considers the Base Case as well as all Generating Facilities (and with respect to (b) below, any identified Network Upgrades associated with such higher-queued interconnection) that, on the date the LOIS is commenced:

- a) are directly interconnected to the Transmission System;
- b) are interconnected to Affected Systems and may have an impact on the Interconnection Request;**
- c) have a pending higher-queued Interconnection Request to interconnect to the Transmission System listed in **Table 4** or
- d) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC.

Any changes to these assumptions, for example, one or more of the previously queued requests not included within this study execute an interconnection agreement and commencing commercial operation, may require a re-study of this LOIS at the expense of the Customer.

Nothing within this System Impact Study constitutes a request for transmission service or confers upon the Interconnection Customer any right to receive transmission service rights within Southwest Power Pool's (SPP) transmission system. Should the Customer require transmission service, those rights should be requested through SPP's Open Access Same-Time Information System (OASIS).

POWER FLOW ANALYSIS

Power flow analysis is used to determine if the transmission system can accommodate the injection from the request without violating thermal or voltage transmission planning criteria.

MODEL SELECTION

Power flow analysis was performed using modified versions of the 2015 series of 2016 ITP Near-Term study models including these seasonal models:

- Year 1 (2017) Winter Peak (17WP)
- Year 2 (2018) Spring (18G)
- Year 2 (2018) Summer Peak (18SP)
- Year 5 (2021) Light (21L)
- Year 5 (2021) Summer peak (21SP)
- Year 5 (2021) Winter peak (21WP)

BASE CASE NETWORK UPGRADES

The Network Upgrades included within the cases used for this AS-LOIS are a part of the SPP Transmission Expansion Plan, Balanced Portfolio, or Integrated System (IS) Integration Study projects and have in-service dates prior to the customer's requested in-service date. These facilities have an approved Notification to Construct (NTC), or are in construction stages and expected to be in-service at the effective time of this study. No other upgrades were included for this AS-LOIS. If for some reason, construction on these projects is delayed or discontinued, a restudy may be needed to determine the interconnection service availability of the Customer.

INTERCONNECTION REQUESTS INCLUDED IN THE ANALYSIS

HIGHER QUEUED SPP AND AECI REQUESTS

Table 4: Higher Queued Group 13 Requests Included in the Analysis

Generation Interconnection Number	GEN Area	PMAX	Service	Group	Type	Status
GEN-2008-129	KCPL	80	ER	13 NE-KS & NW-MO	CT	IA FULLY EXECUTED/COMMERCIAL OPERATION
GEN-2010-036	WERE	5.9	ER	13 NE-KS & NW-MO	Hydro	IA FULLY EXECUTED/COMMERCIAL OPERATION
GEN-2011-011	KCPL	50	ER	13 NE-KS & NW-MO	Coal	IA FULLY EXECUTED/COMMERCIAL OPERATION
GEN-2014-021	KCPL	300	ER/NR	13 NE-KS & NW-MO	Wind	IA FULLY EXECUTED/COMMERCIAL OPERATION
GEN-2015-005	KCPL	200.11	ER	13 NE-KS & NW-MO	Wind	IA FULLY EXECUTED/COMMERCIAL OPERATION
ASGI-2016-003	KCPL	12	ER	13 NE-KS & NW-MO	Diesel	FACILITY STUDY STAGE
ASGI-2017-006*	AECI	238	ER/NR	13 NE-KS & NW-MO	Wind	AECI FACILITY STUDY STAGE
GEN-2016-088	KCPL	151.2	ER/NR	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-115	KCPL	300	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE

GEN-2016-149	WERE	302	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-150	WERE	302	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-157	KCPL	252	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-158	KCPL	252	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-174	WERE	302	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE
GEN-2016-176	WERE	302	ER	13 NE-KS & NW-MO	Wind	FACILITY STUDY STAGE

*Excluded from Scenario 2 per study assumptions

HIGHER QUEUED MISO REQUESTS

Table 5: Higher Queued MISO Requests Included in the Analysis

Study	Gen Name	ERIS PMAX (MW)	NRIS PMAX (MW)	Service	Group	Type	Status
DIS-12-2-PQ	H081	201	0	ER	15 E-SD	Wind	Done
DIS-13-1-PQ	G858-H081	78	78	NR	15 E-SD	Wind	Done
DIS-14-2-PQ	J285	250	250	NR	09 NEB	Wind	Done
DIS-14-2-PQ	J343	150	150	NR	09 NEB	Wind	Done
DIS-14-2-PQ	J344	168	168	NR	09 NEB	Wind	Done
DIS-14-2-PQ	J316	150	150	NR	16 W-ND	Wind	Done
DIS-15-1-PQ	J411	300	300	NR	09 NEB	Wind	Done
DIS-15-1-PQ	J416	200.5	200.5	NR	09 NEB	Wind	Done
DIS-15-1-PQ	G736	200	200	NR	15 E-SD	Wind	Done
DIS-15-1-PQ	J385	100	100	NR	15 E-SD	Solar	Done
DIS-15-1-PQ	J391	50	50	NR	15 E-SD	Gas	Done
DIS-15-1-PQ	J400	62	62	NR	15 E-SD	Solar	Done
DIS-15-1-PQ	J407	200	200	NR	15 E-SD	Wind	Done
DIS-15-1-PQ	J426	100	100	NR	15 E-SD	Wind	Done
DIS-15-2-PQ	J412	200	200	NR	09 NEB	Wind	Done
DIS-15-2-PQ	J438	167	167	NR	09 NEB	Wind	Done
DIS-15-2-PQ	J455	294.8	0	ER	09 NEB	Wind	Done
DIS-15-2-PQ	J436	150	0	ER	15 E-SD	Wind	Done
DIS-15-2-PQ	J437	150	0	ER	15 E-SD	Wind	Done
DIS-15-2-PQ	J442	200	200	NR	15 E-SD	Wind	Done
DIS-16-1-PQ	J499	340	340	NR	09 NEB	Wind	Active
DIS-16-1-PQ	J500	500	500	NR	09 NEB	Wind	Active
DIS-16-1-PQ	J527	250	250	NR	09 NEB	Wind	Active
DIS-16-1-PQ	J528	200	200	NR	09 NEB	Wind	Active
DIS-16-2-PQ	J583	200	200	NR	09 NEB	Wind	Active
DIS-16-2-PQ	J611	110	110	NR	13 NE-KS & NW-MO	Wind	Active
DIS-16-2-PQ	J476	246	246	NR	13 NE-KS & NW-MO	Wind	Active
DIS-17-1-PQ	J570	150	150	NR	13 NE-KS & NW-MO	Wind	Active

CURRENT STUDY AECI REQUESTS

Table 6: Current Study Requests Included in the Analysis

Generation Interconnection Number	GEN Area	PMAX	Service	Group	Type	Status
ASGI-2018-001	AECI	242	ER/NR	13 NE-KS & NW-MO	Wind	CURRENT STUDY

DISPATCH OF REQUESTS

SPP & AECI REQUESTS

Please refer to **Table 7** for an overview of SPP dispatch criteria.

Table 7: SPP GIR Power Flow Fuel Type Dispatch

Dispatch Type	Season	Service Type	Renewable (in group)	Renewable (out of group)	Conventional (in group)	Conventional (out of group)
ERIS HVER	All	All	100%	20%	N/A	N/A
ERIS LVER	Peak	All	20%	20%	100%	100%
NRIS HVER	Spring and Light Load	ERIS	80%	20%	N/A	N/A
		NRIS	100%	20%	100%	20%
NRIS LVER	Peak	ERIS	20% ²	20% ²	80%	80%
		NRIS	100%	100%	100%	100%

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

Peaking units are not dispatched in the Year 2 spring and Year 5 light, or in the “High VER” summer and winter peaks. To study peaking units’ impacts, the Year 1 winter peak, Year 2 summer peak, and Year 5 summer and winter peaks, models are developed with peaking units dispatched at 100% of the nameplate rating and VERs dispatched at 20% of the nameplate rating. Each interconnection request is also modeled separately at 100% nameplate for certain analyses.

All SPP generators (VER and peaking) that requested Network Resource Interconnection Service (NRIS) are dispatched in an additional analysis into the interconnecting Transmission Owner’s (T.O.) area at 100% nameplate with Energy Resource Interconnection Service (ERIS) only requests at 80% nameplate. All affected system generators (VER and peaking) that requested Network Resource Interconnection Service (NRIS) are dispatched based on their respective NRIS amounts in an additional analysis into the direct connect transmission system. This method allows for identification of network constraints that are common between regional groupings and have affecting requests share the mitigating upgrade costs throughout the cluster.

MISO REQUESTS

To incorporate higher queued MISO interconnection requests, a re-dispatch of existing generation within MISO was performed with respect to the amount of the Customers’ injection. **Table 8** outlines the dispatch of MISO requests in the SPP models.

MISO projects are dispatched across the SPP footprint using load factor ratios. All MISO generation dispatched by SPP was sunk to the MISO Classic (West) footprint, whether ERIS or NRIS.

² Solar in SP 80%

Table 8: Dispatch of MISO Requests in SPP Models

Dispatch Type	Season	Service Type	Renewable (in group)	Renewable (out of group)	Conventional (in group)	Conventional (out of group)
ERIS HVER	All	All	100%	20%	N/A	N/A
ERIS LVER	Peak	All	20%	20%	100%	100%
NRIS	Spring and Light Load	ERIS	Off	Off	Off	Off
		NRIS	100%	20%	100%	20%
	Peak	ERIS	Off	Off	Off	Off
		NRIS	100%	100%	100%	100%
HVER – High Variable Energy Resource Dispatch LVER – Low Variable Energy Resource Dispatch N/A – units are not dispatched up from base case amounts Renewable – Includes wind, solar, and storage Conventional – Includes nuclear, hydro, coal, cc, CT, oil, waste heat						

TRANSMISSION REINFORCEMENT MITIGATION CRITERIA

THERMAL OVERLOADS

Network constraints are found by using PSS/E AC Contingency Calculation (ACCC) analysis with PSS/E MUST First Contingency Incremental Transfer Capability (FCITC) analysis on the entire cluster grouping dispatched at the various levels previously mentioned.

For Energy Resource Interconnection Service (ERIS), thermal overloads are determined for system intact (n-0) (greater than 100% of Rate A - normal) and for contingency (n-1) (greater than 100% of Rate B – emergency) conditions.

The overloads are then screened to determine which generator interconnection requests have at least:

- 3% Distribution Factor (DF) for system intact conditions (n-0),
- 20% DF upon outage based conditions (n-1), or
- 3% DF on contingent elements that resulted in a non-converged solution.

Interconnection Requests that requested Network Resource Interconnection Service (NRIS) are also studied in a separate NRIS analysis to determine if any constraint measured greater than or equal to a 3% DF. If so, these constraints are also considered for transmission reinforcement under NRIS. The contingency set includes all SPP control area branches and ties 69kV and above, first tier Non-SPP control area branches and ties 115 kV and above, any defined contingencies for these control areas, and generation unit outages for the SPP control areas with SPP reserve share program redispatch.

The monitored elements include all SPP control area branches, ties, and buses 69 kV and above, and all first tier Non-SPP control area branches and ties 69 kV and above. NERC Power Transfer Distribution Flowgates for SPP and first tier Non-SPP control area are monitored. Additional NERC Flowgates are monitored in second tier or greater Non-SPP control areas. Voltage monitoring was performed for SPP control area buses 69 kV and above.

Notwithstanding, should any facility be identified by MISO using MISO Constraint Identification Criteria as being affected by a study request, such as “Outlet” constraints or other specific criteria, review and mitigation of those constraints may also be required.

The SPP Permanent List of Flowgates are included within SPP Planning studies and can be reviewed on the SPP OASIS website. The direct link to the current Permanent Flowgate list is as follows:

https://www.oasis.oati.com/SWPP/SWPPdocs/Permanent_flowgates.xls

VOLTAGE CRITERIA

For non-converged power flow solutions that are determined to be caused by lack of voltage support, appropriate transmission support will be determined to mitigate the constraint.

After all thermal overload and voltage support mitigations are determined; a full ACCC analysis is then performed to determine voltage constraints. The following voltage performance guidelines are used in accordance with the Transmission Owner local planning criteria.

SPP Areas (69kV+):

Transmission Owner	Voltage Criteria (System Intact)	Voltage Criteria (Contingency)
AEPW	0.95 – 1.05 pu	0.92 – 1.05 pu
GRDA	0.95 – 1.05 pu	0.90 – 1.05 pu
SWPA	0.95 – 1.05 pu	0.90 – 1.05 pu
OKGE	0.95 – 1.05 pu	0.90 – 1.05 pu
OMPA	0.95 – 1.05 pu	0.90 – 1.05 pu
WFEC	0.95 – 1.05 pu	0.90 – 1.05 pu
SWPS	0.95 – 1.05 pu	0.90 – 1.05 pu
MIDW	0.95 – 1.05 pu	0.90 – 1.05 pu
SUNC	0.95 – 1.05 pu	0.90 – 1.05 pu
KCPL	0.95 – 1.05 pu	0.90 – 1.05 pu
INDN	0.95 – 1.05 pu	0.90 – 1.05 pu
SPRM	0.95 – 1.05 pu	0.90 – 1.05 pu
NPPD	0.95 – 1.05 pu	0.90 – 1.05 pu
WAPA	0.95 – 1.05 pu	0.90 – 1.05 pu
WERE L-V	0.95 – 1.05 pu	0.93 – 1.05 pu
WERE H-V	0.95 – 1.05 pu	0.95 – 1.05 pu
EMDE L-V	0.95 – 1.05 pu	0.90 – 1.05 pu
EMDE H-V	0.95 – 1.05 pu	0.92 – 1.05 pu
LES	0.95 – 1.05 pu	0.90 – 1.05 pu
OPPD	0.95 – 1.05 pu	0.90 – 1.05 pu

SPP Buses with more stringent voltage criteria:

Bus Name/Number	Voltage Criteria (System Intact)	Voltage Criteria (Contingency)
TUCO 230kV 525830	0.925 – 1.05 pu	0.925 – 1.05 pu
Wolf Creek 345kV 532797	0.985 – 1.03 pu	0.985 – 1.03 pu
FCS 646251	1.001 – 1.047 pu	1.001 – 1.047 pu

Affected System Areas (115kV+):

Transmission Owner	Voltage Criteria (System Intact)	Voltage Criteria (Contingency)
EES-EAI	0.95 – 1.05 pu	0.90 – 1.05 pu
LAGN	0.95 – 1.05 pu	0.90 – 1.05 pu
EES	0.95 – 1.05 pu	0.90 – 1.05 pu
AMMO	0.95 – 1.05 pu	0.90 – 1.05 pu
CLEC	0.95 – 1.05 pu	0.90 – 1.05 pu
LAFA	0.95 – 1.05 pu	0.90 – 1.05 pu
LEPA	0.95 – 1.05 pu	0.90 – 1.05 pu
XEL	0.95 – 1.05 pu	0.90 – 1.05 pu

MP	0.95 – 1.05 pu	0.90 – 1.05 pu
SMMPA	0.95 – 1.05 pu	0.90 – 1.05 pu
GRE	0.95 – 1.05 pu	0.90 – 1.10 pu
OTP	0.95 – 1.05 pu	0.90 – 1.05 pu
OTP-H (115kV+)	0.97 – 1.05 pu	0.92 – 1.10 pu
ALTW	0.95 – 1.05 pu	0.90 – 1.05 pu
MEC	0.95 – 1.05 pu	0.90 – 1.05 pu
MDU	0.95 – 1.05 pu	0.90 – 1.05 pu
SPC	0.95 – 1.05 pu	0.95 – 1.05 pu
DPC	0.95 – 1.05 pu	0.90 – 1.05 pu
ALTE	0.95 – 1.05 pu	0.90 – 1.05 pu

The constraints identified through the voltage scan are then screened for the following for each interconnection request. 1) 3% DF on the contingent element and 2) 2% change in pu voltage. In certain conditions, engineering judgement was used to determine whether or not a generator had impacts to voltage constraints.

CURTAILMENT AND SYSTEM RELIABILITY

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

RESULTS

LIMITED OPERATION SCENARIOS

The limited operation amount is calculated according to the following equation:

$$LOIS \text{ Amount} = \text{Request MW} - \frac{\text{MVA Rating} * (\text{Overload PU} - 1)}{\text{Request TDF}}$$

Scenario 1 (242¹ MW)

As the 2017 winter peak and 2018 spring seasons have now passed, the 2018 summer peak season is serving as the near-term season. Power flow results from this analysis indicate that GIA-61 may have **143¹ MW ERIS** and **143¹ MW NRIS** prior to the estimated in-service dates of either the AECI or SPP current study assigned network upgrades. If neither the AECI nor SPP current study network upgrades are in service by summer 2021, GIA-61 will need to reduce to **54 MW ERIS and 54 MW NRIS**. If the network upgrades are still not in-service by summer 2026, GIA-61 will need to reduce to **19 MW ERIS and 19 MW NRIS**.

Table 9: Scenario 1 Limited Operation Amount per Season

Season	Constraint	From Area	To Area	Rating	TDF	BC % Loading	TC % Loading	MVA Needed	MW Available	Contingency
17WP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.53377	73.22704	130.1721	299	112	'CRESTON - MARYVILLE 161KV CKT 1'
18G	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.65256	55.0605	123.1425	282	160	'FAIRPORT - HARVIEL E 161KV CKT 1'
18SP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.53441	65.65626	122.9352	282	143	'CRESTON - MARYVILLE 161KV CKT 1'
21L	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.65163	47.06892	115.9076	266	186	'FAIRPORT - HARVIEL E 161KV CKT 1'
21SP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.535	90.28297	143.8177	330	54	'CRESTON - MARYVILLE 161KV CKT 1'
21WP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.5345	72.9738	130.0825	298	113	'CRESTON - MARYVILLE 161KV CKT 1'
26SP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.53501	98.45406	152.0506	349	19	CRESTON - MARYVILLE 161KV CKT 1'

Table 10 outlines the maximum MW available to GIA-61 without triggering the need for the associated network upgrade.

Table 10: Most Severe Scenario 1 ERIS Constraints

Season	Constraint	From Area	To Area	Rating	TDF	BC % Loading	TC % Loading	MVA Needed	MW Available (Reduce to Eliminate Constraint)	Contingency
26SP	'CRESTON - MARYVILLE 161KV CKT 1'	AECI	WAPA	208	0.30336	79.45205	113.9291	237	146	'MARYVILLE - MARYVILLE 161KV CKT 1'

26SP	J611 161.00 - MARYVILLE 161KV CKT 1	KCPL	MEC	171	0.28977	65.23734	106.3776	182	204	'CRESTON - MARYVILLE 161KV CKT 1'
26SP	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.53501	98.45406	152.0506	349	19	'CRESTON - MARYVILLE 161KV CKT 1'

No NRIS thermal constraints were observed in Scenario 1.

No ERIS or NRIS voltage constraints were observed in Scenario 1.

Scenario 2 (230 MW)

This scenario evaluated the limited operation amount for GIA-61 where the AECI assigned network upgrades are in service but the SPP assigned network upgrades are not. Power flow analysis from this scenario has determined that if the AECI assigned network upgrades are in service by summer 2021 but the SPP network upgrades are not yet complete, GIA-61 can interconnect **95 MW ERIS and 95 MW NRIS**. If the SPP network upgrades are still not in service by summer 2026, GIA-61 will need to reduce to **64 MW ERIS and 64 MW NRIS**.

Table 11: Scenario 2 LOIS Amounts per Season

Season	TDF	TC Loading %	Available (MW)	Most Limited Constraint	SPP Comments
17WP	0.52427	112.0055	183	'MARYVILLE - MARYVILLE 161KV CKT 1'	These seasons are provided for reference only they are "past" seasons.
18G	0.64775	125.0201	152	'FAIRPORT - HARVIELE 161KV CKT 1'	
18SP	0.52496	110.2204	191	'MARYVILLE - MARYVILLE 161KV CKT 1'	As SPP does not currently have a 19 or 20 SP, the 18 SP is serving as the near term season. These seasons are provided for reference only as the AECI network upgrades are not expected to be in service until summer 2021.
21L	0.64721	116.0229	183	'MARYVILLE - MARYVILLE 161KV CKT 1'	
21SP	0.52559	134.2668	95	'FAIRPORT - HARVIELE 161KV CKT 1'	Once the AECI network upgrades are in service, the limited operation amount without the SPP assigned network upgrades is 95 MW. Once both the AECI and SPP network upgrades are in service, GIA-61 may have full interconnection service at 230 MW ERIS and 230 MW NRIS.
21WP	0.52507	114.0733	177	'MARYVILLE - MARYVILLE 161KV CKT 1'	
26SP	0.52559	142.1455	64	'MARYVILLE - MARYVILLE 161KV CKT 1'	If AECI network upgrades are in service by this season but the SPP assigned network upgrades are not, the request will need to reduce to 64 MW.

Table 12: Most Severe Scenario 2 ERIS Thermal Constraints

Group	Season(s) Constraint Observed	MONTCOMMONNAME	RATING	TDF	BC% LOADING	TC% LOADING	CONT NAME	F AREA NAME	T AREA NAME
13ALL	26SP, 21SP, 21WP, 17WP, 18SP	MARYVILLE - MARYVILLE 161KV CKT 1'	229	0.52559	92.72694	142.1455	'CRESTON - MARYVILLE 161KV CKT 1'	AECI	KCPL
13ALL	26SP	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	0.43272	67.09403	107.0436	System Intact	AECI	KCPL

13ALL	26SP	CRESTON-MARYVILLE 161KV CKT 1'	208	0.29651	71.58234	103.6926	'MARYVILLE-MARYVILLE 161KV CKT 1'	AECI	WAPA
-------	------	--------------------------------	-----	---------	----------	----------	-----------------------------------	------	------

The following thermal constraints are listed for informational purposes only. None of the NRIS thermal constraints listed below were cost assigned in the original ASGI-2018-001 affected system impact study. The Creston (WAPA) terminal equipment was sufficient to achieve the required TC MVA loading. The 'MARYVILLE - MARYVILLE 161KV CKT 1' constraint was mitigated by an ERIS SPP assigned network upgrade.

Table 13: Scenario 2 NRIS Thermal Constraints (From Original ASGI 2018-001 Impact Study Analysis)

Group	Season(s) Constraint Observed	MONT COMMONNAME	RATING	TDF	BC% LOADING	TC% LOADING	CONT NAME	F AREA NAME	T AREA NAME
13NR	21L, 18G	ADAMS 5 161.00- CRESTON 161KV CKT 1'	154	0.09833	98.36186	110.9844	'CLARINDA-HASTINGS 161KV CKT 1'	MEC	WAPA
13NR	21L, 18G	'MARYVILLE-MARYVILLE 161KV CKT 1'	0.64775	60.63404	125.0201	'FAIRPORT-HARVIELE 161KV CKT 1'	AECI	KGPL	229

No ERIS or NRIS voltage constraints were observed in Scenario 2.

Scenario 3 (230 MW)

This scenario evaluated the limited operation amount for GIA-61 where the AECI assigned network upgrades and the SPP Maryville - Maryville 161 kV rebuild are in service but the SPP Creston - Maryville 161 kV reconductor is not. Power flow analysis from this scenario has determined that GIA-61 can interconnect **199 MW ERIS and 199 MW NRIS** before summer 2026. However, if the Creston - Maryville 161 kV reconductor is still not in service by summer 2026, GIA-61 will need to reduce to **160 MW ERIS and 160 MW NRIS**.

If all AECI network upgrades are completed prior to summer 2021 and the Maryville - Maryville 161 kV rebuild is in service, GIA-61 may have full interconnection service up until summer 2021. The 199 MW limit would take effect summer 2021 (starting 6/1/2021), with all Scenario 3 upgrades in service.

Table 14: Scenario 3 LOIS Amounts per Season

Season	TDF	TC Loading %	Available (MW)	Most Limited Constraint	SPP Comments
17WP	N/A	N/A	N/A	N/A	These seasons are provided for reference only they are "past" seasons.
18G	N/A	N/A	N/A	N/A	
18SP	N/A	N/A	N/A	N/A	As SPP does not currently have a 19 or 20 SP, the 18 SP is serving as the near-term season.
21L	N/A	N/A	N/A	N/A	This season is provided for reference only as the AECI network upgrades are not expected to be in service until summer 2021.
21SP	0.30341	105.9792	184	'CRESTON - MARYVILLE 161KV CKT 1'	199 MW ERIS available until 2026 summer.
21WP	N/A	N/A	N/A	N/A	No constraints observed in 21 WP if Maryville - Maryville 161 kV rebuild in service.
26SP	0.30337	111.9165	140	'CRESTON - MARYVILLE 161KV CKT 1'	If Creston - Maryville reconductor is still not in service, GIA-61 will need to reduce to 160 MW ERIS .

Table 15: Most Severe Scenario 3 ERIS Constraints for 21SP and 26SP

Group	Season(s) Constraint Observed	MONT COMMONNAME	RATING	TDF	BC% LOADING	TC% LOADING	CONT NAME	F AREA NAME	T AREA NAME
13ALL	21SP	'CRESTON- MARYVILLE 161KV CKT 1'	208	0.29558	72.57591	104.1677	'MARYVILLE- MARYVILLE 161KV CKT 1'	AECI	WAPA
13ALL	26SP	'CRESTON- MARYVILLE 161KV CKT 1'	208	0.29554	77.54338	109.9376	'MARYVILLE- MARYVILLE 161KV CKT 1'	AECI	WAPA

No NRIS thermal constraints met SPP mitigation criteria. Please refer to Appendix B-T, Scenario 3 for the constraints observed for affected systems.

No ERIS or NRIS voltage constraints were observed in Scenario 3.

Scenario 4 (230 MW)

Prior to the in-service date of the higher queued GIA-53 request, GIA-61 may have **242¹ MW ERIS** and **242¹ MW NRIS**. No current study GIA-61 network upgrades were included in this analysis (AECI or SPP).

No NRIS thermal constraints were observed for Scenario 4.

No ERIS or NRIS voltage constraints were observed in Scenario 4.

Scenario 5 (242¹ MW)

Under the study assumptions outlined in Scenario 5, GIA-61 may have **196 MW ERIS and 196 MW NRIS** until the end of summer 2021. After summer 2021, GIA-61 will need to reduce to **156 MW ERIS** and **156 MW NRIS**.

Table 16: Scenario 5 LOIS Amounts per Season

Season	Constraint	From Area	To Area	Rating	TDF	BC Loading %	TC Loading %	MVA Needed	MW Available	Contingency
21SP	'CRESTON- MARYVILLE 161KV CKT 1'	AECI	WAPA	208	0.29939	73.411	106.5951	222	196	'MARYVILLE- MARYVILLE 161KV CKT 1'
26SP	'CRESTON- MARYVILLE 161KV CKT 1'	AECI	WAPA	208	0.29935	78.59494	112.3103	234	156	'MARYVILLE- MARYVILLE 161KV CKT 1'

Table 17: Most Severe Scenario 5 ERIS Constraints

Season	Constraint	From Area	To Area	Rating	TDF	BC Loading %	TC Loading %	MVA Needed	MW Available (Reduce to Eliminate Constraint)	Contingency
26SP	'CRESTON- MARYVILLE 161KV CKT 1'	AECI	WAPA	208	0.29935	78.59494	112.3103	234	156	'MARYVILLE- MARYVILLE 161KV CKT 1'
26SP	'J611-161.00- MARYVILLE 161KV CKT 1'	KCPL	MEG	152	0.28701	64.16365	105.2822	181	210	'CRESTON- MARYVILLE 161KV CKT 1'

No ERIS or NRIS voltage constraints were observed in Scenario 5.

Scenario 6 (242 MW)

Scenario 6 assumes the GIA-61 assigned network upgrades are in-service according to Table 18. Table 19 outlines the most limiting ERS constraints per season. Table 20 assumes GIA-53 is not in-service until 9/1/2020.

Table 18: Scenario 6 Study Assumptions

Network Upgrade ID	Estimated In-Service Date of Network Upgrade	Included in SPP Case
A1 & A6	December 2019	2019 WP+
A2, A3, A7, & A8	July 2020	2020 SP+
A4	December 2020	2020 WP+
A5	July 2021	2021 SP+
K1, K2, K3, & K4	September 2021	2021 SP+
W1	November 2021	2021 WP+

Table 19: Most limiting ERS constraints per season for Scenario 6

Season	Constraint	From Area	To Area	Rating	TDF	BC Loading %	TC Loading %	MVA Needed	MW Available (Reduce to Eliminate Constraint)	Contingency
21L	'MARYVILLE - MARYVILLE 161KV CKT 1'	AECI	KCPL	229	0.64213	46.15224	113.8268	261	192	'FAIRPORT - HARVIE E 161KV CKT 1'
21SP	'CRESTON - MARYVILLE 161KV CKT 1'	AECI	WAPA	208	0.29345	72.5286	105.4286	220	203	'MARYVILLE - MARYVILLE 161KV CKT 1'

Table 20: Scenario 6 GIA-61 LOIS Amount per Season

Season	Assumptions	LOIS (MW)
Winter 2019, Spring 2020	GIA-53 not in-service	242
Summer 2020, Winter 2020, Spring 2021	GIA-53 in-service All AECI network upgrades in-service except for A5	192
Summer 2021, Winter 2021	All AECI & SPP network upgrades in-service except for W1	203
Spring 2022 +	All AECI & SPP network upgrades in-service	242

STABILITY ANALYSIS

Transient stability analysis was not performed for this AS-LOIS.

CONCLUSION

Scenario 1 (242¹ MW)

Power flow results from this analysis indicate that GIA-61 may have **143¹ MW ERIS** and **143¹ MW NRIS** prior to the estimated in-service dates of either the AECl or SPP current study assigned network upgrades. If neither the AECl nor SPP current study network upgrades are in service by summer 2021, GIA-61 will need to reduce to **54 MW ERIS and 54 MW NRIS**. If the network upgrades are still not in-service by summer 2026, GIA-61 will need to reduce to **19 MW ERIS and 19 MW NRIS**.

Scenarios 2 and 3 were not reevaluated at the 242 MW amount, therefore results from these scenarios are invalid.

Scenario 2 (230 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the AECl assigned network upgrades are in-service but the SPP assigned network upgrades are not. Power flow analysis from this scenario has determined that if the AECl assigned network upgrades are in-service by summer 2021 but the SPP network upgrades are not yet complete, GIA-61 can interconnect **95 MW ERIS** and **95 MW NRIS**. If the SPP network upgrades are still not in service by summer 2026, GIA-61 will need to reduce to **64 MW ERIS and 64 MW NRIS**.~~

Scenario 3 (230 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the AECl assigned network upgrades and the SPP Maryville – Maryville 161 kV rebuild are in-service but the SPP Creston – Maryville 161 kV reconductor is not. Power flow analysis from this scenario has determined that GIA-61 can interconnect **200 MW ERIS** and **200 MW NRIS** prior to summer 2026. However, if the Creston – Maryville 161 kV reconductor is still not in service by summer 2026, GIA-61 will need to reduce to **160 MW ERIS and 160 MW NRIS**.~~

Scenario 4 (242¹ MW)

Prior to the in-service date of the higher queued GIA-53 request, GIA-61 may have **242¹ MW ERIS** and **242¹ MW NRIS**. No current study GIA-61 network upgrades were included in this analysis (AECl or SPP).

Scenario 5 (242 MW)

~~This scenario evaluated the limited operation amount for GIA-61 where the Maryville – Maryville 161 kV rebuild was in-service but the reconductor of Creston – Maryville 161 kV and J611 – Maryville 161 kV were not. Under these assumptions GIA-61 may have **196 MW ERIS and 196 MW NRIS** until the end of summer 2021. After summer 2021, GIA-61 will need to reduce to **156 MW ERIS and 156 MW NRIS**.~~

Scenario 6 (242 MW)

This scenario evaluated the available limited operation amount for GIA-61 prior to the in-service dates of the network upgrades identified in the GIA-61 affected system impact study. Seasonal limited operation amounts are outlined for this scenario in Table 20.

Curtailed and System Reliability

Should any other projects other than those listed within Table 4 of this report come into service or if the upgrades are not placed in service as scheduled, an additional study may be required to determine if any affected system limited operation service is available.

It should be noted that although this AS-LOIS analyzed many of the most probable contingencies, it is not an all-inclusive list that can account for every operational situation. Additionally, the generator may

not be able to inject any power onto the Transmission System due to constraints that fall below the threshold of mitigation for a Generator Interconnection request. Because of this, the Customer may be required by the Transmission Provider to reduce their generation output to 0 MW under certain system conditions to allow system operators to maintain the reliability of the transmission network.

Nothing in this study should be construed as a guarantee of delivery or transmission service within Southwest Power Pool's (SPP) transmission system. If the customer wishes to sell power from the facility, a separate request for transmission service must be requested on Southwest Power Pool's OASIS by the Customer.

APPENDIX A-T: THERMAL CONSTRAINTS FOR MITIGATION

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATE (MVA)	RATEB (MVA)	TDF	BC%LOADING (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.30336	79.45205	113.9291	MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.30336	79.45205	113.9291	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.3034	74.2732	108.0624	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.3034	74.2732	108.0624	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.22562	79.89336	105.5322	'CLARINDA - J611 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.22564	75.5481	100.8723	'CLARINDA - J611 161.00 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	J611 161.00 - MARYVILLE 161KV CKT 1'	152	171	0.28977	65.23734	106.3776	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	J611 161.00 - MARYVILLE 161KV CKT 1'	152	171	0.28977	65.23734	106.3776	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	J611 161.00 - MARYVILLE 161KV CKT 1'	152	171	0.22491	71.66108	101.1567	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	J611 161.00 - MARYVILLE 161KV CKT 1'	152	171	0.32715	54.15165	100.169	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	System Intact
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	-9999	9999	'*P11.345:OPPD:NEBCY1G'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	-9999	9999	'*P11.345:OPPD:NEBCY1G'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.652	93.74796	158.3756	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.652	93.74796	158.3756	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.652	92.19286	156.9834	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.652	92.19286	156.9834	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53501	98.45406	152.0506	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53501	98.45406	152.0506	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53501	98.45406	152.0506	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65196	82.42882	146.8043	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65196	82.42882	146.8043	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65196	80.89707	145.4065	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65196	80.89707	145.4065	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.535	90.28297	143.8177	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.535	90.28297	143.8177	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.535	90.28297	143.8177	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.535	90.28297	143.8177	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53377	73.22704	130.1721	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53377	73.22704	130.1721	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53377	73.22704	130.1721	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53377	73.22704	130.1721	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.5345	72.9738	130.0825	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.5345	72.9738	130.0825	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.5345	72.9738	130.0825	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.5345	72.9738	130.0825	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	85.598	128.6286	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	85.598	128.6286	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	55.0605	123.1425	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	55.0605	123.1425	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53441	65.65626	122.9352	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53441	65.65626	122.9352	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	79.19566	122.4146	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	79.19566	122.4146	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	51.93092	121.1272	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	51.93092	121.1272	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	51.05003	120.4549	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	51.05003	120.4549	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	49.42321	118.2194	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	49.42321	118.2194	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	49.39995	118.1625	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65256	49.39995	118.1625	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.45305	72.20605	116.9694	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.45305	72.20605	116.9694	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65163	47.06892	115.9076	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65163	47.06892	115.9076	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	46.22759	115.7661	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	46.22759	115.7661	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	72.63326	115.7645	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	72.63326	115.7645	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	46.1968	115.7055	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65136	46.1968	115.7055	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39865	75.87371	115.5135	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39865	75.87371	115.5135	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53379	59.1344	115.4125	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53379	59.1344	115.4125	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53379	59.1344	115.4125	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53379	59.1344	115.4125	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	72.06203	115.1789	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	72.06203	115.1789	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44465	71.88763	115.1551	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44465	71.88763	115.1551	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	45.36699	115.0636	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	45.36699	115.0636	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	45.33529	115.0004	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65184	45.33529	115.0004	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65163	45.64099	114.6323	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65163	45.64099	114.6323	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65163	45.61599	114.5737	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	FROM->							

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65196	44.29164	114.1797	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39865	74.49845	114.1151	'BUNGE - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39865	74.49845	114.1151	'BUNGE - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44458	70.51817	113.876	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44458	70.51817	113.876	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44278	70.60353	113.8652	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44278	70.60353	113.8652	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43694	71.0454	113.8508	'EASTOWN7 345.00 [EASTOWN 345] 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43694	71.0454	113.8508	'EASTOWN7 345.00 [EASTOWN 345] 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43968	70.60006	113.7734	'P23:345:OPPD:53456-53459&T4'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43968	70.60006	113.7734	'P23:345:OPPD:53456-53459&T4'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.49049	113.6529	'P23:345:OPPD:53458-MULLNCR'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.49049	113.6529	'P23:345:OPPD:53458-MULLNCR'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43971	70.33579	113.5041	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43971	70.33579	113.5041	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43971	70.33579	113.5041	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43971	70.33579	113.5041	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.2356	113.411	'P23:345:OPPD:53456-53455'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.2356	113.411	'P23:345:OPPD:53456-53455'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.17307	113.3465	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.17307	113.3465	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.17307	113.3465	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43983	70.17307	113.3465	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65248	43.46441	113.1007	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65248	43.46441	113.1007	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	69.90481	113.0643	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	69.90481	113.0643	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	69.90481	113.0643	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	69.90481	113.0643	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65248	43.44195	113.0448	'HARVIE E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.65248	43.44195	113.0448	'HARVIE E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44458	69.53422	113.0399	'SMPTAP 161.00 - LATHROP 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44458	69.53422	113.0399	'SMPTAP 161.00 - LATHROP 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.82461	113.039	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.82461	113.039	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.1933	112.9875	'P22:345:OPPD:53458 NEBCTY2G'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.1933	112.9875	'P22:345:OPPD:53458 NEBCTY2G'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.1933	112.9875	'P23:345:OPPD:53458 NEBCTY2G'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.1933	112.9875	'P23:345:OPPD:53458 NEBCTY2G'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43766	70.17445	112.8452	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43766	70.17445	112.8452	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.66196	112.7897	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.66196	112.7897	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.61571	112.7334	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.61571	112.7334	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.51382	112.6856	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.51382	112.6856	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.50645	112.677	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	69.50645	112.677	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44591	69.16935	112.6628	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44591	69.16935	112.6628	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	68.33688	111.3563	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.45304	65.68601	110.1429	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.45304	65.68601	110.1429	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53564	53.89311	110.0614	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53564	53.89311	110.0614	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.53564	53.89311	110.0614	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43945	63.93917	110.0413	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43945	63.939		

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (%)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	66.46594	109.4715	'ARBR HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	66.46594	109.4715	'ARBR HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43892	66.60703	109.4541	'P23-345-OPPD:S3456-S3458&T4'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43892	66.60703	109.4541	'P23-345-OPPD:S3456-S3458&T4'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	66.68516	109.4258	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	66.68516	109.4258	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	66.39663	109.4145	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	66.39663	109.4145	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	66.2353	109.2781	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	66.2353	109.2781	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43916	63.17028	109.2504	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	17WP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43916	63.17028	109.2504	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	66.10162	109.1237	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	66.10162	109.1237	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44426	65.35659	109.0583	'P42-345-NPPD:BKR-CPR-3322"
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44426	65.35659	109.0583	'P42-345-NPPD:BKR-CPR-3322"
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44426	65.34589	109.0461	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44426	65.34589	109.0461	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	65.82553	108.9636	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	65.82553	108.9636	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	66.15941	108.8332	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43959	66.15941	108.8332	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	65.83976	108.8299	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	65.83976	108.8299	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39866	69.22877	108.6819	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39866	69.22877	108.6819	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	65.9633	108.65	'GEN344225 1-CAL G1 25.000'
FDNS	13ALL	0	26SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43992	65.9633	108.65	'GEN344225 1-CAL G1 25.000'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44464	65.48912	108.6133	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44464	65.48912	108.6133	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43693	65.12086	107.9433	'EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43693	65.12086	107.9433	'EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44457	64.5399	107.7172	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44457	64.5399	107.7172	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44277	64.58263	107.5948	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44277	64.58263	107.5948	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43967	64.49294	107.5069	'P23-345-OPPD:S3456-S3459&T4'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43967	64.49294	107.5069	'P23-345-OPPD:S3456-S3459&T4'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44572	64.16312	107.3552	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44572	64.16312	107.3552	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.34547	107.3378	'P23-345-OPPD:S3458-MULLNCR "
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.34547	107.3378	'P23-345-OPPD:S3458-MULLNCR "
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39866	67.89876	107.3073	'BUNGE - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.39866	67.89876	107.3073	'BUNGE - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43969	64.2432	107.2406	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43969	64.2432	107.2406	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43969	64.2432	107.2406	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43969	64.2432	107.2406	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.09819	107.0933	'P23-345-OPPD:S3456-S3455"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.09819	107.0933	'P23-345-OPPD:S3456-S3455"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.03698	107.0292	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.03698	107.0292	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.03698	107.0292	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43981	64.03698	107.0292	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43765	64.33198	106.9086	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43765	64.33198	106.9086	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	63.81206	106.791	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	63.81206	106.791	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	63.81206	106.791	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	63.81206	106.791	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.77172	106.6633	'P22-345-OPPD:S3458 NEBCY2G"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.77172	106.6633	'P22-345-OPPD:S3458 NEBCY2G"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.77172	106.6633	'P22-345-OPPD:S3458 NEBCY2G"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.77172	106.6633	'P22-345-OPPD:S3458 NEBCY2G"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.63222	106.6596	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	63.63222	106.6596	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44457	63.25202	106.5581	'SMPLTAP 161.00 - LATHROP 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44457	63.25202	106.5581	'SMPLTAP 161.00 - LATHROP 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44587	63.11849	106.4614	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44587	63.11849	106.4614	'MCK

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	62.22908	105.0328	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43989	60.80931	103.7964	'P55:345:GMO:SIBLEY BUS 11:VALID PRIOR TO 6"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43989	60.80931	103.7964	'P55:345:GMO:SIBLEY BUS 11:VALID PRIOR TO 6"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4583	59.22162	103.7297	'FAIRPORT - ST JOE 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4583	59.22162	103.7297	'FAIRPORT - ST JOE 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4583	59.22162	103.7297	'FAIRPORT - ST JOE 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4583	59.22162	103.7297	'FAIRPORT - ST JOE 345KV CKT 1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.07829	103.6768	'GEN335831 1-RIVERBEND UNIT#1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.07829	103.6768	'GEN335831 1-RIVERBEND UNIT#1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.06245	103.6318	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.06245	103.6318	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.00392	103.5891	'GEN336153 1-WATERFORD UNIT#3'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	61.00392	103.5891	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43931	60.79401	103.5236	'P55:345:KCPH:HAWTHORN BUS 20"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43931	60.79401	103.5236	'P55:345:KCPH:HAWTHORN BUS 20"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43893	60.82464	103.4367	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43893	60.82464	103.4367	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43893	60.82464	103.4367	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43893	60.82464	103.4367	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4389	60.79855	103.4076	'P23:345:OPPD:S3456-S3458&T4"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.4389	60.79855	103.4076	'P23:345:OPPD:S3456-S3458&T4"
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	60.63492	103.3838	'ARBR HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	60.63492	103.3838	'ARBR HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	60.66751	103.1954	'GEN336821 1-GRAND GULF UNIT'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	60.66751	103.1954	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.46183	103.0765	'P42:345:NPPD:BKR-CPR-3322"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.46183	103.0765	'P42:345:NPPD:BKR-CPR-3322"
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.4511	103.062	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.4511	103.062	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.4511	103.062	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.44425	59.4511	103.062	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	60.26226	103.0272	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43982	60.26226	103.0272	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	60.20711	102.9833	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	60.20711	102.9833	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	60.03843	102.7322	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43958	60.03843	102.7322	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	59.78932	102.7223	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	59.78932	102.7223	'GEN300003 1-THOMAS HILL UNIT 3'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	59.92558	102.4507	'GEN344225 1-1CAL G1 25.000'
FDNSLock	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43991	59.92558	102.4507	'GEN344225 1-1CAL G1 25.000'
FDNS	13ALL	0	18G	ASGI 18 01	'TO->FROM'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43934	54.95275	100.6197	'GEN 86115 1-J611 G 0.6900'
FDNS	13ALL	0	18G	ASGI 18 01	'FROM->TO'	MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.43934	54.95275	100.6197	'GEN 86115 1-J611 G 0.6900'

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.29345	72.5286	105.4286	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	'TO->FROM'	'CRESTON - MARYVILLE 161KV CKT 1'	208	208	0.29345	72.5286	105.4286	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	46.15224	113.8268	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	46.15224	113.8268	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	44.82535	112.7925	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	44.82535	112.7925	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	44.79408	112.7334	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.64213	44.79408	112.7334	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.52317	52.20535	107.2283	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.52317	52.20535	107.2283	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'TO->FROM'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.52317	52.20535	107.2283	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	'FROM->TO'	'MARYVILLE - MARYVILLE 161KV CKT 1'	229	229	0.52317	52.20535	107.2283	'CRESTON - MARYVILLE 161KV CKT 1'

APPENDIX B-T: THERMAL CONSTRAINTS NOT FOR MITIGATION

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22382	-9999	9999	"P11:161:OPPD-NOMA 5G"
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22382	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22313	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	-9999	9999	"P11:161:OPPD-NOMA 5G"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22483	-9999	9999	"P11:161:OPPD-NOMA 5G"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22483	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	-9999	9999	"P11:161:OPPD-NOMA 5G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29097	96.47076	134.8137	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29097	96.47076	134.8137	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2841	98.30142	134.2683	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32617	89.76637	132.5273	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.327	89.63885	132.4665	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2841	95.54444	131.5582	'AVENUCTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2841	95.13544	131.1374	'AVENUCTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2841	95.13528	131.1337	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32776	85.70175	130.1967	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22382	97.02798	129.8302	System Intact
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22483	96.78891	129.7944	System Intact
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28767	91.90267	129.3567	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28767	91.90267	129.3567	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32776	84.88715	129.2471	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32776	84.85543	129.2443	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.327	85.92039	129.0172	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.327	85.90862	129.0111	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32617	86.06403	129.0005	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32617	86.05434	128.9948	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22483	99.964	128.5385	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22443	99.9869	128.3834	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22443	99.9869	128.3834	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22468	99.89574	128.3045	'P23:345:OPPD-S3458-MULLNCR"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	99.80079	128.2675	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22468	99.52419	127.9436	'P23:345:OPPD-S3456-S3455"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22468	99.38741	127.8108	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22468	99.38741	127.8108	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	127.2047	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	98.58014	127.0412	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	98.54577	127.0067	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	98.22473	126.7433	'OTTUMWA 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	98.20798	126.6767	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22455	98.08901	126.4808	'7MAYWOOD 345.00 - 7SPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32569	83.70074	126.2804	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.8265	126.2799	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.69868	126.149	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.66789	126.1219	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.62112	126.0818	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.61444	126.0751	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.61955	126.0735	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.52499	125.9997	'ARNOLD 161/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.23251	96.65299	125.9797	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.16441	125.6329	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	97.16441	125.6329	'GEN659107 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32712	82.13304	125.5555	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	97.4248	125.4927	'GEN36170 1-GULF OXY U4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22476	97.3728	125.4505	'P42:500:OKGE:SB FTTH8581"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22476	97.35056	125.4277	'P42:500:OKGE:SB FTTH8583"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22476	97.34748	125.4246	'ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22476	97.34748	125.4246	'ARKANSAS NUCLEAR ONE - FT SMITH 500KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22471	96.98422	125.4119	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22471	96.98422	125.4119	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	97.33442	125.4018	'GEN337757 1-DUKE HOTSPRINGS STG1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	96.92092	125.3884	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22574	96.76557	125.2541	'COOPER - MONOLITH 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	96.7742	125.204	'P22:345:OPPD-S3458-NEBCTY2G"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	96.7742	125.204	'P23:345:OPPD-S3458-NEBCTY2G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	97.14149	125.1984	'P12:069:WERE:2MAD-TEC_69_1:1"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	96.74216	125.198	'BIG STONE 230/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	96.72152	125.1617	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18								

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATE (MVA)	RATE%(MVA)	TDF	BC%LOADING (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.8906	124.9612	'GEN336151 1-WATERFORD UNIT#1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.89057	124.9612	'GEN336152 1-WATERFORD UNIT#2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.89056	124.9455	'P23-345-AEPW-RIVERSIDE CB 3429A NBTB"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.88507	124.9402	'P23-345-AEPW-RIVERSIDE CB 3433A NBTB"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.46127	124.9209	'ALMA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.45683	124.9134	'GEN640011 2-GERALD GENTLEMAN STATION UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.44235	124.9011	'GEN659118 1-LARAMIE RIVER UNIT1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22736	96.22365	124.8729	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.76643	124.8374	'GEN336222 1-LITTLE GYPSY UNIT#2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.71944	124.802	'GEN542956 2-LACYGNE UNIT #2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.33562	124.7897	'COYOTE 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.32862	124.7852	'GEN640010 1-GERALD GENTLEMAN STATION UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.70354	124.7738	'GEN501811 1-RODEMACHER UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22575	96.18201	124.7501	'HAWTHORN - NASHUA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.29074	124.743	'P42-345-UMZB# 2494 #: LO IN ND. STUCK BREAKER (2196)''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.29074	124.743	'P42-345-UMZB# 2495 #: LO IN ND. STUCK BREAKER (2396)''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	96.23631	124.7329	'ATCHSN 3 345.00 -J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22536	96.21075	124.7008	'P23-345-WERE87TH 345 BKRS:..."
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22534	96.21573	124.7	'87H STREET - STRANGER CREEK 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22674	96.01255	124.6986	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	95.68279	124.6981	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22482	96.53701	124.6335	'ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.54755	124.6182	'GEN334433 1-SABINE UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.44193	124.498	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.27065	124.4954	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	96.01625	124.4765	'GENOA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.36867	124.4528	'GEN542955 1-LACYGNE UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.34096	124.4121	'GEN334441 1-SABINE UNIT 5'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.35617	124.4093	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.35576	124.4089	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.89883	124.3534	'BOUNDARY DAM 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22553	95.86118	124.3531	'P23-345-WERE-STR 345-99:..."
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22364	95.05573	124.3066	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.87983	124.2793	'GEN635050 3-SHENENDOH'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.19438	124.2665	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.80218	124.2572	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.80194	124.257	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.79475	124.2521	'CHEMOLITE - LS POWER 7 115.00 115KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.78953	124.2441	'SHAND 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	95.758	124.2301	'ATCHSN 3 345.00 -J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	95.758	124.2301	'ATCHSN 3 345.00 -J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.15299	124.2239	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22729	95.54542	124.2232	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.13487	124.2058	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22383	96.32718	124.177	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	95.71931	124.1766	'FARIBALT GEN115.00 - FEP TAP 115KV CKT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2279	95.67725	124.1545	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.04054	124.1131	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.02275	124.0955	'GEN336464 1-MICHOUD UNIT #3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	94.88281	124.0844	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	96.00375	124.0764	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28384	86.93745	124.0585	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.96796	124.0409	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28294	87.03568	123.9749	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.84125	123.9187	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.83082	123.902	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.79266	123.8661	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.77557	123.8477	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.76355	123.8371	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22641	95.63509	123.8175	'COOPER - ST JOE 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.73481	123.8072	'GEN337692 1-LAKE CATHERINE UNIT #4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.68233	123.762	'GEN345671 2-IRUSH G2 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.68146	123.7612	'GEN345670 1-IRUSH G1 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22402	95.80588	123.7228	'HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22402	95.80141	123.7228	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	123.6237	'GEN999125 1-G161-GEN1 0.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.50613	123.5887	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.50578	123.5883	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.50577	123.5883	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.50547	123.588	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.47319	123.5683	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	95.47804	123.5511	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22494	95.49896	123.5505	'P23-345-WEREJEC 3

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (%)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.90779	122.9851	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.87453	122.9516	'GEN336252 1-NINEMILE POINT UNITH5'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	93.70449	122.9258	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22546	94.78057	122.8837	'P23-345:WEREJEC 345-16:'''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22498	94.37682	122.4393	'P23-345:WEREWOLF 345-50:'''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	122.358	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.23882	122.3396	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22321	93.20475	122.2408	'P23-345:OPPD:S3456-S3459&T4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.17327	122.2317	'P23-345:WEREWOLF 345-60:'''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	93.0237	122.1724	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.08259	122.1629	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22289	93.18929	122.1606	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22289	93.18929	122.1606	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	94.07193	122.1523	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22288	94.10108	122.0529	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22288	94.10108	122.0529	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22404	92.8064	122.0183	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22404	92.8064	122.0183	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22282	94.01563	121.9661	'P23-345:OPPD:S3456-S3458&T4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22431	92.72673	121.9565	'P23-345:OPPD:S3456-S3459&T4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22325	92.70169	121.7671	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22325	92.70169	121.7671	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22435	92.24596	121.4924	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22435	92.24596	121.4924	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	93.30849	121.4004	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	93.02454	121.0908	'GEN335831 1-RIVERBEND UNITH1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	91.84655	121.0786	'OTTUMWA 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	91.61835	120.7671	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	92.62057	120.6905	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	92.17252	120.6268	'GEN336170 1-GULF OXY U4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	92.13664	120.6073	'7CALAWY 1 345.00 345/25.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	92.13294	120.5884	'GEN501811 1-RODEMACHER UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	92.08337	120.5388	'GEN337757 1-DUKE HOTSPRINGS STG1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22481	91.99574	120.47	'ARRB HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.90245	120.3556	'GEN337692 1-LAKE CATHERINE UNIT #4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22364	91.15904	120.3508	'ATCHSN 3 345.00 - J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.89096	120.3366	'P12-069:WERE:2MAD-TEC 69 1:'''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	91.17449	120.3332	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21861	92.69064	120.3036	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.87286	120.2708	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.86164	120.261	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.82493	120.231	'GEN588253 1-G16-174-GEN10.6900'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	91.05266	120.2018	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.75726	120.1794	'GEN588243 1-G16-149-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.72113	120.1756	'GEN336151 1-WATERFORD UNIT#1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.72088	120.1753	'GEN336152 1-WATERFORD UNIT#2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.62624	120.0808	'GEN336222 1-LITTLE GYPSY UNIT#2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22481	91.57349	120.0661	'ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	-999	120.0509	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	-999	120.0183	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.52153	119.9905	'GEN542956 2-LACYGNE UNIT #2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.80453	119.9478	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28294	82.93549	119.9308	'AVENUECTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.74579	119.8892	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28384	82.69817	119.8773	'AVENUECTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.4016	119.8549	'GEN334433 1-SABINE UNIT 3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.67307	119.8351	'ARNOLD 161/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.55196	119.7035	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.54427	119.6959	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	90.33522	119.6755	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.03507	119.6588	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.20523	119.6584	'GEN334441 1-SABINE UNIT 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.21523	119.6547	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	-999	119.6435	'OTTUMWA 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.17754	119.642	'GEN542955 1-LACYGNE UNIT #1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22381	91.39082	119.6186	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22356	90.51782	119.6156	'P23-345:OPPD:S3456-S3455'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	91.13213	11	

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28384	82.2749	119.4564	'AVENUECTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28384	82.27396	119.4564	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.97861	119.4343	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22462	90.09277	119.3805	'P23-345-OPPD-S3456-S3455'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.89668	119.3537	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	90.01052	119.3383	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.87737	119.3344	'GEN336464 1-MICHOUD UNIT #3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.87212	119.3279	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.19829	119.3266	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.85793	119.3149	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22479	89.92247	119.3066	'ATCHSN 3 345.00 -J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	91.17028	119.3051	'GEN344225 1-1CAL G1 25.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22463	90.00156	119.2939	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22463	90.00156	119.2939	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.95935	119.2871	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22463	89.99043	119.279	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22463	89.99043	119.279	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22463	89.99035	119.2789	'P23-345-OPPD-S3458-MULLNCR 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	90.05502	119.2057	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	84.41103	119.161	System Intact
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.68522	119.1405	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22401	90.83713	119.1383	'HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22401	90.83055	119.1367	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.75759	119.0928	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.7413	119.0894	'ARNOLD 161/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.75109	119.0863	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.61857	119.0772	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.91943	119.0669	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22358	89.97986	119.0482	'7MAYWOOD 345.00 - ZSPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22358	89.97804	119.0454	'7MONTGOMRY 345.00 - ZSPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2298	89.91842	118.9917	'P42-345-NPPD-BKR-CPR-3322'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.65018	118.985	'AS KING 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.52729	118.9847	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	90.89499	118.9749	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.50741	118.9633	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.49792	118.9555	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22979	89.87453	118.947	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22979	89.87453	118.947	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.61398	118.9466	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.55962	118.8948	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.3941	118.8594	'GEN345671 2-1RUSH G2 18.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.39336	118.8587	'GEN345670 1-1RUSH G1 18.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.37465	118.8326	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22789	89.96375	118.8242	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	93.90188	118.7945	'GEN999125 1-GI61-GEN1 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.48113	118.7945	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.35977	118.7858	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.21009	118.6664	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.48441	118.6503	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.48441	118.6503	'GEN659102 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.17512	118.64	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.17477	118.6396	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.17477	118.6396	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22451	89.38736	118.6394	'7MAYWOOD 345.00 - ZSPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.17447	118.6393	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22451	89.38316	118.636	'7MONTGOMRY 345.00 - ZSPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.47972	118.6281	'BIG STONE 230/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25683	86.20128	118.6102	'FAIRPORT 345/161KV TRANSFORMER CKT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.15606	118.5745	'P23-345-WEREJEC 345-19-1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.15569	118.5741	'P23-345-WEREJEC 345-15-1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	90.0491	118.5092	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22479	89.11514	118.4783	'ATCHSN 3 345.00 -J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22479	89.11514	118.4783	'ATCHSN 3 345.00 -J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.30704	118.4605	'GEN600002 3-SHERBURNE CNTY G3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	89.24366	118.4088	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.05044	118.397	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.05044		

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATE (MVA)	RATEB (MVA)	TDF	BC%LOADING (MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	89.6644	118.1186	'GEN501801 1-DOLET HILLS UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.77764	118.1078	'SQUARE BUTTE - YNG2 4 230.00 230KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.77766	118.1078	'YNG2 4 230.00 230/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.95803	118.1059	'COYOTE 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	89.09625	118.0906	'GEN635059 W-ADAMS W1 0 6000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.84797	118.0827	'GEN629075 1-OTTUMWA GENERATOR FOR OTTUMWA UNIT NO 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.91036	118.068	'ALMA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23182	87.84998	118.042	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.72929	118.0391	'P23-345-OPPD-S3458 NEBCTY2G'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.72929	118.0391	'P23-345-OPPD-S3458 NEBCTY2G'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23282	87.72787	118.0332	'MARYVILLE 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22567	88.65321	118.0197	'COOPER - MONOLITH 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.67422	118.0046	'COYOTE 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22667	88.46397	117.9872	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22465	88.69345	117.968	'HAWTHORN - NASHUA 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.78833	117.9349	'P42-345-UMZB# 2494 #. LO IN ND. STUCK BREAKER (2196)''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.78833	117.9349	'P42-345-UMZB# 2495 #. LO IN ND. STUCK BREAKER (2396)''
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22566	88.45353	117.9139	'HAWTHORN - NASHUA 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.55977	117.9095	'GEN635213 3-NEAL UNIT 3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.75648	117.9059	'BOUNDARY DAM 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.68882	117.9052	'ALMA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.57414	117.9026	'P45-345-UMZB# 2515 #. SQ IN NB. BREAKER FAULT (7196;7092;7292)''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22625	88.48626	117.8941	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22285	89.55419	117.8825	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22285	89.55419	117.8825	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22138	88.96713	117.8806	'P23-345-OPPD-S3456-S3459'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	89.06008	117.8655	'GEN300025 1-NODAWAY UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.53142	117.8635	'MAPLE RIVER - PILSBRYA 230.00 230KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.68589	117.8357	'MAPLE RIVER - PILSBRYA 230.00 230KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.68415	117.8339	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.68404	117.8338	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.49564	117.8248	'P42-345-UMZB# 2506 #. AVS IN ND. STUCK BREAKER (3796)''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.66761	117.8216	'GEN600000 1-SHERBURNECNTY G1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22279	89.49044	117.8165	'P23-345-OPPD-S3456-S3458&T4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.64455	117.7942	'BRADA - NBEC 4 230.00 230KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.44196	117.7792	'GEN600002 3-SHERBURNE CNTY G3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.6217	117.771	'SHAND 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	88.95505	117.7669	'GEN300026 1-NODAWAY UNIT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22725	88.27198	117.7487	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.37406	117.7102	'GEN640011 2-GERALD GENTLEMAN STATION UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	88.89603	117.7039	'NODAWAY 161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.48901	117.647	'GEN600001 2-SHERBURNE CNTY G2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22528	88.13955	117.6426	'P23-345-WERE:R7TH 345 BKRS:'''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	88.65784	117.6368	'GEN300026 1-NODAWAY UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22496	89.19668	117.6334	'P23-345-WERE:WOLF 345-50:'''
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28478	78.9782	117.62	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.28767	117.6175	'P42-345-UMZB# 2494 #. LO IN ND. STUCK BREAKER (2196)''
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.28767	117.6175	'P42-345-UMZB# 2495 #. LO IN ND. STUCK BREAKER (2396)''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	89.15198	117.6099	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.27213	117.6094	'GEN640010 1-GERALD GENTLEMAN STATION UNIT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.47483	117.6088	'GEN645025 5-NORTH OMAHA 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	89.18443	117.6049	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	88.78934	117.6034	'NODAWAY 161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22525	88.10025	117.596	'87TH STREET - STRANGER CREEK 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22426	88.29177	117.5882	'P23-345-WERE:R7TH 345 BKRS:'''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.42941	117.5854	'GENOA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.42947	117.5826	'CHEMOLITE - IS POWER 7 115.00 115KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.42596	117.5721	'GEN615002 2-COAL CREEK'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.22691	117.567	'GEN659118 1-LARAMIE RIVER UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.23409	117.566	'BOUNDARY DAM 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22457	88.34953	117.5658	'P42-345-NPPD-BKR-CPR-3310'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	88.57851	117.5595	'NODAWAY 161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.39836	117.5449	'GEN615001 1-COAL CREEK'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22424	88.25053	117.5412	'87TH STREET - STRANGER CREEK 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22664	87.90179	117.533	'P23-345-WERE:STRA 345-100:'''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.37075	117.5292	'GEN659118 1-LARAMIE RIVER UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.18586	117.5038	'GEN645025 5-NORTH OMAHA 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	89.06063	117.4929	'P23-345-WERE:WOLF 345-60:'''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.2992	117.4527	'OLIVER COUNTY 1 - SQUARE BUTTE 230KV CKT Z1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.11402	117.4525	'GENOA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	88.11543	117.4478	'SHAND 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.28883	117.4432	'GEN600005 1-MONTICELLO'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22			

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.08398	117.2397	'GEN600006 1-AS KING'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	87.90515	117.2383	'BRADA - NBEC 4 230.00 230KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25721	84.70853	117.2274	'P42-345-NPPD-BKR-C-3322-2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25721	84.67986	117.1983	'P12-345-NPPD-3517-COOPER 3-ST JOE 3-BTB'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	88.04235	117.1937	'LANSING WEST 161/22 OKV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	87.83113	117.167	'FARIBALT GEN115.00 - FEP TAP 115KV CKT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22413	87.82448	117.1528	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22413	87.82448	117.1528	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22718	87.59198	117.1523	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22364	87.98402	117.1425	'COOPER - J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22544	87.63191	117.1331	'P23-345-WERE-STRA 345-99-3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22513	87.59711	117.1292	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22513	87.59711	117.1292	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	88.17244	116.6677	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28478	77.82066	116.5066	'AVENUCTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	87.74369	116.2064	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	87.72749	116.1859	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28478	77.33006	116.0876	'AVENUCTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28478	77.3147	116.083	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	87.33881	115.8026	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	115.4046	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	115.3728	'2606-NEBRASKA CITY 2'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	86.2853	115.2886	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	84.11897	114.6877	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	81.38807	114.5747	System Intact
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	85.73441	114.2302	'GEN344225 1-ICAL G1 25000'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	85.6032	114.0741	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.25371	113.617	'7CALAWY 1 345.00 345/25.OKV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.46147	113.6164	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.47312	113.6122	'P23-345-AEPW-RIVERSIDE CB 3429A NBTB'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.45844	113.5979	'P23-345-AEPW-RIVERSIDE CB 3433A NBTB'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.4248	113.5796	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.23676	113.5777	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22476	84.23421	113.5713	'PONY CREEK - RHLH53 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22537	84.19299	113.5516	'COOPER - ST JOE 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.39242	113.5474	'GEN336464 1-MICHOUD UNIT #3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22401	85.34042	113.547	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.38173	113.5366	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.37316	113.5328	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.18349	113.5243	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.15479	113.4956	'GEN336464 1-MICHOUD UNIT #3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.14993	113.4896	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.11654	113.4874	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.14288	113.4837	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28256	76.2382	113.4308	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.25817	113.4236	'7CALAWY 1 345.00 345/25.OKV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22378	84.21974	113.3944	'PONY CREEK - RHLH53 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22983	83.37336	113.3921	'P42-345-NPPD-BKR-CPR-3322'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.27642	113.3815	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.26585	113.3717	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.20511	113.3644	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22983	83.33357	113.3522	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22983	83.33357	113.3522	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.05617	113.3432	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	84.22715	113.3397	'GEN588253 1-G16-174-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	84.04453	113.333	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.97077	113.3101	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'						

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.52083	112.8433	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22404	83.65255	112.8421	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.69422	112.835	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22308	83.82771	112.8152	'HILLS - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.67181	112.8101	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.67142	112.8098	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.46558	112.8084	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.45818	112.8	'GEN336252 1-NINEMILE POINT UNITS'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.45923	112.7999	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.65086	112.7911	'GEN336831 1-BAKTER WILSON SES'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.42205	112.7644	'GEN336831 1-BAKTER WILSON SES'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.44227	112.7616	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.44186	112.7612	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22877	82.90793	112.7291	'P42-345:NPPD:BKR-CPR-3322'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.56613	112.7165	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22877	82.86073	112.6819	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22877	82.86073	112.6819	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.08362	112.6601	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.23368	112.6343	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.25936	112.6017	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22376	83.48767	112.595	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22376	83.33109	112.5822	'ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25683	79.66748	112.5801	'FAIRPORT 345/161KV TRANSFORMER CKT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21852	84.08371	112.5587	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22289	83.5928	112.5582	'HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22289	83.5862	112.5555	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.19067	112.533	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22474	83.13388	112.5246	'ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.16592	112.5083	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.15018	112.4911	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.30245	112.4426	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22163	83.43826	112.4393	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22163	83.43826	112.4393	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.27189	112.4119	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.24592	112.386	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.24025	112.3791	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.02464	112.3785	'GEN345671 2-IRUSH G2 18.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	83.02388	112.3778	'GEN345670 1-IRUSH G1 18.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21762	84.02123	112.3594	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22158	83.33878	112.337	'P23-345:OPPD:S3456-S3458&T4'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22385	83.1362	112.2636	'P23-345:WEREJEC 345-20:'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.08926	112.2505	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.90571	112.2466	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	83.0601	112.2459	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.89578	112.2371	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.83699	112.1925	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.83663	112.1922	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.83663	112.1922	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.83634	112.1919	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.81458	112.1611	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.97035	112.1226	'GEN345671 2-IRUSH G2 18.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.96949	112.1219	'GEN345670 1-IRUSH G1 18.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.72173	112.1184	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.97821	112.1174	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22486	82.77943	112.0905	'P23-345:WEREJEC 345-20:'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22383	82.91628	112.0282	'P23-345:WEREJEC 345-19:'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22383	82.91595	112.0279	'P23-345:WEREJEC 345-15:'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.83667	111.9761	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22281	82.7067	111.9343	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22281	82.7067	111.9343	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.76712	111.9215	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.76672	111.9211	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.7667	111.9211	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.76636	111.9208	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22275	82.63986	111.8634	'P23-345:OPPD:S3456-S3458&T4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.55251	111.8502	'P23-345:WEREJEC 345-19:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	82.55218	111.8499	'P23-345:WEREJEC 345-15:'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	86.2471	111.8339	'GEN999125 1-G161-GEN1 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	86.03458	111.7959	'GEN999125 1-G161-GEN1 0.6900'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	81.01885	111.7413	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	-999	111.7206	'GEN501801 1-DOLET HILLS UNIT1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	82.4515	111.6437	'GEN501801 1-DOLET HILLS UNIT1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2572	78.53518	111.4729	'P42-345:NPPD:BKR-C-3322-2'
FDNS</												

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22383	81.888	111.0052	"P23-345:WERE-WOLF 345-60:"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22775	81.29161	110.9598	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	81.72256	110.9194	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	81.71356	110.9099	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28256	73.66443	110.9082	'AVENUECTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28256	73.64816	110.9058	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	81.70682	110.9057	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2249	81.55885	110.8713	'P23-345:WERE-WOLF 345-50:"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	81.48824	110.8644	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	81.47608	110.7821	'P23-345:WERE-WOLF 345-60:"
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	81.32201	110.5646	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	79.73891	110.5	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	80.9653	110.2072	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	80.84326	110.1912	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	79.34775	110.1249	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	80.76278	110.1061	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22522	79.19328	110.0407	'P23-345:OPPD-53456-53459&T4"
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	80.81429	110.0161	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	80.52218	109.9706	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	80.75444	109.9526	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	79.09573	109.8997	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	80.49555	109.8449	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22762	78.48408	109.685	'P23-345:WERE-STRA 345-100:"
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	80.45284	109.6468	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22527	78.91891	109.6329	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22527	78.91891	109.6329	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.76005	109.5514	'ARNOLD 161/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.74005	109.5316	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.73395	109.5257	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.70431	109.4975	'OTTUMWA 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.65384	109.4465	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	79.99309	109.3391	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.52097	109.3176	'GEN600002 3-SHERBURNE CNTY G3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.48129	109.2633	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	78.46198	109.2346	'GEN635059 W-ADAMS W1 0.6000'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	79.9522	109.1466	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.97401	108.7962	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.90604	108.72	'BIG STONE 230/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.7907	108.6053	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.7907	108.6053	'GEN659107 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22762	77.3503	108.5702	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	79.12688	108.4792	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.60547	108.4279	'GEN600005 1-MONTICELLO'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.58555	108.4065	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	79.0418	108.4035	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.57284	108.3986	'GEN600001 2-SHERBURNE CNTY G2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	78.90578	108.3129	'GEN344225 1-1CAL G1 25.000'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22555	77.54104	108.3047	'P23-345:OPPD-53456-53455"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22556	77.51934	108.2915	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22556	77.51934	108.2915	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22292	78.819	108.2748	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22556	77.48084	108.2649	'P23-345:OPPD-53458-MULLNCR'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22556	77.48103	108.2649	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22556	77.48103	108.2649	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22199	79.06761	108.2545	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22199	79.06761	108.2545	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.3469	108.1756	'P42-345:UMZB# 2506 #: AVS IN ND. STUCK BREAKER (3796)'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22577	77.31499	108.1441	'P45-345:UMZB# 2515 #: SQ IN NB. BREAKER FAULT (7196;7092;7292)''
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22382	78.90426	108.1187	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.26311	108.0941	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.26221	108.0939	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22608	76.76323	108.0664	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22608	76.76323	108.0664	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.2002	108.0337	'GEN600000 1-SHERBURNECNTY G1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.15908	107.9934	'P42-345:UMZB# 2494 #: LO IN ND. STUCK BREAKER (2196)'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.15908	107.9934	'P42-345:UMZB# 2495 #: LO IN ND. STUCK BREAKER (2396)'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22244	78.72465	107.9843	'P23-345:OPPD-53456-53459&T4"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	77.14771	107.9833	'ALMA 161 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22668	77.06688	107.9764	'COOPER - MONOLITH 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22755	76.68284	107.9209	'CHILLICOTHE - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22547	77.17177	107.9144	'7MONTGOMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22547	77.17233	107.9136	'7MAYWOOD 345.00 - 7SPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 16						

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22249	78.28535	107.5794	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22249	78.28535	107.5794	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'	
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22404	78.08852	107.3634	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'	
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22289	77.78128	106.8292	'KETCHEM7 345.00 - SIBLEY 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	77.32417	106.6994	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	77.30762	106.6915	'SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	77.17154	106.5805	'OTTUMWA 161/24.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	77.16907	106.5499	'MONTICELLO 345/22.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	76.84968	106.241	'COAL CREEK 230/22.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	76.84214	106.2313	'ARNOLD 161/22.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	76.57773	106.0064	'GEN635214 4-NEAL UNIT 4'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	76.60282	106.0002	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	76.59555	105.9931	'PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	75.03203	105.9209	'2218-NEBRASKA CITY 2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	75.03203	105.9209	'2566-NEBRASKA CITY 2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	75.03203	105.9209	'2606-NEBRASKA CITY 2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.23592	105.5718	'*P23-345-OPPD:S3456-S3455'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.13249	105.4779	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.13249	105.4779	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.12041	105.4598	'SUB 3455 - SUB 3740 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.12041	105.4598	'SUB 3455 - SUB 3740 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22283	76.12035	105.4597	'*P23-345-OPPD:S3458-MULLNCR'	
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25636	71.79472	105.3708	'FAIRPORT 345/161KV TRANSFORMER CKT 3'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.92829	105.3138	'GEN645012 2-NEBRASKA CITY 2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.88316	105.2979	'GEN600002 3-SHERBURNE CNTY G3'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.82301	105.2127	'GEN645011 1-NEBRASKA CITY 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22062	75.97548	105.1252	'*P23-345-OPPD:S3456-S3459'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.76708	105.1056	'GEN635059 W-ADAMS W1 0.6000'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.63544	105.0403	'GEN635023 3-WALTER SCOTT UNIT 3'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22498	75.1254	104.9765	'FAIRPORT - HICKORY CREEK 161KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.54865	104.9746	'BIG STONE 230/24.0KV TRANSFORMER CKT 1'	
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2568	71.31371	104.9662	'*P42-345-NPPD:BKR-C-3322-2'	
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2568	71.28629	104.939	'*P12-345-NPPD:3517-COOPER 3-ST JOE 3-8TB'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.45038	104.8666	'GEN659103 1-ANTELOPE VALLEY UNIT1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.45038	104.8666	'GEN659107 2-ANTELOPE VALLEY UNIT2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22278	75.44796	104.7906	'7MAYWOOD 345.00 - 7SPENCER 345.00 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22278	75.44431	104.7876	'7MONTGOMRY 345.00 - 7SPENCER 345.00 345KV CKT 1'	
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25549	71.3665	104.7393	'FAIRPORT 345/161KV TRANSFORMER CKT 3'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.24292	104.6648	'*P22-345-OPPD:S3458-NEBCTY2G'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.24292	104.6648	'*P23-345-OPPD:S3458-NEBCTY2G'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.21731	104.64	'GEN659111 2-LELAND OLDS UNIT2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22312	75.17104	104.605	'*P45-345-UMZB# 2515 3- SGQ IN NB. BREAKER FAULT (7196,7092,7292)''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22503	74.88844	104.5353	'*P23-345-WERE:STRA 345-100-''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22398	74.88181	104.4899	'HAWTHORN - NASHUA 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.03041	104.4689	'*P42-345-UMZB# 2506 3- AVS IN ND. STUCK BREAKER (3796)''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	75.029	104.4593	'GEN629075 1-OTTUMWA GENERATOR FOR OTTUMWA UNIT NO 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.95047	104.3903	'GEN600000 1-SHERBURNECNTY G1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.94263	104.3866	'GEN600001 2-SHERBURNE CNTY G2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22292	74.84919	104.3571	'ATCHSN 3 345.00 - J475 POI 345.00 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.81725	104.2616	'*P42-345-UMZB# 2494 3- LO IN ND. STUCK BREAKER (2196)''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.81725	104.2616	'*P42-345-UMZB# 2495 3- LO IN ND. STUCK BREAKER (2396)''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.81502	104.2606	'GEN615002 2-COAL CREEK'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22561	74.4053	104.2072	'FAIRPORT - OSBORN 161KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22358	74.6824	104.205	'*P23-345-WERE:87TH 345 BKRS-''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.69987	104.1459	'GEN600005 1-MONTICELLO'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22356	74.61805	104.1438	'87th STREET - STRANGER CREEK 345KV CKT 1'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22542	73.23083	104.1066	'HILLS - MONTEZUMA 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23076	73.62917	104.0893	'MARYVILLE 161/69KV TRANSFORMER CKT 2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22568	73.12003	104.0223	'ARBH HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'	
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25588	70.55087	104.0136	'*P42-345-NPPD:BKR-C-3322-2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21944	73.78176	104.0066	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21944	73.78176	104.0066	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'	
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25588	70.51855	103.9814	'*P12-345-NPPD:3517-COOPER 3-ST JOE 3-8TB'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	73.02773	103.9677	'GEN303007 1-1BC2 U2'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.47094	103.9232	'ALMA 161 161/24.0KV TRANSFORMER CKT 1'	
FDNS	Lock	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.47089	103.9177	'GEN629074 1-ARNOLD LOWSIDE OF GSU XFMR'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22372	73.21056	103.9135	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22372	73.21056	103.9135	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.44537	103.8981	'GEN600003 1-PRAIRIE ISLAND G1'	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.44202	103.8948	'GEN600004 2-PRAIRIE ISLAND G2'	
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22365	73.17583	103.8821	'*P23-345-OPPD:S3456-S3458&T4''	
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.3691	103.839	'GEN659118 1-LARAMIE RIVER UNIT1'	
FDNS	13ALL	0	18G	ASGI 1									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22388	74.13694	103.6653	'COOPER - MOORE 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.20761	103.6653	'AS KING 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22292	74.0928	103.65	'ATCHSN 3 345.00 -J570PO1 345.00 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22292	74.0928	103.65	'ATCHSN 3 345.00 -J570PO1 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.6497	103.6478	'GEN588243 1-G16-149-GEN10.6900'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	73.91599	103.6467	'CHILLICOTHE - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22378	74.11906	103.6345	'P42-345-NPPD-BKR-MOR-3308'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22343	74.06117	103.6336	'70VERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22343	74.06117	103.6336	'70VERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22555	73.86382	103.6295	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22388	74.08014	103.6167	'P42-345-NPPD-BKR-MOR-3302'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.61035	103.6002	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22568	72.68377	103.5935	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.58778	103.5855	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	74.11765	103.5775	'OLIVER COUNTY 1 - SQUARE BUTTE 230KV CKT 21'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.50452	103.5075	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.37558	103.3504	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	72.09921	103.0631	'GEN501801 1-DOLET HILLS UNIT1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21944	72.84098	102.9301	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22581	71.83	102.8053	'P23-345:WEREJEC 345-20:"'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	71.74094	102.7638	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	71.72208	102.7141	'P23-345:WEREJEC 345-19:"'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	71.60401	102.6282	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	71.59617	102.6209	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	71.53935	102.567	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	75.03203	102.3298	'GEN999125 1-G161-GEN1 0.6900'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22471	71.54048	102.3049	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25772	67.55324	102.0194	'FAIRPORT 345/161KV TRANSFORMER CKT 3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25821	67.32358	101.9847	'P42-345-NPPD-BKR-C-3322-2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.25821	67.30771	101.9691	'P12-345-NPPD-3517-COOPER 3-ST JOE 3-BTB"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.92577	101.9687	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	72.34496	101.8442	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.71976	101.7648	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.65665	101.7049	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.51723	101.5561	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	99.14206	101.5414	'GEN999126 1-G161-GEN2 0.6900'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.10205	101.1587	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	70.07738	101.0763	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	69.57026	100.64	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	69.53798	100.5976	'GEN344225 1-1CAL G1 25.000'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.65609	100.1924	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21693	71.23476	100.0922	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21693	71.23476	100.0922	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22583	69.00443	100.0658	'P23-345:WERE-WOLF 345-50:"'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22424	70.43406	100	'COOPER - ST JOE 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.45879	100	'7CALAWY 1 345.00 345/25.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22578	68.90366	100	'P23-345:WERE-WOLF 345-60:"'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.30137	99.8	'P12-069:WERE-2MAD-TEC 69 1:"'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22306	70.23104	99.8	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.17077	99.7	'GEN542955 1-LACYGNE UNIT#1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.08492	99.7	'GEN542956 2-LACYGNE UNIT#2'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.05437	99.7	'GEN588243 1-G16-149-GEN10.6900'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.07467	99.7	'GEN588253 1-G16-174-GEN10.6900'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.09343	99.7	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22313	70.10034	99.7	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.5641	76.18049	134.1575	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.5641	76.18049	134.1575	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.56407	64.86012	122.3689	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.56407	64.86012	122.3689	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.41124	65.33533	107.2228	'CLARINDA - J611 161.00 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.56534	47.52797	107.1528	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18G	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.56534	47.52797	107.1528	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'FAIRPORT - HARVIEL E 161KV CKT 1'	227	227	0.56336			

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	-9999	9999	"P11:161:OPPD:N OMA 5G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	-9999	9999	"P11:345:OPPD:NEBCTV1G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28976	89.74297	126.1511	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28976	89.74297	126.1511	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28974	82.43613	119.449	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28974	82.43613	119.449	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32715	73.5556	115.2579	"FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32715	72.56992	114.3759	"HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28841	72.5554	110.5625	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	17WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28841	72.5554	110.5625	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28961	71.15326	109.4172	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28961	71.15326	109.4172	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	78.9623	107.3426	"GEN635024 4-WALTER SCOTT UNIT 4"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32712	64.71772	106.8363	"FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	77.85229	106.2385	"GEN635023 3-WALTER SCOTT UNIT 3"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.32712	63.72367	105.8531	"HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22442	76.97361	105.3736	"P23:345:OPPD:S3456-S3459&T4"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22402	76.68209	105.0167	"HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22402	76.68209	105.0167	"HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	76.4528	104.9321	"SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22471	76.48379	104.9082	"P23:345:OPPD:S3458-MULLNCR "
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22446	76.44443	104.8529	"SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22446	76.44443	104.8529	"SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28411	68.7147	104.7344	"MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22486	76.10867	104.6676	"J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2247	76.11307	104.5382	"P23:345:OPPD:S3456-S3455"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22471	75.97144	104.4002	"SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22471	75.97144	104.4002	"SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	75.24104	103.7068	"SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	75.20736	103.6727	"MONTICELLO 345/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.94378	103.4334	"OTTUMWA 161/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.87712	103.3476	"SHERBURNE CO 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22457	74.67908	103.057	"7MAYWOOD 345.00 - TSPENCER 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.55793	103.0133	"GEN645012 2-NEBRASKA CITY 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.43044	102.8819	"GEN645011 1-NEBRASKA CITY 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.36729	102.8167	"COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.31616	102.7787	"ARNOLD 161/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.31898	102.7679	"COAL CREEK 230/22.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.28006	102.7355	"PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.27342	102.7288	"PRAIRIE ISLAND 345/20.0KV TRANSFORMER CKT 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	74.18555	102.6398	"AS KING 345/20.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.93894	102.3947	"GEN659103 1-ANTELOPE VALLEY UNIT1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.93894	102.3947	"GEN659107 2-ANTELOPE VALLEY UNIT2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.85593	102.3108	"GEN659111 2-LELAND OLDS UNIT2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22676	73.38486	102.153	"P23:345:WERE:STRA 345-100:"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28411	66.06367	102.1225	"AVENUCTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22575	73.62637	102.1066	"COOPER - MONOLITH 3 345.00 345KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28874	63.46445	102.0643	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	18SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28874	63.46445	102.0643	"CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.23253	72.76744	102.0528	"MARYVILLE 161/69KV TRANSFORMER CKT 2"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22489	73.33214	102.0471	"GEN635024 4-WALTER SCOTT UNIT 4"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	102	"2218-NEBRASKA CITY 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	102	"2566-NEBRASKA CITY 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	102	"2606-NEBRASKA CITY 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22473	73.5661	101.981	"SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22473	73.5661	101.981	"SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.46117	101.9013	"P45:345:UMZB# 2515 #: SGQ IN NB. BREAKER FAULT (7196;7092;7292)"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	101.9	"2217-NEBRASKA CITY 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	101.9	"2564-NEBRASKA CITY 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	70.60201	101.9	"2604-NEBRASKA CITY 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.46697	101.8938	"P22:345:OPPD:S3458 NEBCTV2G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.46697	101.8938	"P23:345:OPPD:S3458 NEBCTV2G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.42301	101.8582	"GEN635214 4-NEAL UNIT 4"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.40944	101.8525	"BIG STONE 230/24.0KV TRANSFORMER CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28411	65.64949	101.7031	"AVENUCTY 5 161.00 - MIDWAY TAP 161KV CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28411	65.64907	101.7009	"MIDWAY TAP - ST JOE 161KV CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.23181	101.6752	"GEN640011 2-GERALD GENTLEMAN STATION UNIT 2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.23329	101.6719	"P42:345:UMZB# 2506 #: AVS IN ND. STUCK BREAKER (3796)"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	999	101.6599	"GEN659118 1-LARAMIE RIVER UNIT1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.23727	101.6576	"GEN645025 5-NORTH OMAHA 5"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.17108	101.6103	"SQUARE BUTTE - YNG2 4 230.00 230KV CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.1711	101.6103	"YNG2 4 230.00 230/20.0KV TRANSFORMER CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.22491	73.15703	101.5947	"P42:345:UMZB# 2494 #: LO IN ND. STUCK BREAKER (2196)"
FDNS	13ALL	0	26SP	ASGI								

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (% MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.59768	101.0307	'BEPCCPROXYG 3345.00 - BROOKING COUNTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.59616	101.0292	'COYOTE 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.58425	101.0172	'BOUNDARY DAM 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22676	72.27549	100.9718	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.51965	100.9523	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.51969	100.9523	'POPLAR RIVER 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	72.23113	100.9474	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22486	72.46321	100.9346	'ATCHSN 3 345.00 -J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.47699	100.9089	'SHAND 230/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.47479	100.9085	'CHEMOLITE - LS POWER 7 115.00 115KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.45249	100.8859	'FARIBALT GEN115.00 - FEP TAP 115KV CKT Z'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22419	72.5909	100.8842	'COUNCIL BLUFFS (CW19T1) 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	72.43171	100.8658	'EMERY 161/18.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2242	72.49238	100.8412	'COUNCIL BLUFFS (CW19T2) 345/161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22731	72.12354	100.7915	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22439	71.67662	100.3906	'P23:345:OPPD:S3456-S3459&T4"
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.224	71.39882	100	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.224	71.39882	100	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22483	70.99813	99.8	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22468	71.03241	99.8	'P23:345:OPPD:S3458-MULLNCR ' '
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22443	71.14197	99.8	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22443	71.14197	99.8	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	70.88181	99.7	'SHERBURNE CO 345/26.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22491	79.42727	111.3908	System Intact
FDNS	13ALL	0	21SP	ASGI_18_01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22489	73.19087	105.4888	System Intact

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	-9999	9999	"P11:161:OPPD-N OMA 5G"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	-9999	9999	"P11:161:OPPD-N OMA 5G"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	-9999	9999	"P11:161:OPPD-N OMA 4G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	-9999	9999	"P11:161:OPPD-N OMA 5G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	-9999	9999	"P11:345:OPPD-NEBCTY1G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35803	141.7903	188.6602	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35803	141.7903	188.6602	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35801	133.226	180.1511	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35801	133.226	180.1511	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40633	127.5094	180.0284	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40633	126.252	178.8306	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.41028	117.992	171.9186	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.41028	116.7299	170.6554	'HARVIEL E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35823	121.9434	170.1791	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35823	121.9434	170.1791	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	122.1392	164.0295	System Intact
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35401	114.4474	160.2912	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	115.5524	158.2106	System Intact
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35401	111.2805	157.0404	'AVENUECTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	119.8385	157.0007	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35401	110.7477	156.511	'AVENUECTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35401	110.7412	156.5071	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	118.3416	155.5151	'GEN635023 3-WALTER SCOTT UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28726	117.0859	154.2374	'P23:345:OPPD-S3456-S3459&T4"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35723	107.2557	153.918	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28775	116.4847	153.6825	'P23:345:OPPD-S3458-MULLNCR ' "
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28682	116.6047	153.6562	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28682	108.5682	153.6562	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28732	116.3821	153.548	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28787	116.1181	153.4541	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28775	115.9921	153.1914	'P23:345:OPPD-S3456-S3455"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28775	115.8028	153.0078	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	113.9455	151.2081	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	113.7665	151.0255	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35723	103.9089	150.4858	'AVENUECTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	113.1044	150.3647	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	113.1044	150.3647	'GEN659107 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40647	95.40732	150.2936	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.9915	150.2513	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29047	112.7134	150.2469	'P23:345:WERE-STRA 345-100:"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35723	103.3744	149.9551	'AVENUECTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35723	103.3682	149.9512	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28779	112.536	149.7401	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.4534	149.6984	'P45:345:UMZB-# 2515 #: SGQ IN NB. BREAKER FAULT (7196;7092;7292)"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.4534	149.692	'P22:345:OPPD-S3458 NEBCTY2G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.4534	149.692	'P23:345:OPPD-S3458 NEBCTY2G"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.3973	149.6394	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28963	111.589	149.4686	'P23:345:OPPD-S3456-S3459&T4"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29128	111.8872	149.4053	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.1407	149.3971	'GEN640011 2-GERALD GENTLEMAN STATION UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.1432	149.3884	'P42:345:UMZB-# 2506 #: AVS IN ND. STUCK BREAKER (3796)"
FDNSLock	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.1025	149.3593	'GEN659118 1-LARAMIE RIVER UNIT1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.1294	149.3574	'GEN645025 3-NORTH OMAHA 5'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.0399	149.2841	'P42:345:UMZB-# 2494 #: LO IN ND. STUCK BREAKER (2196)"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.0399	149.2841	'P42:345:UMZB-# 2495 #: LO IN ND. STUCK BREAKER (2396)"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.0178	149.2728	'GEN640010 1-GERALD GENTLEMAN STATION UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	112.1537	149.0628	'GEN635059 W-ADAMS W1 0.6000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28872	111.6253	148.9963	'P23:345:WERE-87TH 345 BKRS:"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29025	110.922	148.9876	'J475 POI 345.00 - ORIENT 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28919	111.5516	148.9577	'HAWTHORN - NASHUA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28919	111.1229	148.8734	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28919	102.7133	148.8734	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28969	110.8767	148.7415	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29046	111.1624	148.7322	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28893	111.2715	148.6715	'P23:345:WERE-STRA 345-99:"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29012	110.7693	148.664	'P23:345:OPPD-S3458-MULLNCR ' "
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	111.3292	148.6029	'GEN635213 3-NEAL UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29122	110.9811	148.5272	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	111.4051	148.5013	'GEN635050 3-SHENENDOAH'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28787	111.0756	148.3521	'ATCHSN 3 345.00 - J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28872	110.8635	148.1998	'LACYGNE - NEOSHO 345KV CKT 1'
FDNS	13ALL											

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (% MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29042	110.3974	147.8764	'NASHUA - ST JOE 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	110.5695	147.8092	'GEN645041 1-CASS COUNTY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	110.5621	147.8018	'GEN645042 2-CASS COUNTY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	110.4888	147.7253	'GEN645033 3-SARPY COUNTY 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	110.4578	147.6917	'P41-69-OPPD-S9065 69B BUS'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28863	110.2732	147.6463	'P55-345-KCPL-CRAIG BUS 22'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28799	110.4062	147.6417	'P42-345-LES-13503-103&ROKEBY MOORE CB3003'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28799	110.4025	147.6368	'P42-345-LES-18589-103&ROKEBY WAGENER CB3002'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28787	110.3759	147.6286	'ATCHSN 3 345.00 -J570PO1 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28799	110.3857	147.6171	'P42-345-LES-18589-103&ROKEBY WAGENER CB3001'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.288	110.3737	147.5976	'103RD & ROKEBY - WAGENER 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28807	110.4	147.5678	'SADAIR1 161.00 - THOMAS HILL 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28926	110.08	147.5369	'P55-345-KCPL-HAWTHORN BUS 20'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	103.882	147.1468	System Intact
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	107.9863	145.9371	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40647	90.79298	145.8061	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'1285-GRDA1 GSU2 22'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'1477-NM GEN N1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.5682	145.804	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40647	90.76681	145.792	'HARVIE E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	107.8113	145.7581	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	107.1243	145.0784	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	107.1243	145.0784	'GEN659107 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.795	144.7465	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29015	106.8465	144.7403	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.5575	144.4781	'P22-345-OPPD-S3458 NEBCITY2G'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.5575	144.4781	'P23-345-OPPD-S3458 NEBCITY2G'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.5062	144.4327	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29288	106.1813	144.4191	'P23-345-WERE-STR 345-100-1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.19736	118.1813	144.3423	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.4112	144.3175	'GEN645025 5-NORTH OMAHA 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2905	106.3773	144.3107	'P45-345-UMZB# 2515 # SGQ IN NB. BREAKER FAULT (7196;7092;7292)''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.8046	144.2266	'GEN635059 W-ADAMS W1 0.6000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.148	144.0913	'GEN640011 2-GERALD GENTLEMAN STATION UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8521	144.073	'P44-69-SPS-BAILYCO 8860'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8346	144.0659	'GEN338446 1-PANDA S2'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	106.1135	144.0582	'GEN659118 1-LARAMIE RIVER UNIT1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8269	144.058	'GEN334431 1-SABINE UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8268	144.0579	'GEN334432 1-SABINE UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29369	105.8483	144.0461	'FAIRPORT - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8053	144.0372	'GEN501910 1-ACADIA UNIT 5T1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8047	144.0359	'GEN338443 1-PANDA S1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.8011	144.0267	'GEN588313 1-G16-158-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.7882	144.0258	'GEN345756 H-1SIOUX 1 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.7994	144.0253	'GEN588303 1-G16-157-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.7292	143.95	'P41-345-OKGE-SB SEOL7382''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.7149	143.9374	'P23-345-GRDA-GRDA BRK80''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28954	106.6118	143.9351	'EASTOWN7 345.00 (EASTOWN 345) 345/161/13 8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	105.9771	143.9188	'GEN640010 1-GERALD GENTLEMAN STATION UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29286	105.5763	143.9036	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.6777	143.8982	'P41-345-OKGE-SB SEDJ7382''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28687	106.8375	143.8672	'CLARINDA 161/69KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28687	106.8375	143.8672	'CLARINDA 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28877	106.5284	143.8643	'P55-345-KCPL-W.GARDNER BUS 11'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28884	106.5889	143.8623	'P23-345-WERE-JEC 345-17-1''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28915	106.2991	143.8581	'P55-345-GMO-SIBLEY BUS 11-INVALID PRIOR TO 6''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.6017	143.8359	'GEN345765 H-1SIOUX 2 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.5835	143.8145	'GEN335370 1-1ACADIA S2616.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29157	105.6959	143.7979	'HAWTHORN - NASHUA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2911	105.7325	143.7895	'P23-345-WERE-87TH 345 BKRS-1''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29025	105.8171	143.7893	'ATCHSN 3 345.00 -J475 PO1 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.5515	143.778	'GEN532663 1-LAWRENCE ENERGY CENTER UNIT 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.41028	87.14439	143.7487	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28766	106.5985	143.7458	'HILLS - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28483	106.8751	143.7054	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28483	106.8751	143.7054	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.2966	143.7044	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	106.4518	143.6821	'GEN337766 1-TRACTEBEL UNIT 51'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J						

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29363	104.9417	143.1801	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.40633	86.83112	143.1449	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.9053	143.1192	'P12-069:WERE:2MAD-TEC 69 1:'''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29025	105.1497	143.0946	'ATCHSN 3 345.00 - J570PO 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.27989	106.8278	143.0279	'MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.828	143.0016	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.8146	142.9894	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.7719	142.9524	'GEN588253 1-G16-174-GEN10.6900'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.6973	142.8915	'GEN588243 1-G16-149-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28937	105.1112	142.8603	'COUNCIL BLUFFS (CW19T1) 345/161/13.8KV TRANSFORMER CKT 1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.9308	142.8501	'P45:345:UMZW:# 1327 #: FT2 IN SD.'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29363	104.5843	142.8423	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28939	105.083	142.8337	'COUNCIL BLUFFS (CW19T2) 345/161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29109	104.8013	142.828	'LACYGNE - NEOSHO 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.9028	142.8203	'P42:345:NPPD:BKR-GGS-3304'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28797	105.6218	142.8119	'ARRB HL 3 345.00 - FALLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29109	104.7763	142.803	'P23:345:WERE:N345 345-80F:'''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29098	104.7359	142.7831	'87H STREET - CRAIG 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.5507	142.7808	'GEN336151 1-WATERFORD UNIT#1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.5506	142.7808	'GEN336152 1-WATERFORD UNIT#2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28814	105.5628	142.7774	'P23:345:AEPW:RIVERSIDE CB 3429A NBTB''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.5555	142.7702	'P23:345:AEPW:RIVERSIDE CB 3433A NBTB''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.8118	142.7472	'GEN600002 3-SHERBURNE CNTY G3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	104.2724	142.6815	'GEN635024 4-WALTER SCOTT UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.7158	142.6503	'GEN659110 1-LELAND OLDS UNIT1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29453	104.2489	142.6432	'MARYVILLE 161/69KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.3843	142.6141	'GEN336222 1-LITTLE GYPSY UNIT#2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.6845	142.6096	'GEN645041 1-CASS COUNTY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29036	104.6815	142.6062	'P42:345:LES:13503:103&ROKEBY.MOORE.CB3003''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.6772	142.6023	'GEN645042 2-CASS COUNTY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29036	104.678	142.6016	'P42:345:LES:L8589:103&ROKEBY.WAGENER.CB3002''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29036	104.6603	142.5806	'P42:345:LES:L8589:103&ROKEBY.WAGENER.CB3001''
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.328	142.5717	'GEN542956 2-LACYGNE UNIT #2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29037	104.6519	142.5633	'103RD & ROKEBY - WAGENER 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.609	142.53	'GEN645033 3-SARPY COUNTY 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.3005	142.5293	'GEN501811 1-RODEMACHER UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.5869	142.5047	'P41:69:OPPD:S9065 69B BUS''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29282	104.3446	142.5013	'NASHUA - ST JOE 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29101	104.4126	142.4229	'P55:345:KCPL:CRAIG BUS 22''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29044	104.5667	142.4148	'SADAIR1 161.00 - THOMAS HILL 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	104.4661	142.377	'GEN645024 4-NORTH OMAHA 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	105.0921	142.3201	'GEN334433 1-SABINE UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28797	105.08	142.2691	'ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.957	142.1663	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.6851	142.1481	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.8597	142.1029	'GEN542955 1-LACYGNE UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.8417	142.0478	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.8411	142.0473	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.8156	142.0427	'GEN334441 1-SABINE UNIT 5'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.6182	141.8448	'GEN336801 1-BAXTER WILSON UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.5637	141.7888	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.5391	141.7643	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29186	104.0425	141.7399	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28665	104.8029	141.715	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.4123	141.6385	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.3885	141.6147	'GEN336464 1-MICHOLD UNIT #3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.3632	141.5892	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.3154	141.5413	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.151	141.3766	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.1333	141.3568	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.0807	141.3057	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.0585	141.2825	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.0418	141.2666	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	104.0042	141.2279	'GEN337692 1-LAKE CATHERINE UNIT #4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	103.9257	141.1566	'GEN345671 2-1RUSH G2 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	103.9245	141.1555	'GEN345670 1-1RUSH G1 18.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28804	102.5076		

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (% MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	140.6317	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	140.6317	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	140.6317	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	140.6317	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	140.6317	'2606-NEBRASKA CITY 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29283	102.6309	140.6203	'COOPER - FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.965	140.1872	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.9208	140.1406	'GEN501801 1-DOLET HILLS UNIT#1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.9005	140.1229	'GEN336831 1-BAXTER WILSON SES'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.8957	140.1186	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.8521	140.074	'GEN336252 1-NINEMILE POINT UNITS#5'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28884	102.7721	140.0298	'*P23:345:WEREJEC 345-16:"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.35398	92.82883	139.9811	'MARYVILLE - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2871	101.4478	139.776	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2871	92.33958	139.776	'HOLT 7 345.00 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28738	101.3131	139.6958	'*P23:345:OPPD:S3456-S3459&T4"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28823	102.2178	139.4251	'*P23:345:WERE:WOLF 345-50:"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	102.0841	139.2838	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28814	101.9448	139.1438	'*P23:345:WERE:WOLF 345-60:"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28744	100.6602	139.0605	'SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	101.7921	139.0115	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	101.7776	138.997	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	101.0106	138.9192	'GEN334431 1-SABINE UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	101.0106	138.9192	'GEN334432 1-SABINE UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9928	138.9045	'GEN345841 2-1TS G2 13.800'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9917	138.9034	'GEN345832 1-1TS G1 13.800'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9945	138.903	'GEN337764 1-TRACTEBEL UNIT C1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9945	138.903	'GEN337765 1-TRACTEBEL UNIT C2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9877	138.8875	'*P23:345:GRDA:GRDA BRK800"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9723	138.8808	'GEN338446 1-PANDA S2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28187	102.0216	138.8634	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28187	102.0216	138.8634	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9244	138.8331	'GEN501910 1-ACADIA UNIT ST1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9202	138.8238	'GEN588313 1-G16-158-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.9186	138.8223	'GEN588303 1-G16-157-GEN10.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28924	101.1118	138.8208	'CLARINDA 161/69KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28924	101.1118	138.8208	'CLARINDA 161/69KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.8998	138.8151	'GEN345756 H-1SIOUX 1 18.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.8946	138.8027	'GEN338443 1-PANDA S1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.8939	138.7904	'*P41:345:OKGE:SB SEOL7383"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29055	100.8285	138.7281	'*P23:345:AEPW:NES CB 3417B NBTB"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29055	100.8285	138.7281	'*P41:345:AEPW:NES CB 3417B NBTB+FAULT"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28508	101.7639	138.7227	'*COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2904	100.7697	138.6837	'*P41:345:OKGE:SB MUGE7385"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28704	101.1963	138.6334	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28704	101.1963	138.6334	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29193	100.5916	138.6299	'EASTOWN7 345.00 (EASTOWN 345) 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.6912	138.6028	'GEN345765 H-1SIOUX 2 18.000'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28499	101.6473	138.5993	'*P23:345:OPPD:S3456-S3458&T4"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2903	100.664	138.588	'*P42:500:OKGE:SB FTTH581"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29002	100.7639	138.5868	'HILLS - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.6776	138.5847	'GEN335370 1-ACADIA S2616.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2921	100.4947	138.5573	'*P42:345:NPPD:BKR-CPR-3316"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2903	100.6313	138.5545	'*P42:500:OKGE:SB FTTH583"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.6382	138.544	'GEN532663 1-LAWRENCE ENERGY CENTER UNIT 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.3718	138.5121	'GEN300003 1-THOMAS HILL UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.5875	138.4931	'GEN334070 1-LEWIS CREEK 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.5875	138.4931	'GEN334071 1-LEWIS CREEK 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29115	100.4714	138.4929	'*P55:345:KCP:W.GARDNER BUS 11"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.5634	138.4695	'GEN337766 1-TRACTEBEL UNIT 51'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29053	100.5397	138.4328	'*P41:345:OKGE:SB SOER7382_G16100TAP"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29123	100.4168	138.3709	'*P23:345:WEREJEC 345-17:"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.4686	138.3622	'*P23:345:AEPW:RIVERSIDE CB 3429A NBTB"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29153	100.1465	138.3593	'*P55:345:GMO:SIBLEY BUS 11:VALID PRIOR TO 6"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.4581	138.3518	'*P23:345:AEPW:RIVERSIDE CB 3433A NBTB"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29204	100.2841	138.3406	'COOPER - SUB 3458 NEB CTY 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.4295	138.3353	'GEN501823 1-TECHE UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.3757	138.279	'GEN336170 1-GULF OXY U4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.322	138.227	'GEN501811 1-RODEMACHER UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.2552	138.1596	'GEN337757 1-DOKE HOTSPPRINGS STG1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29035	100.2132	138.0935	'ARBH HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	100.8171	138.0729	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	100.0105	137.9108	'GEN337692 1-LAKE CATHERINE UNIT #4'
FDNS	13ALL	0	21SP</									

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28813	99.84007	137.0602	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.8251	137.0057	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	99.08797	136.9678	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	99.06876	136.964	'GEN334441 1-SABINE UNIT 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	99.04663	136.9606	'GEN542955 1-LACYGNE UNIT #1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.289	99.32885	136.9047	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.97502	136.8509	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.97446	136.8504	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.19736	110.3822	136.7561	'BUNGE - HASTINGS 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.82986	136.7283	'GEN336801 1-BAKTER WILSON UNIT #1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29189	98.64893	136.6836	'COOPER - ST JOE 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.76556	136.6595	'GEN335204 1-NELSON UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.65248	136.5498	'GEN336191 1-LITTLE GYPSY UNIT#3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.62638	136.5237	'GEN336464 1-MICHOUD UNIT #3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.62187	136.5151	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.6001	136.4971	'GEN335614 1-WILLOW GLENN UNIT#4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.36904	136.2602	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28919	98.57596	136.233	'HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28919	98.56972	136.2322	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2879	97.78203	136.2066	'P23:345:OPPD:S3456-S3455'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.2841	136.178	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28791	97.65855	136.0913	'SUB 3458 NEB CTY - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28791	97.64119	136.0696	'SUB 3455 - SUB 3740 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28791	97.64108	136.0694	'P23:345:OPPD:S3458-MULLNCR 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.15382	136.0486	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28804	97.49243	136.0336	'ATCHSN 3 345.00 -J475 POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.12688	136.02	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	98.1142	136.0088	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.19566	108.7823	135.9756	'COUNCIL BLUFFS - RIVER BEND 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29629	97.25725	135.9544	'P42:345:NPPD:BKR-CPR-3322'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29428	97.54234	135.9113	'EASTOWN7 345.00 -IATAN 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29629	97.19868	135.895	'COOPER FAIRPORT 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	135.8881	'GEN999125 1-GIG1-GEN1 0.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.97143	135.8741	'GEN345671 2-1RUSH G2 18.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.97047	135.8732	'GEN345670 1-1RUSH G1 18.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.9479	135.8421	'GEN303007 1-1BC2 U2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.90985	135.8348	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	97.1582	135.6496	'GEN645012 2-NEBRASKA CITY 2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.72578	135.6169	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	97.08945	135.5814	'GEN645011 1-NEBRASKA CITY 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.67508	135.5751	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.67461	135.5747	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.67459	135.5747	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.67417	135.5742	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	96.97407	135.443	'GEN635214 4-NEAL UNIT 4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.50811	135.4018	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.29594	135.1868	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28813	97.87591	135.112	'GEN344225 1-1CAL G1 25.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.15523	135.0461	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.15366	135.0439	'GEN336831 1-BAKTER WILSON SES'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.35398	87.68803	135.0255	'AVENUECTY 5 161.00 - MIDWAY 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	97.12486	135.0148	'GEN336252 1-NINEMILE POINT UNITS#'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28804	96.38682	134.8976	'ATCHSN 3 345.00 -J570POI 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	96.3883	134.888	'GEN659103 1-ANTELOPE VALLEY UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	96.3883	134.888	'GEN659107 2-ANTELOPE VALLEY UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	96.98901	134.8737	'GEN501801 1-DOLET HILLS UNIT1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28813	97.52638	134.749	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	96.08833	134.585	'GEN659111 2-LELAND OLDS UNIT2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28743	96.83735	134.4691	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	96.2872	134.447	'GEN300026 1-NODAWAY UNIT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	96.41899	134.4376	'GEN635059 W-ADAMS W1 0.6000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	95.97754	134.4342	'P22:345:OPPD:S3458-NEBCTY2G''
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	95.97754	134.4342	'P23:345:OPPD:S3458-NEBCTY2G''
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.35398	87.16221	134.4097	'AVENUECTY 5 161.00 - MIDWAY TAP 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.35398	87.15856	134.3899	'MIDWAY TAP - ST JOE 161KV CKT 21'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28734	96.74807	134.3759	'P23:345:OPPD:S3456-S3458&T4''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	96.17822	134.3412	'NODAWAY 161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29061	95.4689	134.3079	'FAIRPORT - HICKORY CREEK 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	95.73398	134.2407	'GEN635213 3-NEAL UNIT 3'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	96.35145	134.2322	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.2906	96.36729	134.2303	'P23:345:WERE-WOLF 345-50:''
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.28829	95.75183	134.2264	'P45:345:UMZB# 2515 #: SGQ IN NB. BREAKER FAULT (7196;7092;7292)''
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA -J611 161.00 161KV CKT 1'	152	171	0.29051	96.29838	134.1826	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01</								

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	95.8225	133.7068	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	95.23779	133.6959	'GEN645025 5-NORTH OMAHA 5'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	95.81065	133.6947	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.32803	91.43029	133.6273	'FAIRPORT 345/161KV TRANSFORMER CKT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	95.86694	133.6085	'GEN300025 1-NODAWAY UNIT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28682	96.59795	133.5538	'KETCHEM7 345.00- SIBLEY 345KV CKT 1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	95.73181	133.4799	'GEN300026 1-NODAWAY UNIT 2'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	95.6523	133.3983	'NODAWAY 161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.89397	133.372	'GEN600000 1-SHERBURNECNTY G1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28486	95.13555	133.2966	'P23:345:OPPD:53456-53459'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	95.51497	133.2675	'NODAWAY 161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29131	94.41725	133.2139	'SREX 161.00 - OSBORN 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.72197	133.1984	'GEN600005 1-MONTICELLO'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.70863	133.1884	'GEN600001 2-SHERBURNE CNTY G2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28906	94.50957	133.1785	'P23:345:WERE:STRA 345-99:1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28865	94.41489	133.1374	'7OVERTON 345.00 - SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.65941	133.1283	'GEN615002 2-COAL CREEK'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.62971	133.0984	'GEN615001 1-COAL CREEK'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28941	94.35318	133.0343	'P55:345:KCP:PL:HAWTHORN BUS 20"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	95.03851	133.021	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28873	94.3893	132.9924	'87H STREET - CRAIG 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28886	94.38656	132.9642	'LACYGNE - NEOSHO 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28886	94.36347	132.9403	'P23:345:WERE:N345 345-80F:1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29131	94.05849	132.8703	'SMPLTAP 161.00 - SREX 161.00 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28814	94.37837	132.838	'P42:345:LES:L3503:103&ROKEBY.MOORE.CB3003"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28814	94.37403	132.8329	'P42:345:LES:L8589:103&ROKEBY.WAGENER.CB3002"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28824	94.42861	132.8173	'SADAIR1 161.00 - THOMAS HILL 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28814	94.35278	132.8089	'P42:345:LES:L8589:103&ROKEBY.WAGENER.CB3001"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28717	94.47946	132.8069	'COUNCIL BLUFFS (CW19T2) 345/161/13.8KV TRANSFORMER CKT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28815	94.34423	132.7939	'103RD & ROKEBY - WAGENER 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.33489	132.785	'P42:345:NPPD:BKR-GGS-3304"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28715	94.4948	132.7794	'COUNCIL BLUFFS (CW19T1) 345/161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.27301	132.7472	'GEN600006 1-AS KING'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.28621	132.7411	'P45:345:UMZW# 1327 #: FT2 IN SD."
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.24253	132.717	'GEN600003 1-PRAIRIE ISLAND G1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.23942	132.7139	'GEN600004 2-PRAIRIE ISLAND G2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28877	94.08079	132.7033	'P55:345:KCP:PL:CRAIG BUS 22"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.16536	132.6851	'GEN629075 1-OTTUMWA GENERATOR FOR OTTUMWA UNIT NO 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.17982	132.6563	'GEN659110 1-LELAND OLDS UNIT1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	94.19062	132.6458	'GEN645024 4-NORTH OMAHA 4'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28417	95.27166	132.4052	'CRESTON - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28417	95.27166	132.4052	'CRESTON - MARYVILLE 161KV CKT 1'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	94.39972	132.2775	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	94.3784	132.2509	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.32823	89.45261	131.7375	'P42:345:NPPD:BKR-C-3322-2"
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	93.85423	131.7297	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.32823	89.41545	131.6992	'P12:345:NPPD:3517:COOPER 3-ST JOE 3-BT8"
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	93.16713	131.0337	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2217-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2218-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2564-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2566-NEBRASKA CITY 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2604-NEBRASKA CITY 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	130.7971	'2606-NEBRASKA CITY 2'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	91.68756	129.5844	'GEN344225 1-1CAL G1 25.000'
FDNSLock	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	91.51771	129.385	'GEN336821 1-GRAND GULF UNIT'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.60483	129.0487	'GEN334070 1-LEWIS CREEK 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.60481	129.0487	'GEN334071 1-LEWIS CREEK 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.576	129.0184	'P12:069:WERE:2MAD-TEC 69 1:1"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.57865	129.0176	'GEN588313 1-G16-158-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.57704	129.0162	'GEN588303 1-G16-157-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.44585	129.0092	'GEN301358 2-1WINSLOWG1 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28894	90.34849	128.9322	'P55:345:KCP:PL:W.GARDNER BUS 11"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.3226	84.86746	128.92	'FAIRPORT - HARVIEL E 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28831	90.48296	128.9102	'P41:345:OKGE:SB 50ER7382_G16100TAP"
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.41322	128.8567	'GEN501811 1-RODEMACHER UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.38109	128.8254	'GEN336170 1-GULF OXY U4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	90.36469	128.8074	'GEN334433 1-SABINE UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28005	91.42281	128.7934	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28005	91.42281	128.7934	'CRESTON - MCKSBRG 3 161.00 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28919	91.10998	128.7292	'KETCHEM7 345.00- SIBLEY 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28498	90.73955	128.7201	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28498	90.73955	128.7201	'ANITA TAP POINT TO CRESTON AND DENISON - CRESTON 161KV CKT 1'
FDNS												

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	89.75047	128.2292	'NODAWAY 161/13.8KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.65472	128.0367	'GEN588273 1-G16-150-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.64031	128.0237	'GEN588263 1-G16-176-GEN10.6900'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.3226	84.20773	128.0146	'MARYVILLE - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.3226	84.18056	128.0143	'HARVIE E - NODAWAY 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.5705	128.0074	'GEN334440 1-SABINE UNIT 4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.59315	127.9824	'GEN588253 1-G16-174-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.50699	127.9108	'GEN588243 1-G16-149-GEN10.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.34949	127.787	'GEN336251 1-NINEMILE POINT UNIT#4'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	89.33067	127.7763	'GEN542956 2-LACYGNE UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	89.00714	127.4534	'ARBR HL 3 345.00 - FOLLOW 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.95203	127.3973	'GEN542955 1-LACYGNE UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.96302	127.3772	'GEN532651 1-JEFFREY ENERGY CENTER UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2871	89.13358	127.3358	'HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2871	89.12698	127.3346	'KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.89219	127.3275	'GEN337041 1-GERALD ANDRUS'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.88408	127.317	'GEN501812 1-RODEMACHER UNIT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.83404	127.2686	'GEN336831 1-BAXTER WILSON SES'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.85622	127.2661	'GEN532653 1-JEFFREY ENERGY CENTER UNIT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.85569	127.2656	'GEN532652 1-JEFFREY ENERGY CENTER UNIT 2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.39	127.1055	'THOMAS HILL 345/24.0KV TRANSFORMER CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.61572	127.0487	'GEN303007 1-1BC2 U'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28681	88.93246	127.038	'BONDURANT - MONTEZUMA 345KV CKT 1'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.33093	83.84261	127.0165	'FAIRPORT 345/161KV TRANSFORMER CKT 3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.19566	100.0232	126.9926	'BUNGE - HASTINGS 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28005	89.69606	126.985	'MCKSBRG 3 161.00 - WINTER SECT JUNCTION 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.52362	126.9558	'GEN303008 1-1BC2 U3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.49046	126.9224	'GEN303006 1-1BC2 U1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	88.44785	126.9014	'ARBR HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.46974	126.8997	'GEN335206 1-NELSON UNIT 6'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.29894	126.741	'GEN345671 2-IRUSH G2 18.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.298	126.7401	'GEN345670 1-1RUSH G1 18.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.1387	126.566	'GEN532751 1-WOLF CREEK GENERATING STATION UNIT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.12865	126.5564	'GEN501813 1-RODEMACHER UNIT 3'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	89.21439	126.5133	'GEN 861115 1-J611 G 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.04673	126.4892	'GEN344896 3-1LAB G3 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.04626	126.4887	'GEN344895 2-1LAB G2 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.04625	126.4887	'GEN344897 4-1LAB G4 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.04584	126.4883	'GEN344894 1-1LAB G1 20.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	88.01914	126.4512	'GEN338388 1-1PLUM PT U1 23.000'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	87.92635	126.4025	'GEN542951 5-HAWTHORN UNIT #5'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28833	87.98012	126.3747	'P23-345-WEREJEC 345-20:'
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.19686	100.0651	126.2612	'CLARINDA - HASTINGS 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	92.33958	126.0799	'GEN999125 1-G161-GEN1 0.6900'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2883	87.67202	126.0486	'P23-345-WEREJEC 345-19:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2883	87.67159	126.0482	'P23-345-WEREJEC 345-15:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28524	87.84397	126.0465	'COUNCIL BLUFFS - SUB 3456 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28515	87.75352	125.948	'P23-345-OPPD:53456-53458&T4'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.33114	82.21381	125.3945	'P42-345-NPPD:BKR-C-3322-2'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.33113	82.17522	125.3553	'P12-345-NPPD:3517-COOPER 3-ST JOE 3-BTB'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.89699	125.3187	'GEN337653 1-WHITE BLUFF UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.58012	125.001	'GEN338143 1-INDEPENDENCE UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.56299	124.9839	'GEN338146 1-INDEPENDENCE UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28901	86.53877	124.9801	'P23-345-WEREJEC 345-16:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.5452	124.9625	'GEN337652 1-WHITE BLUFF UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29193	86.07381	124.9097	'EASTOWN7 345.00 - IATAN 345KV CKT 1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.30202	124.7508	'GEN542957 1-IATAN UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28838	86.3504	124.7338	'P23-345-WEREWOLF 345-50:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	86.23661	124.6096	'P23-345-WEREWOLF 345-60:'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	85.37772	123.7908	'GEN335831 1-RIVERBEND UNIT#1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	85.27209	123.6791	'GEN337910 1-ARKANSAS NUCLEAR ONE UNIT #1'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	85.06676	123.5759	'GEN542962 2-IATAN UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	84.91249	123.3228	'GEN336153 1-WATERFORD UNIT#3'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	84.24169	122.6431	'GEN337911 1-ARKANSAS NUCLEAR ONE UNIT #2'
FDNS	13ALL	0	21WP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28829	82.79849	121.2366	'GEN344225 1-ICAL G1 25.000'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	83.24107	121.113	'GEN 861115 1-J611 G 0.6900'
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.19923	94.30721	120.991	'CLARINDA - HASTINGS 161KV CKT 1'
FDNS	13ALL											

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB (MVA)	TDF	BC%LOADING (%)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22051	78.51384	108.5132	"P23-345:OPPD:S3456-S3459&T4"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	78.41539	108.3747	"GEN635214 4-NEAL UNIT 4"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2229	77.81396	108.2596	"P23-345:WERE:STRA 345-100:"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22056	78.23323	108.1275	"SUB 3456 - SUB 3458 NEB CTY 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.84136	107.7924	"GEN600002 3-SHERBURNE CNTY G3"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.78439	107.7188	"GEN635023 3-WALTER SCOTT UNIT 3"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.79184	107.7073	"GEN635059 W-ADAMS W1 0.6000"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.27039	107.2433	"GEN645012 2-NEBRASKA CITY 2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22296	76.68584	107.0785	"FAIRPORT - HICKORY CREEK 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.10064	107.0688	"GEN659103 1-ANTELOPE VALLEY UNIT1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	77.10064	107.0688	"GEN659107 2-ANTELOPE VALLEY UNIT2"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	70.08249	106.9703	"GEN588309 1-ASGI1706-GEN0.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.91656	106.8913	"GEN600005 1-MONTICELLO"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.89399	106.8673	"GEN659111 2-LELAND OLDS UNIT2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.88358	106.8617	"GEN600001 2-SHERBURNE CNTY G2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22084	76.84414	106.7626	"P23-345:OPPD:S3456-S3455"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22084	76.81843	106.7512	"SUB 3458 NEB CTY - SUB 3740 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22084	76.78429	106.7226	"SUB 3455 - SUB 3740 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22084	76.78409	106.7224	"P23-345:OPPD:S3458-MULLNCR 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.65407	106.6342	"P42-345:UMZB# 2506 # AVS IN ND. STUCK BREAKER (3796)"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.62187	106.6024	"P45-345:UMZB# 2515 # SGQ IN NB. BREAKER FAULT (7196;7092;7292)"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22136	76.04987	106.5234	"7OVERTON 345.00 - SIBLEY 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.50715	106.4922	"GEN600000 1-SHERBURNECNTY G1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.46446	106.4502	"P42-345:UMZB# 2494 # LO IN ND. STUCK BREAKER (2196)"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.46446	106.4502	"P42-345:UMZB# 2495 # LO IN ND. STUCK BREAKER (2396)"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22291	76.00693	106.4192	"CHILLICOTHE - HICKORY CREEK 161KV CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	69.53381	106.4071	"ASGI1706 161.00 - MARYVILLE 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.37315	106.362	"GEN600003 1-PAIRIE ISLAND G1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.37009	106.359	"GEN600004 2-PAIRIE ISLAND G2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	76.31301	106.3066	"GEN629075 1-OTTUMWA GENERATOR FOR OTTUMWA UNIT NO 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2215	76.0471	106.2512	"P23-345:WERE:R7TH 345 BKRS:"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.28813	108.8221	106.2401	"GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22301	75.77853	106.2118	"CHILLICOTHE - MEADVILLE 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.2219	75.99769	106.1913	"HAWTHORN - NASHUA 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22301	75.75063	106.1895	"MEADVILLE - THOMAS HILL 161KV CKT 1"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	102.7133	106.1853	"GEN999126 1-GI61-GEN2 0.6900"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23263	75.66384	105.152	"BROOKS - CLARINDA 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	74.31705	104.3531	"2218-NEBRASKA CITY 2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	74.31705	104.3531	"2566-NEBRASKA CITY 2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	74.31705	104.3531	"2606-NEBRASKA CITY 2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	72.63573	102.711	"GEN501813 1-RODEMACHER UNIT 3"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22069	72.49496	102.5132	"HILLS - MONTEZUMA 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22095	72.41602	102.4643	"ARRB HL 3 345.00 - FALLOW 3 345.00 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21457	73.05831	102.4063	"CRESTON - MCKSBRG 3 161.00 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21457	73.05831	102.4063	"CRESTON - MCKSBRG 3 161.00 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	72.29314	102.3762	"GEN303007 1-1BC2 U2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21901	72.47845	102.3348	"COUNCIL BLUFFS - SUB 3456 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21895	72.44391	102.3036	"P23-345:OPPD:S3456-S3458&T4"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22033	72.23134	102.136	"KETCHEM7 345.00 - MULLNCR7 345.00 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22033	72.21505	102.1235	"HOLT 7 345.00 - MULLNCR7 345.00 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22393	71.52882	102.0995	"EASTOWN7 345.00 - IATAN 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.92726	102.0887	"GEN588273 1-G16-150-GEN10.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.92377	102.084	"GEN588263 1-G16-176-GEN10.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.99104	102.0811	"GEN335206 1-NELSON UNIT 6"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.91249	102.0742	"GEN588253 1-G16-174-GEN10.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.90808	102.0503	"GEN588243 1-G16-149-GEN10.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22095	71.98193	102.0376	"ARRB HL 3 345.00 - RCCN TRL 3 345.00 345KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.85542	101.9904	"GEN542951 5-HAWTHORN UNIT #5"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.84224	101.9879	"GEN344894 1-1IAB G1 20.000"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.81859	101.9106	"GEN338388 1-1PLUM PT U1 23.000"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.63441	101.7528	"GEN532653 1-JEFFREY ENERGY CENTER UNIT 3"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23119	72.4323	101.7351	"ADAMS 5 161.00 - CRESTON 161KV CKT 1"
FDNS	13ALL	0	26SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.23119	72.4323	101.7351	"ADAMS 5 161.00 - CRESTON 161KV CKT 1"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	63.91706	101.6054	"GEN588309 1-ASGI1706-GEN0.6900"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	71.35484	101.4605	"GEN501801 1-DOLET HILLS UNIT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.21457	72.06523	101.271	"MCKSBRG 3 161.00 - WINTER SET JUNCTION 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22108	71.08761	101.2047	"P23-345:WERE:JEC 345-20:"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	70.98756	101.158	"GEN337653 1-WHITE BLUFF UNIT #2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	70.97482	101.109	"P23-345:WERE:JEC 345-19:"
FDNS	13ALL	0	21SP	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.29051	63.38941	101.0582	"ASGI1706 161.00 - MARYVILLE 161KV CKT 1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	70.8485	101.0205	"GEN338143 1-INDEPENDENCE UNIT #1"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA - J611 161.00 161KV CKT 1'	152	171	0.22105	70.84058	101.0131	"GEN338146 1-INDEPENDENCE UNIT #2"
FDNS	13ALL	0	21L	ASGI 18 01	TO->FROM'	'CLARINDA -						

SOLUTION	GROUP	SCENARIO	SEASON	SOURCE	DIRECTION	MONITORED ELEMENT	RATEA (MVA)	RATEB(MVA)	TDF	BC%LOADING (% MVA)	TC%LOADING (% MVA)	CONTINGENCY
FDNS	13ALL	0	21WP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.541488	108.2678	'J611 161.00 - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21WP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.541488	108.2678	'J611 161.00 - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.655329	108.2486	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21L	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.655329	108.2486	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.6498	108.2368	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	26SP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.6498	108.2368	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.658233	108.1419	'MARYVILLE - MARYVILLE 161KV CKT 1'
FDNS	13ALL	0	21SP	ASGI_18_01	'FROM->TO'	'GI61-GSU2 161.00 - MARYVILLE 161KV CKT 1'	223	223	1	7.658233	108.1419	'MARYVILLE - MARYVILLE 161KV CKT 1'