



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-093
HALIFAX-CHASE CITY 115 KV
92 MW Capacity / 120 MW Energy**

January 2021

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1 Introduction

This Feasibility Study has been prepared in accordance with the PJM Open Access Transmission Tariff, 36.2, as well as the Feasibility Study Agreement between the Interconnection Customer (IC), and PJM Interconnection, LLC (PJM), Transmission Provider (TP). The Interconnected Transmission Owner (ITO) is Dominion.

2 Preface

The intent of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the subject generation to the PJM network at a location specified by the Interconnection Customer. The Interconnection Customer may request the interconnection of generation as a capacity resource or as an energy-only resource. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: (1) Direct Connections, which are new facilities and/or facilities upgrades needed to connect the generator to the PJM network, and (2) Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system.

In some instances a generator interconnection may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection, may also contribute to the need for the same network reinforcement. Cost allocation rules for network upgrades can be found in PJM Manual 14A, Attachment B. The possibility of sharing the reinforcement costs with other projects may be identified in the feasibility study, but the actual allocation will be deferred until the impact study is performed.

The Interconnection Customer seeking to interconnect a wind or solar generation facility shall maintain meteorological data facilities as well as provide that meteorological data which is required per Schedule H to the Interconnection Service Agreement and Section 8 of Manual 14D.

An Interconnection Customer with a proposed new Customer Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (PMUs). See Section 8.5.3 of Appendix 2 to the Interconnection Service Agreement as well as section 4.3 of PJM Manual 14D for additional information.

The Feasibility Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. The project developer is responsible for the right of way, real estate, and construction permit issues. For properties currently owned by Transmission Owners, the costs may be included in the study.

3 General

The Interconnection Customer (IC), has proposed a Solar; Storage generating facility located in Halifax County, Virginia. The installed facilities will have a total capability of 120 MW with 92 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is December 15, 2023. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-093
Project Name	HALIFAX-CHASE CITY 115 KV
State	Virginia
County	Halifax
Transmission Owner	Dominion
MFO	120
MWE	120
MWC	92
Fuel	Solar; Storage
Basecase Study Year	2024

Any new service customers who can feasibly be commercially operable prior to June 1st of the basecase study year are required to request interim deliverability analysis.

4 Point of Interconnection

4.1 Primary POI

AG1-093 will interconnect with the Dominion transmission system tapping the Sedge Hill to Chase City 115 kV line. The primary POI is a direct connect to the new substation to be constructed for the AC1-105 project.

The IC is responsible for securing right-of-way, permits, and constructing the proposed attachment line from the generating facility site to the Point of Interconnection. The IC may not install any facilities on Dominion's right-of-way without first obtaining the necessary approval from Dominion Energy.

Costs provided are contingent on the AC1-105 project being built. Should the AC1-105 project withdraw from the Interconnection Queue, the AG1-093 project will assume the Attachment, Direct Connection, and Non-Direct Connection costs identified in the AC1-105 study report for connection to the Dominion system.

Attachment 1 shows a one-line diagram of the proposed interconnection facilities.

4.2 Secondary POI

The IC requested that a secondary POI be reviewed for network impacts.

The secondary POI for AG1-093 is a new tap on the Sedge Hill-Clover 230 kV line.

This report does not provide costs for the interconnection of the secondary POI. The secondary POI was analyzed for network impacts. Network impact results are shown in the Summer Peak - Load Flow Analysis – Secondary Point of Interconnection section of this report.

5 Cost Summary

The AG1-093 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 2,700,000
Total System Network Upgrade Costs	\$290,113,000 ¹
Total Costs	\$292,813,000

This cost excludes a Federal Income Tax Gross Up charges. This tax may or may not be charged based on whether this project meets the eligibility requirements of IRS Notice 2016-36, 2016-25 I.R.B. (6/20/2016). If at

¹ This project currently causes and contributes to overloads of the Transmission System (see Summer Peak Load Flow Analysis section below) and therefore has potential to have cost allocation for the system reinforcements listed in the report. This will be re-evaluated in the System Impact phase. The results may vary with queue customers withdrawing from the queue and other generators deactivating over time. If a customer is the first to cause the need for a project (causes loading to exceed 100% of rating), then the customer is responsible. If a customer contributes to a facility that is already overloaded by a prior queue, then they may receive cost allocation.

a future date it is determined that the Federal Income Tax Gross charge is required, the Transmission Owner shall be reimbursed by the Interconnection Customer for such taxes.

Cost allocations for any System Upgrades will be provided in the System Impact Study Report.

6 Transmission Owner Scope of Work

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of AG1-093 to the Dominion Transmission System is detailed in the following sections. The associated one-line showing the generation project attachment facilities and primary direct and non-direct connection is shown in Attachment 1.

Note that the ITO findings were made from a conceptual review of this project. A more detailed review of the connection facilities and their cost will be identified in a future study phase. Further note that the cost estimate data contained in this document should be considered high level estimates since it was produced without a detailed engineering review. The applicant will be responsible for the actual cost of construction. ITO herein reserves the right to return to any issues in this document and, upon appropriate justification, request additional monies to complete any reinforcements to the transmission systems.

The total physical interconnection costs is given in the table below:

Description	Total Cost
Attachment Facilities	\$1,700,000
New Breaker	\$1,000,000
Total Physical Interconnection Costs	\$2,700,000

AG1-093 "Halifax-Chase City 115 kV" will interconnect with the Dominion transmission system. The primary POI is a direct connect to the new substation to be constructed for the AC1-105 project.

To accommodate the proposed Project, Dominion Energy will add one new 115 kV breaker to the AC1-105 substation to allow for the proposed interconnection. Dominion will install one span of overhead 115 kV line to the point of interconnection ("POI") including 115 kV interconnection metering.

It is estimated to take **18-30 months** to complete this work upon execution of an Interconnection Construction Service Agreement (ICSA). These preliminary cost estimates are based on typical engineering costs. A more detailed engineering cost estimates are normally done when the IC provides an exact site plan location for the generation substation during the Facility Study phase.

Remote Terminal Work: During the Facilities Study, ITO's System Protection Engineering Department will review transmission line protection as well as anti-islanding required to accommodate the new generation and interconnection substation. System Protection Engineering will determine the minimal acceptable protection requirements to reliably interconnect the proposed generating facility with the transmission system. The review is based on maintaining system reliability by reviewing ITO's protection requirements with the known transmission system configuration which includes generating facilities in the area. This review may determine that transmission line protection and communication upgrades are required at remote substations.

7 Schedule

The estimated schedule for the Attachment Facilities, Direct Connection and Non-Direct Connection work is identified in the “Transmission Owner Scope of Work” section of this report.

If the customer is ultimately responsible for network upgrades, then the schedule for those upgrades will be refined in future study phases. The customer would need to wait for those upgrades to be completed prior to commercial operation unless determined deliverable by an interim deliverability study. The elapsed time to complete any network upgrades is provided in the System Reinforcements table of this report¹.

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-093 for compliance with NERC Reliability Criteria on the Dominion Transmission System. The system was assessed using the summer 2024 AG1 case provided to Dominion by PJM.

When performing a generation analysis, Dominion’s main analysis includes load flow study results following a single contingency event for both normal and stressed system conditions. Dominion Criteria considers a transmission facility overloaded if it exceeds 94% of its emergency rating under normal and stressed system conditions. A full listing of Dominion’s Planning Criteria and interconnection requirements can be found in the Company’s Facility Connection Requirements which are publicly available at: <http://www.dominionenergy.com>.

The results of these studies evaluate the system under a limited set of operating conditions and do not guarantee the full delivery of the capacity and associated energy of this proposed generation facility under all operating conditions. NERC Planning and Operating Reliability Criteria allow for the re-dispatch of generating units to resolve projected and actual deficiencies in real time and planning studies. Specifically, in Planning Studies, NERC Planning Event 3 and 6 Contingency Conditions (Loss of generator, transmission circuit, transformer, shunt device, or Single Pole of a DC line followed by the loss of a generator, transmission circuit, transformer, shunt device or single pole of a DC line) allow for re-dispatch of generating units to resolve potential reliability deficiencies. For Dominion Planning Criteria the re-dispatch of generating units for these contingency conditions is allowed as long as the projected loading does not exceed 100% of a facility Load Dump Rating.

8.1 Power Flow Analysis

PJM performed a power flow analysis of the transmission system using a 2024 summer peak load flow model and the results were verified by Dominion. Additionally, Dominion performed an analysis of its transmission system and no further deficiencies were identified.

8.2 Short Circuit Analysis

No impacts.

8.3 Stability Analysis

TO be performed in the Facilities Study phase.

9 Interconnection Customer Requirements

9.1 System Protection

The IC must design its Customer Facilities in accordance with all applicable standards, including the standards in Dominion's "Dominion Energy Electric Transmission Generator Interconnection Requirements" documented in Dominion's Facility Interconnection Requirements "Exhibit C" located at: <https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>. Preliminary Protection requirements will be provided as part of the Facilities Study. Detailed Protection Requirements will be provided once the project enters the construction phase.

9.2 Compliance Issues and Interconnection Customer Requirements

The proposed Customer Facilities must be designed in accordance with Dominion's "Dominion's Facility Interconnection Requirements" document located at: <https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>. In particular, the IC is responsible for the following:

1. The purchase and installation of a fully rated protection device (circuit breaker, circuit switcher, fuse) to protect the IC's GSU transformer(s).
2. The purchase and installation of the minimum required Dominion generation interconnection relaying and control facilities as described in the System Protection section noted above. This includes over/under voltage protection, over/under frequency protection, and zero sequence voltage protection relays.
3. The purchase and installation of supervisory control and data acquisition ("SCADA") equipment to provide information in a compatible format to the Dominion Transmission System Control Center.
4. Compliance with the Dominion and PJM generator power factor and voltage control requirements.

The GSU(s) associated with the IC queue request shall meet the grounding requirements as noted in Dominion's "Dominion's Facility Interconnection Requirements" document located at: <https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>.

The IC will also be required to meet all PJM, SERC, and NERC reliability criteria and operating procedures for standards compliance. For example, the IC will need to properly locate and report the over and under voltage and over and under frequency system protection elements for its units as well as the submission of the generator model and protection data required to satisfy the PJM and SERC audits. Failure to comply with these requirements may result in a disconnection of service if the violation is found to compromise the reliability of the Dominion system.

9.3 Power Factor Requirements

The IC shall design its non-synchronous Customer Facility with the ability to maintain a power factor of at least 0.95 leading (absorbing VARs) to 0.95 lagging (supplying VARs) measured at the high-side of the facility substation transformer(s) connected to the Dominion transmission system.

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

The Interconnection Customer will be required to install equipment necessary to provide Revenue Metering (KWH, KVARH) and real time data (KW, KVAR) for IC's generating Resource. See PJM Manuals M-01 and M-14D, and PJM Tariff Section 8 of Attachment O.

10.2 Meteorological Data Reporting Requirements

The solar generation facility shall provide the Transmission Provider with site-specific meteorological data including:

- Back Panel temperature (Fahrenheit) - (Required for plants with Maximum Facility Output of 3 MW or higher)
- Irradiance (Watts/meter²) - (Required for plants with Maximum Facility Output of 3 MW or higher)
- Ambient air temperature (Fahrenheit) - (Accepted, not required)
- Wind speed (meters/second) - (Accepted, not required)
- Wind direction (decimal degrees from true north) - (Accepted, not required)

10.3 Interconnected Transmission Owner Requirements

The IC will be required to comply with all Interconnected Transmission Owner's revenue metering requirements for generation interconnection customers located at the following link:

<http://www.pjm.com/planning/design-engineering/to-tech-standards/>

11 Summer Peak - Load Flow Analysis - Primary POI

The Queue Project AG1-093 was evaluated as a 120.0 MW (Capacity 92.0 MW) injection tapping the Sedge Hill to Chase City 115 kV line in the Dominion area. Project AG1-093 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-093 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

11.1 Generation Deliverability

(Single or N-1 contingencies for the Capacity portion only of the interconnection)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
16911199 1	31469 6	3SEDGE HILL	115.0	DVP	31469 7	6SEDGE HILL	230.0	DVP	1	DVP_P1-3: 6SEDGE HILL-TX#2	single	226.727996826	91.26	111.48	DC	45.85

11.2 Multiple Facility Contingency

(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies for the full energy output)

None

11.3 Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
1680944 87	2426 31	05EDAN 1	138.0	AEP	2426 20	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1	single	402.0	116.59	118.43	DC	7.48
1680944 88	2426 31	05EDAN 1	138.0	AEP	2426 20	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	single	402.0	116.59	118.43	DC	7.48
1680944 89	2426 31	05EDAN 1	138.0	AEP	2426 20	05DANVL2	138.0	AEP	1	Base Case	single	275.0	105.91	108.19	DC	6.34
1614551 06	2426 87	05JOHNMT	138.0	AEP	2427 34	05NEWLDN	138.0	AEP	1	AEP_P2-2_#13260_05SKI MMR 69.0_1	bus	240.0	136.46	137.87	DC	7.5
1614554 76	2426 87	05JOHNMT	138.0	AEP	2427 34	05NEWLDN	138.0	AEP	1	DVP_P7-1: LN 158-235	tower	240.0	118.64	119.92	DC	6.8
1680944 72	2426 87	05JOHNMT	138.0	AEP	2427 34	05NEWLDN	138.0	AEP	1	Base Case	single	167.0	132.85	135.85	DC	5.0
1614551 01	2427 41	05OTTER	138.0	AEP	2426 87	05JOHNMT	138.0	AEP	1	AEP_P2-2_#13260_05SKI MMR 69.0_1	bus	245.0	139.48	140.85	DC	7.5
1614551 03	2427 41	05OTTER	138.0	AEP	2426 87	05JOHNMT	138.0	AEP	1	AEP_P2-2_#6213_05WLA KE 138_1	bus	245.0	134.45	135.69	DC	6.74
1614554 84	2427 41	05OTTER	138.0	AEP	2426 87	05JOHNMT	138.0	AEP	1	AEP_P7-1_#10830	tower	245.0	134.33	135.56	DC	6.74
1614554 85	2427 41	05OTTER	138.0	AEP	2426 87	05JOHNMT	138.0	AEP	1	AEP_P7-1_#10829	tower	245.0	127.54	128.76	DC	6.67
1680944 64	2427 41	05OTTER	138.0	AEP	2426 87	05JOHNMT	138.0	AEP	1	Base Case	single	167.0	136.74	139.74	DC	5.0
1683390 35	3137 07	6FORK UNION	230.0	DVP	9610 60	AF2-397 TAP	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	126.49	127.78	DC	8.56
1683390 36	3137 07	6FORK UNION	230.0	DVP	9610 60	AF2-397 TAP	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	122.68	123.97	DC	8.56

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/D C	MW IMPACT
168339052	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	120.03	121.89	DC	10.63
168339053	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	120.07	121.93	DC	10.63
168339057	313867	6BREMIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	128.25	129.63	DC	9.12
168339058	313867	6BREMIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	124.08	125.46	DC	9.12
168339047	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	120.09	121.95	DC	10.63
168339048	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	120.1	121.96	DC	10.63
168926953	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	168.73	171.67	DC	5.37
168926954	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 130	single	182.641998291	116.11	119.12	DC	5.51
168926955	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	107.49	110.41	DC	5.16
163512368	314667	4ALTVSTA	138.0	DVP	242741	05OTTER	138.0	AEP	1	Base Case	single	167.0	138.66	141.65	DC	5.0
163512370	314667	4ALTVSTA	138.0	DVP	242741	05OTTER	138.0	AEP	1	AEP_P2-1_242575 05CAMDLM 138 242737 05OPOSSUMCK 138 1	single	245.0	112.48	114.61	DC	5.22
169111963	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	163.11	166.34	DC	18.43
169111964	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	163.13	166.35	DC	18.43
169112079	314686	6CLOVER	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	single	571.520019531	114.5	116.36	DC	10.63
169112080	314686	6CLOVER	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	114.51	116.37	DC	10.63
169111921	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P1-2: LN 235-A	single	182.641998291	181.33	185.98	DC	8.49
169111924	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	single	176.81401062	103.61	106.29	DC	4.74
169111932	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298	single	198.057998657	109.61	112.26	DC	5.24
169111942	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-C	single	559.299987793	163.38	166.68	DC	18.45
169111943	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B	single	559.299987793	163.42	166.72	DC	18.45
169111969	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	single	674.91998291	143.39	149.2	DC	39.19
169111970	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	674.91998291	143.42	149.23	DC	39.19
163512165	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P4-6: CAROLIN T122	breaker	199.0	146.44	148.7	DC	10.17
163512166	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P4-2: 13002	breaker	199.0	125.51	127.49	DC	8.77
163512167	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P4-2: 102802	breaker	199.0	125.51	127.49	DC	8.77
163513040	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P7-1: LN 22-90	tower	199.0	143.78	146.01	DC	10.06
169331327	314747	6BREMO	230.0	DVP	313867	6BREMIST	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	130.41	131.79	DC	9.12
169331328	314747	6BREMO	230.0	DVP	313867	6BREMIST	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	126.24	127.62	DC	9.12

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169331317	314765	6MTEAGLE	230.0	DVP	314749	6CHARLV	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	130.36	131.66	DC	8.56
169331318	314765	6MTEAGLE	230.0	DVP	314749	6CHARLV	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	126.57	127.87	DC	8.56
163512332	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-D	single	718.0	146.76	152.22	DC	39.19
163512333	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-C	single	718.0	146.79	152.24	DC	39.19
169560484	934620	AD1-088 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	single	571.520019531	121.15	123.01	DC	10.63
169560485	934620	AD1-088 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	121.17	123.03	DC	10.63
169865441	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	133.93	135.23	DC	8.56
169865442	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	130.13	131.42	DC	8.56
169560498	962490	AG1-098 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	single	571.520019531	114.41	116.27	DC	10.63
169560499	962490	AG1-098 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	114.43	116.29	DC	10.63
169865482	963270	AG1-176 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	121.15	123.01	DC	10.63
169865483	963270	AG1-176 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	121.19	123.05	DC	10.63
168640343	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	121.15	123.01	DC	10.63
168640344	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	121.19	123.05	DC	10.63
169865451	966790	AG1-550 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.760009766	133.9	135.2	DC	8.56
169865452	966790	AG1-550 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	130.11	131.41	DC	8.56

11.4 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168094688	242620	05DANVL2	138.0	AEP	242631	05EDAN 1	138.0	AEP	1	Base Case	operation	275.0	102.32	102.98	DC	3.44

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168094484	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P1-3_#1377_05J.FERR 765_1	operation	402.0	143.82	144.92	DC	9.75
168094485	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	operation	402.0	143.82	144.92	DC	9.75
168094486	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	operation	275.0	126.79	128.15	DC	8.27
168094677	242631	05EDAN 1	138.0	AEP	242632	05EDAN 2	138.0	AEP	Z1	AEP_P1-3_#8675_05EDANV1 230_5-B	operation	296.0	109.98	110.53	DC	3.07
168094463	242741	05OTTER	138.0	AEP	242687	05JOHNMT	138.0	AEP	1	Base Case	operation	167.0	175.98	177.74	DC	6.52
168339033	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	151.57	152.33	DC	11.17
168339037	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	Base Case	operation	661.760009766	100.39	101.03	DC	9.4
168339050	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	146.28	148.7	DC	13.87
168339055	313867	6BREMIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	149.19	150.0	DC	11.9
168339059	313867	6BREMIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	Base Case	operation	661.760009766	100.59	101.27	DC	9.96
168339045	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	146.33	148.76	DC	13.87
169112153	314666	3ALTVSTA	115.0	DVP	314667	4ALTVSTA	138.0	DVP	1	DVP_P1-3: 4ALTVSTA-TX#4	operation	126.524002075	102.23	106.33	DC	11.51
163512363	314667	4ALTVSTA	138.0	DVP	242741	05OTTER	138.0	AEP	1	Base Case	operation	167.0	177.9	179.66	DC	6.52
169112172	314667	4ALTVSTA	138.0	DVP	314666	3ALTVSTA	115.0	DVP	2	AEP_P2-1_242687 05JOHNMT 138 242734 05NEWLDN 138 1	operation	130.472000122	101.62	102.65	DC	2.54
169111961	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	214.61	218.82	DC	24.05
169111965	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	Base Case	operation	571.520019531	127.13	128.27	DC	14.52
169112077	314686	6CLOVER	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	138.65	141.08	DC	13.87
169112206	314688	3CRSTL HILL	115.0	DVP	927260	AC1-222 TAP	115.0	DVP	1	AEP_P1-2_#375_5201	operation	285.760009766	100.48	102.41	DC	5.53
169111940	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	559.299987793	216.95	221.25	DC	24.06
169111944	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	Base Case	operation	559.299987793	125.15	126.32	DC	14.54
169111989	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	1	DVP_P1-3: 6SEEDGE HILL-TX#2	operation	226.727996826	154.91	181.2	DC	59.8
169111992	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	1	Base Case	operation	223.531997681	88.99	104.85	DC	35.44
169112005	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	2	DVP_P1-3: 6SEEDGE HILL-TX#1	operation	256.055999756	136.75	159.97	DC	59.62
169111967	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	674.91998291	188.18	195.72	DC	51.12
163512373	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P1-2: LN 90	operation	199.0	116.55	118.37	DC	8.13
163512374	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	Base Case	operation	191.0	111.37	113.01	DC	7.02

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169112201	314714	3PERTH	115.0	DVP	964470	AG1-310 TAP	115.0	DVP	1	AEP_P1-2_#375_5201	operation	285.760009766	106.5	108.43	DC	5.53
169331325	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	3143336POWHATN 230933500 AC2-165 TAP 230 1	operation	661.760009766	151.35	152.16	DC	11.9
169331329	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	Base Case	operation	661.760009766	102.75	103.43	DC	9.96
169331359	316115	AC1-105 TAP	115.0	DVP	314696	3SEGEHILL	115.0	DVP	1	DVP_P1-2: LN 40-A	operation	331.820007324	81.86	109.5	DC	91.97
163512327	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	DVP_P1-2: LN 556-D	operation	718.0	194.26	201.34	DC	51.12
163512337	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	Base Case	operation	542.0	99.08	105.38	DC	34.16
169560482	934620	AD1-088 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	147.29	149.71	DC	13.87
169865439	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	3143336POWHATN 230933500 AC2-165 TAP 230 1	operation	661.760009766	161.07	161.83	DC	11.17
169865443	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	Base Case	operation	661.760009766	106.35	106.99	DC	9.4
169560496	962490	AG1-098 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	138.56	140.99	DC	13.87
169865480	963270	AG1-176 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	147.4	149.82	DC	13.87
169112157	964470	AG1-310 TAP	115.0	DVP	314688	3CRSTLHILL	115.0	DVP	1	AEP_P1-2_#375_5201	operation	285.760009766	106.5	108.43	DC	5.53
168640341	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	147.4	149.82	DC	13.87

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
168094487,168094489,168094488	2	05EDAN 1 138.0 kV - 05DANVL2 138.0 kV Ckt 1	<u>AEP</u> n6124 (533) : PJM Network Upgrade n6124. Increasing the Danville East Danville 138 kV circuit summer rating to 572/572/572 MVA will still require us to rebuild the line. The network project has an projected in-service date of 06/01/2021. Project Type : FAC Cost : \$9,000,000 Time Estimate : Months	\$9,000,000
168339057,168339058	7	6BREMODIST 230.0 kV - 6FORK UNION 230.0 kV Ckt 1	<u>DVP</u> dom-202 (1589) : Rebuild 1.63 miles of 230 kV Line 2028 from Fork Union to Brema Dist with 2-636 ACSR. Project Type : FAC Cost : \$2,445,000 Time Estimate : 30-36 Months	\$2,445,000
168339048,168339047	8	6BRIERY 230.0 kV - 6PRINCE EDW 230.0 kV Ckt 1	<u>DVP</u> dom-212 (1599) : Rebuild 5.7 miles of 230 kV Line 235 from Briery to Prince EDW with 2-636 ACSR. Project Type : FAC Cost : \$8,550,000 Time Estimate : 30-36 Months	\$8,550,000
169865451,169865452	26	AG1-550 TAP 230.0 kV - 6MTEAGLE 230.0 kV Ckt 1	<u>DVP</u> dom-421 (1808) : Rebuild 6.5 miles of 230 kV Line 2028 from AG1-550 Tap to Mt Eagle with 2-768.2 ACSS 250 C Project Type : FAC Cost : \$16,250,000 Time Estimate : 30-36 Months	\$16,250,000
169560484,169560485	21	AD1-088 TAP 230.0 kV - AG1-176 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-392 (1779) : Rebuild 2.729 miles of 230 kV line 235 from AD1-088 Tap to AG1-176 Tap with 2-636 ACSR 150 C. Project Type : FAC Cost : \$6,822,500 Time Estimate : 30-36 Months	\$6,822,500
169111991	1	3SEEDGE HILL 115.0 kV - 6SEEDGE HILL 230.0 kV Ckt 1	<u>DVP</u> dom-046 (1385) : Add additional 230/115 kV transformer at Sedge Hill substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000

ID	Idx	Facility	Upgrade Description	Cost
168339052,168339053	6	6PRINCE EDW 230.0 kV - 6FARMVIL 230.0 kV Ckt 1	<u>DVP</u> dom-199 (1586) : Rebuild 7.2 miles of 230 kV Line 235 from Prince EDW to Farmville with 2-636 ACSR. Project Type : FAC Cost : \$10,800,000 Time Estimate : 30-36 Months	\$10,800,000
163513040,163512166,163512167,163512165	17	3KERR 115.0 kV - 3GW KING TAP 115.0 kV Ckt 1	<u>DVP</u> n6115 (1332) : For DEV portion, rebuild 4.7 miles of 115 kV Line 45 from Kerr Dam to GW King Tap with 768 ACSR. Project Type : FAC Cost : \$6,123,000 Time Estimate : 30-36 Months	\$6,123,000
163512333,163512332	20	AC1-221 TAP 230.0 kV - 6PERSON230 T 230.0 kV Ckt 1	<u>DVP</u> n6449 (1339) : For DEV portion, rebuild 2 miles of 230 kV Line 296 from AC1-221 Tap to Persons DEP with 2-636 ACSR. Project Type : FAC Cost : \$3,000,000 Time Estimate : 30-36 Months dom-259 (1646) : For DEV portion, rebuild 2 miles of 230 kV Line 296 from AC1-221 Tap to Persons DEP with 2-795 ACSR. Project Type : FAC Cost : \$3,000,000 Time Estimate : 30-36 Months	\$6,000,000
169111963,169111964	11	6BUCKING 230.0 kV - 6BREMO 230.0 kV Ckt 1	<u>DVP</u> n6219 (1370) : Rebuild 15.51 miles of 230 kV Line 298 from Buckingham to Brema with 2-636 ACSR. Project Type : FAC Cost : \$23,265,000 Time Estimate : 30-36 Months	\$23,265,000
169111943,169111942	15	6FARMVIL 230.0 kV - 6BUCKING 230.0 kV Ckt 1	<u>DVP</u> n6245 (1372) : Rebuild 12.76 miles of 230 kV Line 298 from Buckingham to Farmville with 2-636 ACSR. Project Type : FAC Cost : \$19,140,000 Time Estimate : 30-36 Months	\$19,140,000
169331327,169331328	18	6BREMO 230.0 kV - 6BREMODIST 230.0 kV Ckt 1	<u>DVP</u> n5873 (1538) : Rebuild 0.16 miles of Line 2028 from Brema to Brema Dist with 2-636 ACSR. Project Type : FAC Cost : \$500,000 Time Estimate : 30-36 Months	\$500,000

ID	Idx	Facility	Upgrade Description	Cost
161455485,161455101,161455103,168094464,161455484	4	05OTTER 138.0 kV - 05JOHNMT 138.0 kV Ckt 1	<u>AEP</u> AEPA0019a (247) : 2) Rebuild/reconductor JohnMt - Otter Line, ACSR ~ 397.5 ~ 30/7 ~ LARK Conductor Section 1, 7 Miles. \$10.5M Project Type : FAC Cost : \$10,500,000 Time Estimate : 24-36 Months AEPA0019b (248) : Replace 795 AAC station conductors at Otter Project Type : FAC Cost : \$10,670,000 Time Estimate : 18-24 Months	\$21,170,000
168094472,161455476,161455106	3	05JOHNMT 138.0 kV - 05NEWLDN 138.0 kV Ckt 1	<u>AEP</u> AEPA0020a (250) : Current Station Rating: S/N: 167, S/E: 240 1) Rebuild/reconductor ACSR ~ 397.5 ~ 30/7 ~ LARK ~ Fe Clamps 9 d, Conductor Section 1, 14.43 miles Project Type : FAC Cost : \$21,650,000 Time Estimate : 12-18 Months AEPA0020b (251) : Replace 1200 A Wavetrap at New London Project Type : FAC Cost : \$50,000 Time Estimate : 24-36 Months	\$21,700,000
169331318,169331317	19	6MTEAGLE 230.0 kV - 6CHARLVL 230.0 kV Ckt 1	<u>DVP</u> n6184 (1576) : Rebuild 6.47 miles of 230 kV Line 2028 from Mt Eagle to Charlottesville with 2-636 ACSR. Project Type : FAC Cost : \$16,175,000 Time Estimate : 30-36 Months	\$16,175,000
169111932	14	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 1	<u>DVP</u> dom-089 (1435) : Add additional 230/115 kV transformer at Farmville substation Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
169111924,169111921	13	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 2		
169111969,169111970	16	6SEDGE HILL 230.0 kV - AC1-221 TAP 230.0 kV Ckt 1	<u>DVP</u> No upgrade needed on Dominion system. Need coordination with CPLE. <u>CPLE</u> The external (i.e. Non-PJM) Transmission Owner, CPLE, will not evaluate this violation until the impact study phase.	\$0

ID	Idx	Facility	Upgrade Description	Cost
168640343,168 640344	25	AG1-347 TAP 230.0 kV - 6BRIERY 230.0 kV Ckt 1	<u>DVP</u> dom-297 (1684) : Rebuild 16.821 mi miles of 230 kV Line 235 from Briery DP to AG1-347 Tap with 2-636 ACSR 150 C Project Type : FAC Cost : \$42,052,500 Time Estimate : 36-40 Months	\$42,052,500
163512368,163 512370	10	4ALTVSTA 138.0 kV - 05OTTER 138.0 kV Ckt 1	<u>AEP</u> AEP A0014a (233) : Rebuild / reconductor 0.9 miles of overhead conductor (ACSR ~ 397.5 ~ 30/7 ~ LARK) Project Type : FAC Cost : \$1,350,000 Time Estimate : 24-36 Months <u>AEP</u> AEP A0014b (234) : Replace 795 AAC station conductors at Altavista Project Type : FAC Cost : \$100,000 Time Estimate : 12-18 Months <u>DVP</u> dom-001 (1330) : Relay Change Outs (Secondary) at Altavista Substation Project Type : FAC Cost : \$120,000 Time Estimate : 6-12 Months	\$1,570,000
169560499,169 560498	23	AG1-098 TAP 230.0 kV - AD1- 088 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-391 (1778) : Rebuild 8.936 miles of 230 kV line 235 from AD1-088 Tap to AG1-098 Tap with 2-636 ACSR 150 C Project Type : FAC Cost : \$22,340,000 Time Estimate : 36-40 Months	\$22,340,000
169112080,169 112079	12	6CLOVER 230.0 kV - AG1-098 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-343 (1730) : Rebuild 6.534 miles of 230 kV Line 235 from Clover to AG1-098 with 2-795 ACSR 150 C. Replace Relay (Secondary CT) at Clover terminal Project Type : FAC Cost : \$16,455,000 Time Estimate : 36-40 Months	\$16,455,000
168926955,168 926954,168926 953	9	3CLUBHSE 115.0 kV - 6CLUBHSE 230.0 kV Ckt 1	<u>DVP</u> n6114 (1544) : Add additional 230/115 kV transformer at Clubhouse substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000

ID	Idx	Facility	Upgrade Description	Cost
168339036,168339035	5	6FORK UNION 230.0 kV - AF2-397 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-198 (1585) : Rebuild 5 miles of 230 kV Line 2028 from Fork Union to AF2-397 Tap with 2-636 ACSR. Project Type : FAC Cost : \$7,500,000 Time Estimate : 30-36 Months	\$7,500,000
169865482,169865483	24	AG1-176 TAP 230.0 kV - AG1-347 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-415 (1802) : Rebuild 0.17 mi miles of 230 kV Line 235 from AG1-347 Tap to AG1-176 Tap with 2-636 ACSR 150 C Project Type : FAC Cost : \$255,000 Time Estimate : 30-36 Months	\$255,000
169865442,169865441	22	AF2-397 TAP 230.0 kV - AG1-550 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-409 (1796) : Rebuild 5.6 miles of 230 kV Line 2028 from AG1-550 Tap to AF2-397 Tap with 2-636 ACSR 150 C. Project Type : FAC Cost : \$14,000,000 Time Estimate : 36-40 Months	\$14,000,000
			TOTAL COST	\$290,113,000 ¹

11.6 Flow Gate Details - Primary POI

The following indices contain additional information about each facility presented in the body of the report. For each index, a description of the flowgate and its contingency was included for convenience. The intent of the indices is to provide more details on which projects/generators have contributions to the flowgate in question. All New Service Queue Requests, through the end of the Queue under study, that are contributors to a flowgate will be listed in the indices. Please note that there may be contributors that are subsequently queued after the queue under study that are not listed in the indices. Although this information is not used "as is" for cost allocation purposes, it can be used to gage the impact of other projects/generators. It should be noted the project/generator MW contributions presented in the body of the report are Full MW Impact contributions which are also noted in the indices column named "Full MW Impact", whereas the loading percentages reported in the body of the report, take into consideration the PJM Generator Deliverability Test rules such as commercial probability of each project as well as the ramping impact of "Adder" contributions. The MW Impact found and used in the analysis is shown in the indices column named "Gendeliv MW Impact".

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111991	314696	3SEEDGE HILL	DVP	314697	6SEEDGE HILL	DVP	1	DVP_P1-3: 6SEEDGE HILL-TX#2	single	226.73	91.26	111.48	DC	45.85

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	0.5805	80/20	0.5805
246844	05SMG2	1.5779	80/20	1.5779
246845	05SMG3	0.9892	80/20	0.9892
246846	05SMG4	1.5534	80/20	1.5534
246847	05SMG5	0.6050	80/20	0.6050
247284	05LEESVG	0.7296	80/20	0.7296
313527	AB2-043 C	0.6460	80/20	0.6460
314429	3JTRSVLE	0.2980	80/20	0.2980
314704	3LAWRENC	0.1696	80/20	0.1696
315156	1HALLBR1	1.3548	80/20	1.3548
315158	1KERR 1	0.3699	80/20	0.3699
315159	1KERR 2	1.0357	80/20	1.0357
315160	1KERR 3	1.0357	80/20	1.0357
315161	1KERR 4	1.0357	80/20	1.0357
315162	1KERR 5	1.0357	80/20	1.0357
315163	1KERR 6	1.0357	80/20	1.0357
315164	1KERR 7	1.0357	80/20	1.0357
315266	1PLYWOOD A	3.6058	80/20	3.6058
316118	AC1-105 C	17.1934	80/20	17.1934
316123	AC1-075 C	2.2966	80/20	2.2966
316129	AC1-054 C	4.6827	80/20	4.6827
316131	AB2-060 C	1.8286	80/20	1.8286
924301	AB2-077 C O1 (Suspended)	2.6800	80/20	2.6800
924311	AB2-078 C O1 (Suspended)	2.6800	80/20	2.6800
924321	AB2-079 C O1 (Suspended)	2.6800	80/20	2.6800
925611	AC1-036 C	0.2218	80/20	0.2218
925661	AC1-042 C	2.1728	80/20	2.1728
926023	AC1-080 C	0.7675	80/20	0.7675
926645	AC1-145 C	0.4081	80/20	0.4081
927261	AC1-222 C	12.1290	80/20	12.1290
934311	AD1-055 C	8.4214	80/20	8.4214
935221	AD1-157 C	0.1446	80/20	0.1446
936265	AD2-033 C	13.5587	80/20	13.5587
936361	AD2-046 C O1	9.1138	80/20	9.1138
936485	AD2-063 C	17.6553	80/20	17.6553
938371	AE1-056 C	3.9510	80/20	3.9510
939181	AE1-148 C	9.0914	80/20	9.0914

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939941	AE1-230 C	0.9802	80/20	0.9802
940661	AE2-053 O1	3.3672	80/20	3.3672
941801	AE2-185 C	4.9010	80/20	4.9010
941821	AE2-187 C	4.9010	80/20	4.9010
942451	AE2-258	3.0548	80/20	3.0548
942461	AE2-259 C O1	3.4716	80/20	3.4716
942671	AE2-283 C	5.3911	80/20	5.3911
942751	AE2-291 C	19.2878	80/20	19.2878
942761	AE2-292 C O1	24.0152	80/20	24.0152
943901	AF1-058 C	6.8587	80/20	6.8587
943911	AF1-059	14.0170	80/20	14.0170
945081	AF1-173	1.8992	80/20	1.8992
946301	AF1-294 C	3.0108	80/20	3.0108
958211	AF2-115 C	1.7711	80/20	1.7711
958801	AF2-171 C	10.7010	80/20	10.7010
959311	AF2-222 C	15.7000	80/20	15.7000
960061	AF2-297 C	27.4349	80/20	27.4349
961121	AF2-403	1.0891	80/20	1.0891
961791	AG1-021 C	1.4168	80/20	1.4168
961891	AG1-030 C	12.0555	80/20	12.0555
962041	AG1-048 C	8.8552	80/20	8.8552
962441	AG1-093 C O1	45.8491	80/20	45.8491
963171	AG1-166 C	1.4168	80/20	1.4168
963181	AG1-167 C	1.4168	80/20	1.4168
963191	AG1-168 C	1.4168	80/20	1.4168
963201	AG1-169 C	1.4168	80/20	1.4168
963211	AG1-170 C	1.4168	80/20	1.4168
963301	AG1-179 C	3.7689	80/20	3.7689
963311	AG1-180	1.8363	80/20	1.8363
963321	AG1-181 C O1	17.3096	80/20	17.3096
963361	AG1-185 O1	8.3749	80/20	8.3749
963601	AG1-209 C	0.3812	80/20	0.3812
963641	AG1-215 C	0.6612	80/20	0.6612
964111	AG1-272 C	2.5210	80/20	2.5210
964121	AG1-273 C	2.5210	80/20	2.5210
964131	AG1-274 C	2.5210	80/20	2.5210
964141	AG1-275 C	1.6337	80/20	1.6337
964151	AG1-276 C	1.6337	80/20	1.6337
964241	AG1-285 C O1	15.1590	80/20	15.1590
964251	AG1-286 C	0.6223	80/20	0.6223
964261	AG1-287 C	5.1440	80/20	5.1440
964471	AG1-310 C	6.8684	80/20	6.8684
964791	AG1-342 C	10.6934	80/20	10.6934
964821	AG1-345 C	0.5693	80/20	0.5693
965191	AG1-384 C	2.5210	80/20	2.5210
965281	AG1-393 C	1.4168	80/20	1.4168
965451	AG1-413 C O1	5.8922	80/20	5.8922
965591	AG1-427 C	14.2996	80/20	14.2996
965601	AG1-428 C O1	3.1464	80/20	3.1464
965641	AG1-432 C O1	6.9432	80/20	6.9432
965721	AG1-440 C	6.1934	80/20	6.1934
965731	AG1-441 C	6.1934	80/20	6.1934

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965771	AG1-445	3.5784	80/20	3.5784
965781	AG1-446	3.5784	80/20	3.5784
965831	AG1-451	1.1572	80/20	1.1572
966691	AG1-539 C	10.0851	80/20	10.0851
966751	AG1-546 C	9.6117	80/20	9.6117
966761	AG1-547 C	4.4300	80/20	4.4300
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	0.6943	80/20	0.6943
WEC	WEC	0.0164	Confirmed LTF	0.0164
LGEE	LGEE	0.0509	Confirmed LTF	0.0509
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
NY	NY	0.0547	Confirmed LTF	0.0547
PRAIRIE	PRAIRIE	0.0827	Confirmed LTF	0.0827
SIGE	SIGE	0.0181	Confirmed LTF	0.0181
CHEOAH	CHEOAH	0.1496	Confirmed LTF	0.1496
COTTONWOOD	COTTONWOOD	0.4284	Confirmed LTF	0.4284
HAMLET	HAMLET	0.6809	Confirmed LTF	0.6809
CATAWBA	CATAWBA	0.3041	Confirmed LTF	0.3041
CBM-W1	CBM-W1	0.7290	Confirmed LTF	0.7290

11.6.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168094488	242631	05EDAN 1	AEP	242620	05DANVL2	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	single	402.0	116.59	118.43	DC	7.48

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.2723	Adder	2.67
313527	AB2-043 C	0.2209	80/20	0.2209
313719	3CHESTNUT	0.5595	80/20	0.5595
314572	3EMPORIA	0.1370	Adder	0.16
314582	3KELFORD	0.1465	80/20	0.1465
314623	3WITAKRS	0.1084	80/20	0.1084
315126	1ROARAP2	0.5492	80/20	0.5492
315128	1ROARAP4	0.5241	80/20	0.5241
315131	1EDGE CMA (Deactivation : 22/04/2019)	4.9062	80/20	4.9062
315132	1EDGE CMB (Deactivation : 22/04/2019)	4.9062	80/20	4.9062
315136	1ROSEMG1	0.8438	80/20	0.8438
315137	1ROSEMS1	0.5232	80/20	0.5232
315138	1ROSEMG2	0.3955	80/20	0.3955
315153	1CLOVER1	4.8431	80/20	4.8431
315154	1CLOVER2	4.7949	80/20	4.7949
315158	1KERR 1	0.1936	80/20	0.1936
315159	1KERR 2	0.5421	80/20	0.5421
315160	1KERR 3	0.5421	80/20	0.5421
315161	1KERR 4	0.5421	80/20	0.5421
315162	1KERR 5	0.5421	80/20	0.5421
315163	1KERR 6	0.5421	80/20	0.5421
315164	1KERR 7	0.5421	80/20	0.5421
315266	1PLYWOOD A	0.5917	80/20	0.5917
315293	1DOMTR9	2.2091	Adder	2.6
315294	1DOMTR10	2.7072	Adder	3.18
315601	1CONETOE2SOL	0.6666	80/20	0.6666
315606	3AA2-053SOLA	0.5921	80/20	0.5921
316020	AB2-059 C OP	0.8793	80/20	0.8793
316118	AC1-105 C	2.8038	80/20	2.8038
316129	AC1-054 C	3.3922	80/20	3.3922
316131	AB2-060 C	0.6316	80/20	0.6316
316140	AB2-099 C (Suspended)	0.1921	Adder	0.23
920591	AA2-165 C	0.0751	80/20	0.0751
922922	AB1-081 C OP	0.7460	80/20	0.7460
923991	AB2-040 C O1	2.4748	Adder	2.91
924301	AB2-077 C O1 (Suspended)	0.8962	80/20	0.8962

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	0.8962	80/20	0.8962
924321	AB2-079 C O1 (Suspended)	0.8962	80/20	0.8962
925591	AC1-034 C	3.6098	80/20	3.6098
926051	AC1-083 C O1	4.9267	80/20	4.9267
926070	AC1-086 C	7.1225	Adder	8.38
926201	AC1-098 C	2.7689	80/20	2.7689
926211	AC1-099 C	0.9279	80/20	0.9279
927024	AC1-189 C	4.1711	80/20	4.1711
927145	AC1-208 C	4.1616	80/20	4.1616
927251	AC1-221 C	1.8225	80/20	1.8225
927261	AC1-222 C	1.7942	80/20	1.7942
932631	AC2-084 C	3.9471	80/20	3.9471
932761	AC2-100 C	4.1943	80/20	4.1943
933941	AD1-017 C	0.9853	80/20	0.9853
933991	AD1-023 C	4.0525	Adder	4.77
934311	AD1-055 C	1.2458	80/20	1.2458
934331	AD1-057 C O1	4.7373	80/20	4.7373
934341	AD1-058 C	4.5688	80/20	4.5688
934615	AD1-087 C	3.0476	80/20	3.0476
934625	AD1-088 C	3.7118	Adder	4.37
934991	AD1-131 C	1.4980	80/20	1.4980
935171	AD1-152 C O1	3.3475	80/20	3.3475
936161	AD2-022 C O1	12.2316	80/20	12.2316
936171	AD2-023 C O1	7.1351	80/20	7.1351
936265	AD2-033 C	5.3407	80/20	5.3407
936361	AD2-046 C O1	4.4130	80/20	4.4130
936401	AD2-051 C O1	2.8492	Adder	3.35
936485	AD2-063 C	6.4260	80/20	6.4260
937481	AD2-202 C O1	0.8927	80/20	0.8927
939181	AE1-148 C	4.3346	80/20	4.3346
940081	AE1-250 C	16.7625	80/20	16.7625
940571	AE2-044 C	2.3643	80/20	2.3643
940661	AE2-053 O1	1.6054	80/20	1.6054
941791	AE2-182 C	0.6030	Adder	0.71
942451	AE2-258	1.0445	80/20	1.0445
943171	AE2-346 C	0.4611	Adder	0.54
943901	AF1-058 C	0.9977	80/20	0.9977
943911	AF1-059	6.8914	80/20	6.8914
944141	AF1-082	1.5199	80/20	1.5199
945811	AF1-246 C O1	2.3280	Adder	2.74
946281	AF1-292 C	0.4826	Adder	0.57
946301	AF1-294 C	1.3261	Adder	1.56
957481	AF2-042 C	16.6285	Adder	19.56
957521	AF2-046 C	5.3511	Adder	6.3
957861	AF2-080 C	3.7883	80/20	3.7883
958211	AF2-115 C	0.7800	Adder	0.92
958801	AF2-171 C	4.6894	Adder	5.52
959311	AF2-222 C	5.6338	Adder	6.63
959511	AF2-242 C	3.1500	80/20	3.1500
959751	AF2-266	3.4765	80/20	3.4765
960061	AF2-297 C	3.9907	80/20	3.9907

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960081	AF2-299 C	0.8133	Adder	0.96
961671	AG1-007 C	0.6235	80/20	0.6235
961681	AG1-008 C	2.8418	Adder	6.31
961791	AG1-021 C	0.3307	Adder	0.73
961891	AG1-030 C	2.5649	Adder	5.69
961931	AG1-036 C	0.2331	Adder	0.52
961941	AG1-037 C	0.0873	Adder	0.19
962041	AG1-048 C	2.0671	Adder	4.59
962331	AG1-082 C	0.3491	Adder	0.77
962341	AG1-083 C	0.3491	Adder	0.77
962351	AG1-084 C	0.3084	Adder	0.68
962361	AG1-085 C	0.3084	Adder	0.68
962441	AG1-093 C O1	7.4768	80/20	7.4768
962491	AG1-098 C O1	2.1986	Adder	4.88
962561	AG1-105 C O1	4.4586	80/20	4.4586
962571	AG1-106 C	1.0498	Adder	2.33
963171	AG1-166 C	0.3307	Adder	0.73
963181	AG1-167 C	0.3307	Adder	0.73
963191	AG1-168 C	0.3307	Adder	0.73
963201	AG1-169 C	0.3307	Adder	0.73
963211	AG1-170 C	0.3307	Adder	0.73
963301	AG1-179 C	1.0263	Adder	2.28
963311	AG1-180	0.5000	Adder	1.11
963321	AG1-181 C O1	6.8883	80/20	6.8883
963361	AG1-185 O1	3.3327	80/20	3.3327
963641	AG1-215 C	0.1543	Adder	0.34
964111	AG1-272 C	0.4663	Adder	1.04
964121	AG1-273 C	0.4663	Adder	1.04
964131	AG1-274 C	0.4663	Adder	1.04
964241	AG1-285 C O1	5.4135	80/20	5.4135
964261	AG1-287 C	0.7483	80/20	0.7483
964471	AG1-310 C	1.0236	80/20	1.0236
964491	AG1-312 C O1	3.2055	Adder	7.12
964501	AG1-313 C O1	0.8414	Adder	1.87
964791	AG1-342 C	2.0004	80/20	2.0004
964801	AG1-343 C	0.9747	Adder	2.16
964821	AG1-345 C	0.1324	Adder	0.29
964931	AG1-357 C	3.3550	Adder	7.45
965191	AG1-384 C	0.4663	Adder	1.04
965281	AG1-393 C	0.3307	Adder	0.73
965291	AG1-394 C	0.3332	Adder	0.74
965451	AG1-413 C O1	2.8969	80/20	2.8969
965591	AG1-427 C	5.1228	80/20	5.1228
965601	AG1-428 C O1	0.8568	Adder	1.9
965691	AG1-437 C O1	1.6775	Adder	3.72
965701	AG1-438 C O1	1.6775	Adder	3.72
965711	AG1-439 C O1	11.9580	80/20	11.9580
965721	AG1-440 C	3.5896	80/20	3.5896
965731	AG1-441 C	3.5896	80/20	3.5896
965741	AG1-442 O1	0.9785	Adder	2.17
965751	AG1-443 O1	0.9785	Adder	2.17
965761	AG1-444 O1	6.3776	80/20	6.3776

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965771	AG1-445	2.0740	80/20	2.0740
965781	AG1-446	2.0740	80/20	2.0740
966621	AG1-532 C	0.2328	Adder	0.52
966751	AG1-546 C	7.3693	80/20	7.3693
966801	AG1-551 C	1.0116	80/20	1.0116
966811	AG1-552 C	0.8720	80/20	0.8720
CPLE	CPLE	6.7370	Confirmed LTF	6.7370
G-007A	G-007A	1.0861	Confirmed LTF	1.0861
VFT	VFT	2.8767	Confirmed LTF	2.8767
CBM-W2	CBM-W2	2.6701	Confirmed LTF	2.6701
PRAIRIE	PRAIRIE	0.7439	Confirmed LTF	0.7439
TVA	TVA	1.3328	Confirmed LTF	1.3328
CBM-S2	CBM-S2	76.2955	Confirmed LTF	76.2955
CBM-S1	CBM-S1	0.2120	Confirmed LTF	0.2120
CBM-N	CBM-N	0.5172	Confirmed LTF	0.5172
GIBSON	GIBSON	0.5700	Confirmed LTF	0.5700
BLUEG	BLUEG	2.1804	Confirmed LTF	2.1804
TRIMBLE	TRIMBLE	0.7173	Confirmed LTF	0.7173
LAGN	LAGN	1.9565	Confirmed LTF	1.9565
AA2-074	AA2-074	4.4334	LTF	4.4334

11.6.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
161455106	242687	05JOHNMT	AEP	242734	05NEWLDN	AEP	1	AEP_P2-2_#13260_05SKIMMR69.0_1	bus	240.0	136.46	137.87	DC	7.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	1.1693	50/50	1.1693
246844	05SMG2	3.1786	50/50	3.1786
246845	05SMG3	1.9928	50/50	1.9928
246846	05SMG4	3.1292	50/50	3.1292
246847	05SMG5	1.2187	50/50	1.2187
247284	05LEESVG	1.8564	50/50	1.8564
315156	1HALLBR1	2.9223	50/50	2.9223
316118	AC1-105 C	1.8331	Adder	2.16
316123	AC1-075 C	1.2269	50/50	1.2269
925661	AC1-042 C	5.9959	50/50	5.9959
925662	AC1-042 E	9.7827	50/50	9.7827
925997	AC1-075 E	4.4060	50/50	4.4060
926023	AC1-080 C	0.4100	50/50	0.4100
926024	AC1-080 E	1.4619	50/50	1.4619
926051	AC1-083 C O1	2.5478	Adder	3.0
926052	AC1-083 E O1	4.1570	Adder	4.89
926274	AC1-105 E	0.9006	Adder	1.06
926645	AC1-145 C	1.1261	50/50	1.1261
926646	AC1-145 E	6.4053	50/50	6.4053
927261	AC1-222 C	1.9259	Adder	2.27
927262	AC1-222 E	1.8334	Adder	2.16
933941	AD1-017 C	0.5096	Adder	0.6
933942	AD1-017 E	0.8314	Adder	0.98
934311	AD1-055 C	1.3372	Adder	1.57
934312	AD1-055 E	0.3448	Adder	0.41
938451	AE1-064 C	4.7778	Adder	5.62
938452	AE1-064 E	2.4705	Adder	2.91
939941	AE1-230 C	2.7049	50/50	2.7049
939942	AE1-230 E	4.8087	50/50	4.8087
941801	AE2-185 C	13.5245	50/50	13.5245
941802	AE2-185 E	9.0163	50/50	9.0163
941821	AE2-187 C	13.5245	50/50	13.5245
941822	AE2-187 E	6.0109	50/50	6.0109
942671	AE2-283 C	14.8769	50/50	14.8769
942672	AE2-283 E	7.8141	50/50	7.8141
942751	AE2-291 C	15.1898	50/50	15.1898
942752	AE2-291 E	10.1266	50/50	10.1266
942761	AE2-292 C O1	18.9128	50/50	18.9128
942762	AE2-292 E O1	12.6086	50/50	12.6086
943901	AF1-058 C	0.7117	Adder	0.84
943902	AF1-058 E	0.4744	Adder	0.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
945081	AF1-173	5.2407	50/50	5.2407
960061	AF2-297 C	2.8466	Adder	3.35
960062	AF2-297 E	1.8977	Adder	2.23
961121	AF2-403	3.0054	50/50	3.0054
962441	AG1-093 C O1	2.5908	Adder	5.75
962442	AG1-093 E O1	0.7885	Adder	1.75
963601	AG1-209 C	1.0519	50/50	1.0519
963602	AG1-209 E	1.5779	50/50	1.5779
964141	AG1-275 C	4.5082	50/50	4.5082
964142	AG1-275 E	3.0054	50/50	3.0054
964151	AG1-276 C	4.5082	50/50	4.5082
964152	AG1-276 E	3.0054	50/50	3.0054
964251	AG1-286 C	3.3401	50/50	3.3401
964252	AG1-286 E	2.2268	50/50	2.2268
964261	AG1-287 C	0.2829	Adder	0.63
964262	AG1-287 E	0.1886	Adder	0.42
964471	AG1-310 C	1.4850	50/50	1.4850
964472	AG1-310 E	0.7314	50/50	0.7314
964533	AG1-316 BAT	1.6207	Merchant Transmission	1.6207
966253	AG1-494 BAT	2.5943	Merchant Transmission	2.5943
966691	AG1-539 C	7.9424	50/50	7.9424
966692	AG1-539 E	10.6726	50/50	10.6726
966761	AG1-547 C	12.2246	50/50	12.2246
966762	AG1-547 E	6.5594	50/50	6.5594
CPL	CPL	0.9111	Confirmed LTF	0.9111
NY	NY	0.0210	Confirmed LTF	0.0210
PRAIRIE	PRAIRIE	0.4288	Confirmed LTF	0.4288
O-066	O-066	0.0673	Confirmed LTF	0.0673
CBM-S2	CBM-S2	8.1014	Confirmed LTF	8.1014
COTTONWOOD	COTTONWOOD	0.0105	Confirmed LTF	0.0105
G-007	G-007	0.0084	Confirmed LTF	0.0084
GIBSON	GIBSON	0.1381	Confirmed LTF	0.1381
BLUEG	BLUEG	0.4826	Confirmed LTF	0.4826
TRIMBLE	TRIMBLE	0.1564	Confirmed LTF	0.1564

11.6.4 Index 4

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
161455101	242741	05OTTER	AEP	242687	05JOHNMT	AEP	1	AEP_P2-2_#13260_05SKIMMR69.0_1	bus	245.0	139.48	140.85	DC	7.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	1.1693	50/50	1.1693
246844	05SMG2	3.1786	50/50	3.1786
246845	05SMG3	1.9928	50/50	1.9928
246846	05SMG4	3.1292	50/50	3.1292
246847	05SMG5	1.2187	50/50	1.2187
247284	05LEESVG	1.8564	50/50	1.8564
315156	1HALLBR1	2.9223	50/50	2.9223
316118	AC1-105 C	1.8331	Adder	2.16
316123	AC1-075 C	1.2269	50/50	1.2269
925661	AC1-042 C	5.9959	50/50	5.9959
925662	AC1-042 E	9.7827	50/50	9.7827
925997	AC1-075 E	4.4060	50/50	4.4060
926023	AC1-080 C	0.4100	50/50	0.4100
926024	AC1-080 E	1.4619	50/50	1.4619
926051	AC1-083 C O1	2.5478	Adder	3.0
926052	AC1-083 E O1	4.1570	Adder	4.89
926274	AC1-105 E	0.9006	Adder	1.06
926645	AC1-145 C	1.1261	50/50	1.1261
926646	AC1-145 E	6.4053	50/50	6.4053
927261	AC1-222 C	1.9259	Adder	2.27
927262	AC1-222 E	1.8334	Adder	2.16
933941	AD1-017 C	0.5096	Adder	0.6
933942	AD1-017 E	0.8314	Adder	0.98
934311	AD1-055 C	1.3372	Adder	1.57
934312	AD1-055 E	0.3448	Adder	0.41
938451	AE1-064 C	4.7778	Adder	5.62
938452	AE1-064 E	2.4705	Adder	2.91
939941	AE1-230 C	2.7049	50/50	2.7049
939942	AE1-230 E	4.8087	50/50	4.8087
940081	AE1-250 C	4.5831	Adder	5.39
940082	AE1-250 E	3.0554	Adder	3.59
941801	AE2-185 C	13.5245	50/50	13.5245
941802	AE2-185 E	9.0163	50/50	9.0163
941821	AE2-187 C	13.5245	50/50	13.5245
941822	AE2-187 E	6.0109	50/50	6.0109
942671	AE2-283 C	14.8769	50/50	14.8769
942672	AE2-283 E	7.8141	50/50	7.8141
942751	AE2-291 C	15.1898	50/50	15.1898
942752	AE2-291 E	10.1266	50/50	10.1266
942761	AE2-292 C O1	18.9128	50/50	18.9128
942762	AE2-292 E O1	12.6086	50/50	12.6086

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943901	AF1-058 C	0.7117	Adder	0.84
943902	AF1-058 E	0.4744	Adder	0.56
945081	AF1-173	5.2407	50/50	5.2407
960061	AF2-297 C	2.8466	Adder	3.35
960062	AF2-297 E	1.8977	Adder	2.23
961121	AF2-403	3.0054	50/50	3.0054
962441	AG1-093 C O1	2.5908	Adder	5.75
962442	AG1-093 E O1	0.7885	Adder	1.75
963601	AG1-209 C	1.0519	50/50	1.0519
963602	AG1-209 E	1.5779	50/50	1.5779
964141	AG1-275 C	4.5082	50/50	4.5082
964142	AG1-275 E	3.0054	50/50	3.0054
964151	AG1-276 C	4.5082	50/50	4.5082
964152	AG1-276 E	3.0054	50/50	3.0054
964261	AG1-287 C	0.2829	Adder	0.63
964262	AG1-287 E	0.1886	Adder	0.42
964471	AG1-310 C	1.4850	50/50	1.4850
964472	AG1-310 E	0.7314	50/50	0.7314
964533	AG1-316 BAT	1.6207	Merchant Transmission	1.6207
966253	AG1-494 BAT	2.5943	Merchant Transmission	2.5943
966691	AG1-539 C	7.9424	50/50	7.9424
966692	AG1-539 E	10.6726	50/50	10.6726
966761	AG1-547 C	12.2246	50/50	12.2246
966762	AG1-547 E	6.5594	50/50	6.5594
CPL	CPL	0.9111	Confirmed LTF	0.9111
NY	NY	0.0210	Confirmed LTF	0.0210
PRAIRIE	PRAIRIE	0.4288	Confirmed LTF	0.4288
O-066	O-066	0.0673	Confirmed LTF	0.0673
CBM-S2	CBM-S2	8.1014	Confirmed LTF	8.1014
COTTONWOOD	COTTONWOOD	0.0105	Confirmed LTF	0.0105
G-007	G-007	0.0084	Confirmed LTF	0.0084
GIBSON	GIBSON	0.1381	Confirmed LTF	0.1381
BLUEG	BLUEG	0.4826	Confirmed LTF	0.4826
TRIMBLE	TRIMBLE	0.1564	Confirmed LTF	0.1564

11.6.5 Index 5

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339035	313707	6FORK UNION	DVP	961060	AF2-397 TAP	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	126.49	127.78	DC	8.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1287	80/20	0.1287
315153	1CLOVER1	6.8569	80/20	6.8569
315154	1CLOVER2	6.7885	80/20	6.7885
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6058	80/20	0.6058
315160	1KERR 3	0.6058	80/20	0.6058
315161	1KERR 4	0.6058	80/20	0.6058
315162	1KERR 5	0.6058	80/20	0.6058
315163	1KERR 6	0.6058	80/20	0.6058
315164	1KERR 7	0.6058	80/20	0.6058
315191	1BEARGRDN G1	16.8024	80/20	16.8024
315192	1BEARGRDN G2	16.8024	80/20	16.8024
315193	1BEARGRDN S1	21.7287	80/20	21.7287
315266	1PLYWOOD A	0.6338	80/20	0.6338
316118	AC1-105 C	3.2102	80/20	3.2102
316123	AC1-075 C	0.3997	80/20	0.3997
316129	AC1-054 C	3.1902	80/20	3.1902
316131	AB2-060 C	1.1581	80/20	1.1581
924301	AB2-077 C O1 (Suspended)	1.5320	80/20	1.5320
924311	AB2-078 C O1 (Suspended)	1.5320	80/20	1.5320
924321	AB2-079 C O1 (Suspended)	1.5320	80/20	1.5320
925611	AC1-036 C	0.2580	80/20	0.2580
926023	AC1-080 C	0.1336	80/20	0.1336
927251	AC1-221 C	0.7557	80/20	0.7557
927261	AC1-222 C	1.8205	80/20	1.8205
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9463	80/20	0.9463
932761	AC2-100 C	1.7391	80/20	1.7391
933501	AC2-165 C	31.7815	80/20	31.7815
934311	AD1-055 C	1.2640	80/20	1.2640
934341	AD1-058 C	1.8944	80/20	1.8944
934615	AD1-087 C	4.2935	80/20	4.2935
934625	AD1-088 C	14.0108	80/20	14.0108

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458
963361	AG1-185 O1	8.8762	80/20	8.8762

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963641	AG1-215 C	1.3491	80/20	1.3491
964111	AG1-272 C	2.9318	80/20	2.9318
964121	AG1-273 C	2.9318	80/20	2.9318
964131	AG1-274 C	2.9318	80/20	2.9318
964231	AG1-284 C O1	20.2255	80/20	20.2255
964241	AG1-285 C O1	11.0250	80/20	11.0250
964261	AG1-287 C	0.7492	80/20	0.7492
964471	AG1-310 C	1.0449	80/20	1.0449
964791	AG1-342 C	2.5948	80/20	2.5948
964821	AG1-345 C	1.1534	80/20	1.1534
964841	AG1-347 C	11.8194	80/20	11.8194
964931	AG1-357 C	7.8348	80/20	7.8348
965191	AG1-384 C	2.9318	80/20	2.9318
965281	AG1-393 C	2.8909	80/20	2.8909
965451	AG1-413 C O1	3.9569	80/20	3.9569
965581	AG1-426	7.5610	80/20	7.5610
965591	AG1-427 C	10.5299	80/20	10.5299
965601	AG1-428 C O1	2.2741	80/20	2.2741
965641	AG1-432 C O1	36.9672	80/20	36.9672
965721	AG1-440 C	3.7895	80/20	3.7895
965731	AG1-441 C	3.7895	80/20	3.7895
965771	AG1-445	2.1895	80/20	2.1895
965781	AG1-446	2.1895	80/20	2.1895
965831	AG1-451	6.1612	80/20	6.1612
966251	AG1-494 C	1.8194	80/20	1.8194
966621	AG1-532 C	0.4099	80/20	0.4099
966691	AG1-539 C	1.9309	80/20	1.9309
966751	AG1-546 C	6.7436	80/20	6.7436
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.6967	80/20	3.6967
WEC	WEC	0.1342	Confirmed LTF	0.1342
LGEE	LGEE	0.2878	Confirmed LTF	0.2878
CPL	CPL	2.2686	Confirmed LTF	2.2686
CBM-W2	CBM-W2	7.5264	Confirmed LTF	7.5264
NY	NY	0.4396	Confirmed LTF	0.4396
TVA	TVA	1.5232	Confirmed LTF	1.5232
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.2148	Confirmed LTF	26.2148
CBM-S1	CBM-S1	0.3701	Confirmed LTF	0.3701
MEC	MEC	0.9057	Confirmed LTF	0.9057
LAGN	LAGN	1.8795	Confirmed LTF	1.8795
AA2-074	AA2-074	1.4972	LTF	1.4972
CBM-W1	CBM-W1	5.2996	Confirmed LTF	5.2996

11.6.6 Index 6

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339053	313802	6PRINCE EDW	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 556-B	single	571.52	120.07	121.93	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934625	AD1-088 C	33.5073	80/20	33.5073
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
941791	AE2-182 C	5.4438	80/20	5.4438
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
963271	AG1-176 C O1	43.9413	80/20	43.9413
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964841	AG1-347 C	27.5044	80/20	27.5044
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
SIGE	SIGE	0.1586	Confirmed LTF	0.1586
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339057	313867	6BREMODIST	DVP	313707	6FORK UNION	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	128.25	129.63	DC	9.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1780	80/20	2.1780
313527	AB2-043 C	0.4243	80/20	0.4243
314429	3JTRSVLE	0.6669	80/20	0.6669
314572	3EMPORIA	0.1382	80/20	0.1382
314677	6BUCKING	1.0571	80/20	1.0571
314704	3LAWRENC	0.1410	80/20	0.1410
315126	1ROARAP2	0.4085	80/20	0.4085
315128	1ROARAP4	0.3898	80/20	0.3898
315153	1CLOVER1	7.5116	80/20	7.5116
315154	1CLOVER2	7.4368	80/20	7.4368
315158	1KERR 1	0.2345	80/20	0.2345
315159	1KERR 2	0.6567	80/20	0.6567
315160	1KERR 3	0.6567	80/20	0.6567
315161	1KERR 4	0.6567	80/20	0.6567
315162	1KERR 5	0.6567	80/20	0.6567
315163	1KERR 6	0.6567	80/20	0.6567
315164	1KERR 7	0.6567	80/20	0.6567
315191	1BEARGRDN G1	18.4998	80/20	18.4998
315192	1BEARGRDN G2	18.4998	80/20	18.4998
315193	1BEARGRDN S1	23.9239	80/20	23.9239
315266	1PLYWOOD A	0.6737	80/20	0.6737
316087	AB2-174 C	0.3606	80/20	0.3606
316118	AC1-105 C	3.4200	80/20	3.4200
316123	AC1-075 C	0.3763	80/20	0.3763
316129	AC1-054 C	3.4710	80/20	3.4710
316131	AB2-060 C	1.2610	80/20	1.2610
923991	AB2-040 C O1	2.3720	80/20	2.3720
924301	AB2-077 C O1 (Suspended)	1.6661	80/20	1.6661
924311	AB2-078 C O1 (Suspended)	1.6661	80/20	1.6661
924321	AB2-079 C O1 (Suspended)	1.6661	80/20	1.6661
925611	AC1-036 C	0.2822	80/20	0.2822
926023	AC1-080 C	0.1258	80/20	0.1258
927251	AC1-221 C	0.7947	80/20	0.7947
927261	AC1-222 C	1.8844	80/20	1.8844
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.0415	80/20	1.0415
932761	AC2-100 C	1.8288	80/20	1.8288

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0262	80/20	11.0262
938821	AE1-108 C O1	11.0132	80/20	11.0132
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7368	80/20	6.7368
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9629	80/20	3.9629
958801	AF2-171 C	23.6781	80/20	23.6781
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1703	80/20	3.1703
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0131	80/20	22.0131
962041	AG1-048 C	19.8142	80/20	19.8142
962441	AG1-093 C O1	9.1200	80/20	9.1200
962491	AG1-098 C O1	12.3900	80/20	12.3900
962561	AG1-105 C O1	6.1674	80/20	6.1674
963171	AG1-166 C	3.1703	80/20	3.1703
963181	AG1-167 C	3.1703	80/20	3.1703
963191	AG1-168 C	3.1703	80/20	3.1703
963201	AG1-169 C	3.1703	80/20	3.1703
963211	AG1-170 C	3.1703	80/20	3.1703
963271	AG1-176 C O1	20.7171	80/20	20.7171
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O1	20.0593	80/20	20.0593
963361	AG1-185 O1	9.7052	80/20	9.7052
963641	AG1-215 C	1.4795	80/20	1.4795
964111	AG1-272 C	3.2072	80/20	3.2072
964121	AG1-273 C	3.2072	80/20	3.2072
964131	AG1-274 C	3.2072	80/20	3.2072
964231	AG1-284 C O1	2.9513	80/20	2.9513
964241	AG1-285 C O1	12.0195	80/20	12.0195
964261	AG1-287 C	0.7911	80/20	0.7911
964471	AG1-310 C	1.0720	80/20	1.0720
964791	AG1-342 C	2.7843	80/20	2.7843
964821	AG1-345 C	1.2648	80/20	1.2648
964841	AG1-347 C	12.9875	80/20	12.9875
964931	AG1-357 C	8.6556	80/20	8.6556
965191	AG1-384 C	3.2072	80/20	3.2072
965281	AG1-393 C	3.1703	80/20	3.1703
965451	AG1-413 C O1	4.3205	80/20	4.3205
965581	AG1-426	2.3994	80/20	2.3994
965591	AG1-427 C	11.4819	80/20	11.4819
965601	AG1-428 C O1	2.4880	80/20	2.4880
965641	AG1-432 C O1	40.6200	80/20	40.6200
965721	AG1-440 C	4.1121	80/20	4.1121
965731	AG1-441 C	4.1121	80/20	4.1121
965771	AG1-445	2.3759	80/20	2.3759
965781	AG1-446	2.3759	80/20	2.3759
965831	AG1-451	6.7700	80/20	6.7700
966361	AG1-505 C	4.9734	80/20	4.9734
966371	AG1-506 C	4.9734	80/20	4.9734
966621	AG1-532 C	0.4522	80/20	0.4522
966691	AG1-539 C	1.7146	80/20	1.7146
966751	AG1-546 C	7.3410	80/20	7.3410
966811	AG1-552 C	0.6485	80/20	0.6485
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	4.0620	80/20	4.0620
WEC	WEC	0.0699	Confirmed LTF	0.0699
LGEE	LGEE	0.1483	Confirmed LTF	0.1483
CPL	CPL	2.3396	Confirmed LTF	2.3396
CBM-W2	CBM-W2	5.8061	Confirmed LTF	5.8061
NY	NY	0.4076	Confirmed LTF	0.4076
TVA	TVA	1.2558	Confirmed LTF	1.2558
SIGE	SIGE	0.1120	Confirmed LTF	0.1120
CBM-S2	CBM-S2	25.9121	Confirmed LTF	25.9121
CBM-S1	CBM-S1	0.2953	Confirmed LTF	0.2953
MEC	MEC	0.5863	Confirmed LTF	0.5863
LAGN	LAGN	1.5645	Confirmed LTF	1.5645
AA2-074	AA2-074	1.5426	LTF	1.5426
CBM-W1	CBM-W1	2.5236	Confirmed LTF	2.5236

11.6.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339048	314268	6BRIERY	DVP	313802	6PRINCE EDW	DVP	1	DVP_P1-2: LN 556-B	single	571.52	120.1	121.96	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934625	AD1-088 C	33.5073	80/20	33.5073
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
941791	AE2-182 C	5.4438	80/20	5.4438
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
963271	AG1-176 C O1	43.9413	80/20	43.9413
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964841	AG1-347 C	27.5044	80/20	27.5044
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
SIGE	SIGE	0.1586	Confirmed LTF	0.1586
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.9 Index 9

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
168926953	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	168.73	171.67	DC	5.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	14.9250	80/20	14.9250
313527	AB2-043 C	0.3856	80/20	0.3856
313719	3CHESTNUT	0.5206	80/20	0.5206
314429	3JTRSVLE	0.1956	80/20	0.1956
314572	3EMPORIA	1.2299	80/20	1.2299
314582	3KELFORD	0.1483	80/20	0.1483
314589	3MURPHYS	0.0389	80/20	0.0389
314623	3WITAKRS	0.0846	80/20	0.0846
314704	3LAWRENC	0.7289	80/20	0.7289
315115	1S HAMPT1	0.4811	80/20	0.4811
315126	1ROARAP2	1.1971	80/20	1.1971
315128	1ROARAP4	1.1424	80/20	1.1424
315136	1ROSEMG1	0.9301	80/20	0.9301
315137	1ROSEMS1	0.5767	80/20	0.5767
315138	1ROSEMG2	0.4359	80/20	0.4359
315139	1GASTONA	1.4047	80/20	1.4047
315141	1GASTONB	1.4047	80/20	1.4047
315158	1KERR 1	0.2620	80/20	0.2620
315159	1KERR 2	0.7337	80/20	0.7337
315160	1KERR 3	0.7337	80/20	0.7337
315161	1KERR 4	0.7337	80/20	0.7337
315162	1KERR 5	0.7337	80/20	0.7337
315163	1KERR 6	0.7337	80/20	0.7337
315164	1KERR 7	0.7337	80/20	0.7337
315266	1PLYWOOD A	0.3917	80/20	0.3917
315606	3AA2-053SOLA	1.1660	80/20	1.1660
315607	3AA1-063SOLA	0.9971	80/20	0.9971
315608	3AA2-088SOLA	0.4761	80/20	0.4761
316020	AB2-059 C OP	0.5459	80/20	0.5459
316087	AB2-174 C	2.7447	80/20	2.7447
316096	AB2-100 C1	0.4277	80/20	0.4277
316098	AB2-100 C2	0.4277	80/20	0.4277
316103	AB2-015 C	2.5605	80/20	2.5605
316118	AC1-105 C	2.0148	80/20	2.0148
316129	AC1-054 C	5.7187	80/20	5.7187
316131	AB2-060 C	1.0922	80/20	1.0922
316140	AB2-099 C (Suspended)	0.2281	80/20	0.2281
920591	AA2-165 C	0.0699	80/20	0.0699
922922	AB1-081 C OP	0.4632	80/20	0.4632
923991	AB2-040 C O1	16.2549	80/20	16.2549
924301	AB2-077 C O1 (Suspended)	1.5130	80/20	1.5130

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	1.5130	80/20	1.5130
924321	AB2-079 C O1 (Suspended)	1.5130	80/20	1.5130
925591	AC1-034 C	2.2414	80/20	2.2414
925611	AC1-036 C	0.1376	80/20	0.1376
926070	AC1-086 C	10.0123	80/20	10.0123
926201	AC1-098 C	3.1031	80/20	3.1031
926211	AC1-099 C	1.0399	80/20	1.0399
927145	AC1-208 C	5.2586	80/20	5.2586
932631	AC2-084 C	4.4236	80/20	4.4236
934331	AD1-057 C O1	3.8417	80/20	3.8417
935221	AD1-157 C	0.0980	80/20	0.0980
936265	AD2-033 C	8.3234	80/20	8.3234
936361	AD2-046 C O1	6.2368	80/20	6.2368
936485	AD2-063 C	10.6713	80/20	10.6713
938371	AE1-056 C	2.6788	80/20	2.6788
939181	AE1-148 C	6.1781	80/20	6.1781
940571	AE2-044 C	1.4680	80/20	1.4680
940661	AE2-053 O1	2.2882	80/20	2.2882
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0630	80/20	0.0630
942451	AE2-258	1.8236	80/20	1.8236
943171	AE2-346 C	0.5473	80/20	0.5473
943911	AF1-059	31.0992	80/20	31.0992
944141	AF1-082	0.9437	80/20	0.9437
946281	AF1-292 C	4.8137	80/20	4.8137
946301	AF1-294 C	1.9760	80/20	1.9760
957521	AF2-046 C	7.4161	80/20	7.4161
958211	AF2-115 C	1.1624	80/20	1.1624
958801	AF2-171 C	7.0200	80/20	7.0200
959311	AF2-222 C	9.8000	80/20	9.8000
960081	AF2-299 C	8.1131	80/20	8.1131
961091	AF2-400 C	0.1383	80/20	0.1383
961681	AG1-008 C	7.4310	80/20	7.4310
961791	AG1-021 C	0.9299	80/20	0.9299
961891	AG1-030 C	7.7229	80/20	7.7229
961931	AG1-036 C	0.5625	80/20	0.5625
961941	AG1-037 C	0.1955	80/20	0.1955
962041	AG1-048 C	5.8118	80/20	5.8118
962331	AG1-082 C	0.7819	80/20	0.7819
962341	AG1-083 C	0.7819	80/20	0.7819
962351	AG1-084 C	0.6452	80/20	0.6452
962361	AG1-085 C	0.6452	80/20	0.6452
962441	AG1-093 C O1	5.3728	80/20	5.3728
962571	AG1-106 C	2.7843	80/20	2.7843
963171	AG1-166 C	0.9299	80/20	0.9299
963181	AG1-167 C	0.9299	80/20	0.9299
963191	AG1-168 C	0.9299	80/20	0.9299
963201	AG1-169 C	0.9299	80/20	0.9299
963211	AG1-170 C	0.9299	80/20	0.9299
963301	AG1-179 C	12.9655	80/20	12.9655
963311	AG1-180	6.3171	80/20	6.3171

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O1	10.6630	80/20	10.6630
963361	AG1-185 O1	5.1590	80/20	5.1590
963641	AG1-215 C	0.4339	80/20	0.4339
964111	AG1-272 C	1.5637	80/20	1.5637
964121	AG1-273 C	1.5637	80/20	1.5637
964131	AG1-274 C	1.5637	80/20	1.5637
964241	AG1-285 C O1	9.1275	80/20	9.1275
964501	AG1-313 C O1	3.2212	80/20	3.2212
964791	AG1-342 C	1.9409	80/20	1.9409
964801	AG1-343 C	2.8707	80/20	2.8707
964821	AG1-345 C	0.3733	80/20	0.3733
965191	AG1-384 C	1.5637	80/20	1.5637
965281	AG1-393 C	0.9299	80/20	0.9299
965291	AG1-394 C	0.9982	80/20	0.9982
965451	AG1-413 C O1	13.0729	80/20	13.0729
965591	AG1-427 C	8.6159	80/20	8.6159
965601	AG1-428 C O1	10.8238	80/20	10.8238
965721	AG1-440 C	5.2753	80/20	5.2753
965731	AG1-441 C	5.2753	80/20	5.2753
965771	AG1-445	3.0480	80/20	3.0480
965781	AG1-446	3.0480	80/20	3.0480
966621	AG1-532 C	4.3810	80/20	4.3810
966751	AG1-546 C	12.7746	80/20	12.7746
966811	AG1-552 C	1.9007	80/20	1.9007
WEC	WEC	0.1181	Confirmed LTF	0.1181
LGEE	LGEE	0.2444	Confirmed LTF	0.2444
CPL	CPL	1.2353	Confirmed LTF	1.2353
CBM-W2	CBM-W2	4.9818	Confirmed LTF	4.9818
NY	NY	0.1526	Confirmed LTF	0.1526
TVA	TVA	0.9282	Confirmed LTF	0.9282
SIG	SIG	0.0771	Confirmed LTF	0.0771
CBM-S2	CBM-S2	13.8539	Confirmed LTF	13.8539
CBM-S1	CBM-S1	0.2329	Confirmed LTF	0.2329
MEC	MEC	0.6960	Confirmed LTF	0.6960
LAGN	LAGN	1.1515	Confirmed LTF	1.1515
CBM-W1	CBM-W1	4.9631	Confirmed LTF	4.9631

11.6.10 Index 10

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163512368	314667	4ALTVSTA	DVP	242741	05OTTER	AEP	1	Base Case	single	167.0	138.66	141.65	DC	5.0

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	1.0628	80/20	1.0628
246844	05SMG2	2.8890	80/20	2.8890
246845	05SMG3	1.8113	80/20	1.8113
246846	05SMG4	2.8441	80/20	2.8441
246847	05SMG5	1.1077	80/20	1.1077
247284	05LEESVG	1.6819	80/20	1.6819
315156	1HALLBR1	2.5326	80/20	2.5326
315266	1PLYWOOD A	0.3932	80/20	0.3932
316118	AC1-105 C	1.8744	80/20	1.8744
316123	AC1-075 C	1.0637	80/20	1.0637
925661	AC1-042 C	5.4272	80/20	5.4272
926023	AC1-080 C	0.3555	80/20	0.3555
926051	AC1-083 C O1	2.7208	80/20	2.7208
926645	AC1-145 C	1.0193	80/20	1.0193
927261	AC1-222 C	1.9669	80/20	1.9669
933941	AD1-017 C	0.5442	80/20	0.5442
934311	AD1-055 C	1.3657	80/20	1.3657
938451	AE1-064 C	5.1128	80/20	5.1128
939941	AE1-230 C	2.4484	80/20	2.4484
940081	AE1-250 C	4.8870	80/20	4.8870
941801	AE2-185 C	12.2418	80/20	12.2418
941821	AE2-187 C	12.2418	80/20	12.2418
942671	AE2-283 C	13.4660	80/20	13.4660
942751	AE2-291 C	13.1678	80/20	13.1678
942761	AE2-292 C O1	16.3952	80/20	16.3952
943901	AF1-058 C	0.7274	80/20	0.7274
945081	AF1-173	4.7437	80/20	4.7437
960061	AF2-297 C	2.9098	80/20	2.9098
961121	AF2-403	2.7204	80/20	2.7204
962441	AG1-093 C O1	4.9984	80/20	4.9984
963601	AG1-209 C	0.9521	80/20	0.9521
964141	AG1-275 C	4.0806	80/20	4.0806
964151	AG1-276 C	4.0806	80/20	4.0806
964261	AG1-287 C	0.5456	80/20	0.5456
964471	AG1-310 C	1.2888	80/20	1.2888
966691	AG1-539 C	6.8851	80/20	6.8851
966761	AG1-547 C	11.0652	80/20	11.0652
CPL	CPL	0.8026	Confirmed LTF	0.8026
NY	NY	0.0194	Confirmed LTF	0.0194
PRAIRIE	PRAIRIE	0.3771	Confirmed LTF	0.3771
CBM-S2	CBM-S2	7.1514	Confirmed LTF	7.1514
COTTONWOOD	COTTONWOOD	0.0084	Confirmed LTF	0.0084

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
GIBSON	GIBSON	0.1212	Confirmed LTF	0.1212
BLUEG	BLUEG	0.4236	Confirmed LTF	0.4236
TRIMBLE	TRIMBLE	0.1375	Confirmed LTF	0.1375

11.6.11 Index 11

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111964	314677	6BUCKING	DVP	314747	6BREMO	DVP	1	DVP_P1-2: LN 556-B	single	571.52	163.13	166.35	DC	18.43

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.6684	80/20	2.6684
313527	AB2-043 C	0.6826	80/20	0.6826
313719	3CHESTNUT	0.3600	80/20	0.3600
314429	3JTRSVLE	1.0076	80/20	1.0076
314572	3EMPORIA	0.1683	80/20	0.1683
314623	3WITAKRS	0.0667	80/20	0.0667
314677	6BUCKING	1.4768	80/20	1.4768
314704	3LAWRENC	0.1998	80/20	0.1998
315126	1ROARAP2	0.5063	80/20	0.5063
315128	1ROARAP4	0.4832	80/20	0.4832
315153	1CLOVER1	20.9369	80/20	20.9369
315154	1CLOVER2	20.7283	80/20	20.7283
315156	1HALLBR1	0.4996	80/20	0.4996
315158	1KERR 1	0.3755	80/20	0.3755
315159	1KERR 2	1.0513	80/20	1.0513
315160	1KERR 3	1.0513	80/20	1.0513
315161	1KERR 4	1.0513	80/20	1.0513
315162	1KERR 5	1.0513	80/20	1.0513
315163	1KERR 6	1.0513	80/20	1.0513
315164	1KERR 7	1.0513	80/20	1.0513
315266	1PLYWOOD A	1.3866	80/20	1.3866
315606	3AA2-053SOLA	0.5091	80/20	0.5091
315607	3AA1-063SOLA	0.4357	80/20	0.4357
316087	AB2-174 C	0.4407	80/20	0.4407
316118	AC1-105 C	6.9131	80/20	6.9131
316123	AC1-075 C	0.7898	80/20	0.7898
316129	AC1-054 C	5.1900	80/20	5.1900
316131	AB2-060 C	2.0201	80/20	2.0201
920591	AA2-165 C	0.0483	80/20	0.0483
923991	AB2-040 C O1	2.9062	80/20	2.9062
924301	AB2-077 C O1 (Suspended)	2.6962	80/20	2.6962
924311	AB2-078 C O1 (Suspended)	2.6962	80/20	2.6962
924321	AB2-079 C O1 (Suspended)	2.6962	80/20	2.6962
925611	AC1-036 C	0.4351	80/20	0.4351
925661	AC1-042 C	0.8262	80/20	0.8262
926023	AC1-080 C	0.2640	80/20	0.2640
926645	AC1-145 C	0.1552	80/20	0.1552
927145	AC1-208 C	2.9573	80/20	2.9573
927251	AC1-221 C	1.6710	80/20	1.6710

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927261	AC1-222 C	4.1067	80/20	4.1067
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.4549	80/20	1.4549
932761	AC2-100 C	3.8455	80/20	3.8455
934311	AD1-055 C	2.8513	80/20	2.8513
934341	AD1-058 C	4.1889	80/20	4.1889
934615	AD1-087 C	13.0965	80/20	13.0965
934625	AD1-088 C	29.0477	80/20	29.0477
934991	AD1-131 C	1.3734	80/20	1.3734
935171	AD1-152 C O1	14.3851	80/20	14.3851
935221	AD1-157 C	0.6064	80/20	0.6064
936161	AD2-022 C O1	4.1004	80/20	4.1004
936171	AD2-023 C O1	2.3919	80/20	2.3919
936265	AD2-033 C	23.6348	80/20	23.6348
936361	AD2-046 C O1	9.3324	80/20	9.3324
936485	AD2-063 C	23.7834	80/20	23.7834
937481	AD2-202 C O1	3.8360	80/20	3.8360
938371	AE1-056 C	16.5711	80/20	16.5711
939181	AE1-148 C	9.3242	80/20	9.3242
939941	AE1-230 C	0.3727	80/20	0.3727
940661	AE2-053 O1	3.4534	80/20	3.4534
941791	AE2-182 C	4.7192	80/20	4.7192
941801	AE2-185 C	1.8637	80/20	1.8637
941821	AE2-187 C	1.8637	80/20	1.8637
942451	AE2-258	3.2276	80/20	3.2276
942461	AE2-259 C O1	30.1788	80/20	30.1788
942671	AE2-283 C	2.0501	80/20	2.0501
942751	AE2-291 C	6.7081	80/20	6.7081
942761	AE2-292 C O1	8.3523	80/20	8.3523
943901	AF1-058 C	2.3154	80/20	2.3154
943911	AF1-059	15.5565	80/20	15.5565
945081	AF1-173	0.7222	80/20	0.7222
945811	AF1-246 C O1	12.6239	80/20	12.6239
946281	AF1-292 C	0.6035	80/20	0.6035
946301	AF1-294 C	10.1788	80/20	10.1788
957481	AF2-042 C	90.1710	80/20	90.1710
958211	AF2-115 C	5.9876	80/20	5.9876
958801	AF2-171 C	35.7867	80/20	35.7867
959311	AF2-222 C	33.1870	80/20	33.1870
959751	AF2-266	15.0290	80/20	15.0290
960061	AF2-297 C	9.2616	80/20	9.2616
960081	AF2-299 C	1.0172	80/20	1.0172
961121	AF2-403	0.4142	80/20	0.4142
961791	AG1-021 C	4.7900	80/20	4.7900
961891	AG1-030 C	33.4611	80/20	33.4611
962041	AG1-048 C	29.9378	80/20	29.9378
962441	AG1-093 C O1	18.4350	80/20	18.4350
962491	AG1-098 C O1	26.7862	80/20	26.7862
962561	AG1-105 C O1	16.8312	80/20	16.8312
963171	AG1-166 C	4.7900	80/20	4.7900
963181	AG1-167 C	4.7900	80/20	4.7900
963191	AG1-168 C	4.7900	80/20	4.7900

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	4.7900	80/20	4.7900
963211	AG1-170 C	4.7900	80/20	4.7900
963271	AG1-176 C O1	37.8534	80/20	37.8534
963301	AG1-179 C	4.3337	80/20	4.3337
963311	AG1-180	2.1115	80/20	2.1115
963321	AG1-181 C O1	31.0660	80/20	31.0660
963361	AG1-185 O1	15.0305	80/20	15.0305
963601	AG1-209 C	0.1450	80/20	0.1450
963641	AG1-215 C	2.2354	80/20	2.2354
964111	AG1-272 C	4.9447	80/20	4.9447
964121	AG1-273 C	4.9447	80/20	4.9447
964131	AG1-274 C	4.9447	80/20	4.9447
964141	AG1-275 C	0.6212	80/20	0.6212
964151	AG1-276 C	0.6212	80/20	0.6212
964241	AG1-285 C O1	19.0492	80/20	19.0492
964261	AG1-287 C	1.7365	80/20	1.7365
964471	AG1-310 C	2.3287	80/20	2.3287
964501	AG1-313 C O1	1.4714	80/20	1.4714
964791	AG1-342 C	5.2388	80/20	5.2388
964821	AG1-345 C	1.9116	80/20	1.9116
964841	AG1-347 C	23.6846	80/20	23.6846
965191	AG1-384 C	4.9447	80/20	4.9447
965281	AG1-393 C	4.7900	80/20	4.7900
965451	AG1-413 C O1	6.5394	80/20	6.5394
965591	AG1-427 C	18.1810	80/20	18.1810
965601	AG1-428 C O1	3.6179	80/20	3.6179
965641	AG1-432 C O1	60.3576	80/20	60.3576
965721	AG1-440 C	6.4480	80/20	6.4480
965731	AG1-441 C	6.4480	80/20	6.4480
965771	AG1-445	3.7255	80/20	3.7255
965781	AG1-446	3.7255	80/20	3.7255
965831	AG1-451	10.0596	80/20	10.0596
966621	AG1-532 C	0.5493	80/20	0.5493
966691	AG1-539 C	3.5075	80/20	3.5075
966751	AG1-546 C	10.8417	80/20	10.8417
966761	AG1-547 C	1.6846	80/20	1.6846
966811	AG1-552 C	0.8039	80/20	0.8039
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	6.0358	80/20	6.0358
WEC	WEC	0.2939	Confirmed LTF	0.2939
LGEE	LGEE	0.6051	Confirmed LTF	0.6051
CPL	CPL	3.6248	Confirmed LTF	3.6248
CBM-W2	CBM-W2	13.4490	Confirmed LTF	13.4490
NY	NY	0.4020	Confirmed LTF	0.4020
TVA	TVA	2.5732	Confirmed LTF	2.5732
SIGE	SIGE	0.1956	Confirmed LTF	0.1956
CBM-S2	CBM-S2	41.5512	Confirmed LTF	41.5512
CBM-S1	CBM-S1	0.6380	Confirmed LTF	0.6380
MEC	MEC	1.7940	Confirmed LTF	1.7940
LAGN	LAGN	3.1955	Confirmed LTF	3.1955
AA2-074	AA2-074	2.3936	LTF	2.3936
CBM-W1	CBM-W1	12.2254	Confirmed LTF	12.2254

11.6.12 Index 12

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169112080	314686	6CLOVER	DVP	962490	AG1-098 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	114.51	116.37	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962561	AG1-105 C O1	17.8794	80/20	17.8794
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964931	AG1-357 C	39.0228	80/20	39.0228
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734
SIGE	SIGE	0.1586	Confirmed LTF	0.1586
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.13 Index 13

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111921	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	2	DVP_P1-2: LN 235-A	single	182.64	181.33	185.98	DC	8.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1970	80/20	2.1970
313527	AB2-043 C	0.6200	80/20	0.6200
314429	3JTRSVLE	1.1615	80/20	1.1615
314572	3EMPORIA	0.1428	80/20	0.1428
314704	3LAWRENC	0.1773	80/20	0.1773
315158	1KERR 1	0.3023	80/20	0.3023
315159	1KERR 2	0.8464	80/20	0.8464
315160	1KERR 3	0.8464	80/20	0.8464
315161	1KERR 4	0.8464	80/20	0.8464
315162	1KERR 5	0.8464	80/20	0.8464
315163	1KERR 6	0.8464	80/20	0.8464
315164	1KERR 7	0.8464	80/20	0.8464
315266	1PLYWOOD A	0.5826	80/20	0.5826
316087	AB2-174 C	0.3670	80/20	0.3670
316118	AC1-105 C	3.1833	80/20	3.1833
316129	AC1-054 C	4.1416	80/20	4.1416
316131	AB2-060 C	1.8663	80/20	1.8663
923991	AB2-040 C O1	2.3927	80/20	2.3927
924301	AB2-077 C O1 (Suspended)	2.4036	80/20	2.4036
924311	AB2-078 C O1 (Suspended)	2.4036	80/20	2.4036
924321	AB2-079 C O1 (Suspended)	2.4036	80/20	2.4036
925611	AC1-036 C	0.4665	80/20	0.4665
927261	AC1-222 C	1.3197	80/20	1.3197
934311	AD1-055 C	0.9163	80/20	0.9163
935221	AD1-157 C	0.7121	80/20	0.7121
936265	AD2-033 C	24.7775	80/20	24.7775
936361	AD2-046 C O1	7.7284	80/20	7.7284
936485	AD2-063 C	23.4252	80/20	23.4252
938371	AE1-056 C	19.4582	80/20	19.4582
939181	AE1-148 C	7.7609	80/20	7.7609
940661	AE2-053 O1	2.8744	80/20	2.8744
942451	AE2-258	2.9317	80/20	2.9317
942461	AE2-259 C O1	36.8346	80/20	36.8346
943901	AF1-058 C	0.7463	80/20	0.7463
943911	AF1-059	13.9793	80/20	13.9793
946281	AF1-292 C	0.5181	80/20	0.5181
946301	AF1-294 C	11.7333	80/20	11.7333
958211	AF2-115 C	6.9020	80/20	6.9020
958801	AF2-171 C	41.2074	80/20	41.2074

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959311	AF2-222 C	36.0450	80/20	36.0450
960061	AF2-297 C	2.9851	80/20	2.9851
960081	AF2-299 C	0.8732	80/20	0.8732
961791	AG1-021 C	5.5216	80/20	5.5216
961891	AG1-030 C	37.7604	80/20	37.7604
962041	AG1-048 C	34.5098	80/20	34.5098
962441	AG1-093 C O1	8.4888	80/20	8.4888
963171	AG1-166 C	5.5216	80/20	5.5216
963181	AG1-167 C	5.5216	80/20	5.5216
963191	AG1-168 C	5.5216	80/20	5.5216
963201	AG1-169 C	5.5216	80/20	5.5216
963211	AG1-170 C	5.5216	80/20	5.5216
963301	AG1-179 C	3.8659	80/20	3.8659
963311	AG1-180	1.8835	80/20	1.8835
963321	AG1-181 C O1	32.7592	80/20	32.7592
963361	AG1-185 O1	15.8498	80/20	15.8498
963641	AG1-215 C	2.5767	80/20	2.5767
964111	AG1-272 C	5.3022	80/20	5.3022
964121	AG1-273 C	5.3022	80/20	5.3022
964131	AG1-274 C	5.3022	80/20	5.3022
964241	AG1-285 C O1	18.3810	80/20	18.3810
964261	AG1-287 C	0.5597	80/20	0.5597
964471	AG1-310 C	0.7473	80/20	0.7473
964791	AG1-342 C	3.0915	80/20	3.0915
964821	AG1-345 C	2.2020	80/20	2.2020
965191	AG1-384 C	5.3022	80/20	5.3022
965281	AG1-393 C	5.5216	80/20	5.5216
965451	AG1-413 C O1	5.8764	80/20	5.8764
965591	AG1-427 C	17.6058	80/20	17.6058
965601	AG1-428 C O1	3.2273	80/20	3.2273
965641	AG1-432 C O1	73.6692	80/20	73.6692
965721	AG1-440 C	5.1777	80/20	5.1777
965731	AG1-441 C	5.1777	80/20	5.1777
965771	AG1-445	2.9916	80/20	2.9916
965781	AG1-446	2.9916	80/20	2.9916
965831	AG1-451	12.2782	80/20	12.2782
966621	AG1-532 C	0.4715	80/20	0.4715
966751	AG1-546 C	8.6364	80/20	8.6364
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	7.3669	80/20	7.3669
WEC	WEC	0.0813	Confirmed LTF	0.0813
LGEE	LGEE	0.1659	Confirmed LTF	0.1659
CPL	CPL	1.2422	Confirmed LTF	1.2422
CBM-W2	CBM-W2	4.0768	Confirmed LTF	4.0768
NY	NY	0.1233	Confirmed LTF	0.1233
TVA	TVA	0.7980	Confirmed LTF	0.7980
SIGE	SIGE	0.0565	Confirmed LTF	0.0565
CBM-S2	CBM-S2	13.8748	Confirmed LTF	13.8748
CBM-S1	CBM-S1	0.1953	Confirmed LTF	0.1953
MEC	MEC	0.5180	Confirmed LTF	0.5180
LAGN	LAGN	0.9958	Confirmed LTF	0.9958
CBM-W1	CBM-W1	3.3508	Confirmed LTF	3.3508

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111932	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 298	single	198.06	109.61	112.26	DC	5.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5190	80/20	0.5190
314429	3JTRSVLE	1.0409	80/20	1.0409
314704	3LAWRENC	0.1400	80/20	0.1400
315158	1KERR 1	0.2388	80/20	0.2388
315159	1KERR 2	0.6685	80/20	0.6685
315160	1KERR 3	0.6685	80/20	0.6685
315161	1KERR 4	0.6685	80/20	0.6685
315162	1KERR 5	0.6685	80/20	0.6685
315163	1KERR 6	0.6685	80/20	0.6685
315164	1KERR 7	0.6685	80/20	0.6685
316118	AC1-105 C	1.9644	80/20	1.9644
316129	AC1-054 C	3.1577	80/20	3.1577
316131	AB2-060 C	1.5710	80/20	1.5710
924301	AB2-077 C O1 (Suspended)	2.0004	80/20	2.0004
924311	AB2-078 C O1 (Suspended)	2.0004	80/20	2.0004
924321	AB2-079 C O1 (Suspended)	2.0004	80/20	2.0004
925611	AC1-036 C	0.4104	80/20	0.4104
935221	AD1-157 C	0.6410	80/20	0.6410
936265	AD2-033 C	21.6637	80/20	21.6637
936361	AD2-046 C O1	6.1935	80/20	6.1935
936485	AD2-063 C	20.1177	80/20	20.1177
938371	AE1-056 C	17.5166	80/20	17.5166
939181	AE1-148 C	6.2354	80/20	6.2354
940661	AE2-053 O1	2.3094	80/20	2.3094
942451	AE2-258	2.4541	80/20	2.4541
942461	AE2-259 C O1	33.4608	80/20	33.4608
943911	AF1-059	11.3951	80/20	11.3951
946301	AF1-294 C	10.5152	80/20	10.5152
958211	AF2-115 C	6.1854	80/20	6.1854
958801	AF2-171 C	36.9198	80/20	36.9198
959311	AF2-222 C	31.8180	80/20	31.8180
961791	AG1-021 C	4.9483	80/20	4.9483
961891	AG1-030 C	33.6627	80/20	33.6627
962041	AG1-048 C	30.9270	80/20	30.9270
962441	AG1-093 C O1	5.2385	80/20	5.2385
963171	AG1-166 C	4.9483	80/20	4.9483
963181	AG1-167 C	4.9483	80/20	4.9483
963191	AG1-168 C	4.9483	80/20	4.9483
963201	AG1-169 C	4.9483	80/20	4.9483

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963211	AG1-170 C	4.9483	80/20	4.9483
963301	AG1-179 C	3.0910	80/20	3.0910
963311	AG1-180	1.5060	80/20	1.5060
963321	AG1-181 C O1	28.6883	80/20	28.6883
963361	AG1-185 O1	13.8802	80/20	13.8802
963641	AG1-215 C	2.3092	80/20	2.3092
964111	AG1-272 C	4.6644	80/20	4.6644
964121	AG1-273 C	4.6644	80/20	4.6644
964131	AG1-274 C	4.6644	80/20	4.6644
964241	AG1-285 C O1	15.6870	80/20	15.6870
964791	AG1-342 C	2.2108	80/20	2.2108
964821	AG1-345 C	1.9730	80/20	1.9730
965191	AG1-384 C	4.6644	80/20	4.6644
965281	AG1-393 C	4.9483	80/20	4.9483
965451	AG1-413 C O1	4.7901	80/20	4.7901
965591	AG1-427 C	15.0419	80/20	15.0419
965601	AG1-428 C O1	2.5804	80/20	2.5804
965641	AG1-432 C O1	66.9216	80/20	66.9216
965721	AG1-440 C	4.0478	80/20	4.0478
965731	AG1-441 C	4.0478	80/20	4.0478
965771	AG1-445	2.3387	80/20	2.3387
965781	AG1-446	2.3387	80/20	2.3387
965831	AG1-451	11.1536	80/20	11.1536
966751	AG1-546 C	6.5405	80/20	6.5405
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	6.6922	80/20	6.6922
WEC	WEC	0.0236	Confirmed LTF	0.0236
LGEE	LGEE	0.0496	Confirmed LTF	0.0496
CPL	CPL	0.2361	Confirmed LTF	0.2361
CBM-W2	CBM-W2	0.9498	Confirmed LTF	0.9498
NY	NY	0.0321	Confirmed LTF	0.0321
TVA	TVA	0.1736	Confirmed LTF	0.1736
SIGE	SIGE	0.0158	Confirmed LTF	0.0158
CBM-S2	CBM-S2	2.5056	Confirmed LTF	2.5056
CBM-S1	CBM-S1	0.0441	Confirmed LTF	0.0441
MEC	MEC	0.1367	Confirmed LTF	0.1367
LAGN	LAGN	0.2135	Confirmed LTF	0.2135
CBM-W1	CBM-W1	0.9954	Confirmed LTF	0.9954

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111943	314692	6FARMVIL	DVP	314677	6BUCKING	DVP	1	DVP_P1-2: LN 556-B	single	559.3	163.42	166.72	DC	18.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.6741	80/20	2.6741
313527	AB2-043 C	0.6830	80/20	0.6830
313719	3CHESTNUT	0.3610	80/20	0.3610
314429	3JTRSVLE	1.0080	80/20	1.0080
314572	3EMPORIA	0.1686	80/20	0.1686
314623	3WITAKRS	0.0669	80/20	0.0669
314704	3LAWRENC	0.2000	80/20	0.2000
315126	1ROARAP2	0.5074	80/20	0.5074
315128	1ROARAP4	0.4842	80/20	0.4842
315153	1CLOVER1	20.9467	80/20	20.9467
315154	1CLOVER2	20.7379	80/20	20.7379
315156	1HALLBR1	0.5007	80/20	0.5007
315158	1KERR 1	0.3758	80/20	0.3758
315159	1KERR 2	1.0523	80/20	1.0523
315160	1KERR 3	1.0523	80/20	1.0523
315161	1KERR 4	1.0523	80/20	1.0523
315162	1KERR 5	1.0523	80/20	1.0523
315163	1KERR 6	1.0523	80/20	1.0523
315164	1KERR 7	1.0523	80/20	1.0523
315266	1PLYWOOD A	1.3876	80/20	1.3876
315606	3AA2-053SOLA	0.5104	80/20	0.5104
315607	3AA1-063SOLA	0.4369	80/20	0.4369
316087	AB2-174 C	0.4416	80/20	0.4416
316118	AC1-105 C	6.9179	80/20	6.9179
316123	AC1-075 C	0.7907	80/20	0.7907
316129	AC1-054 C	5.1963	80/20	5.1963
316131	AB2-060 C	2.0213	80/20	2.0213
920591	AA2-165 C	0.0485	80/20	0.0485
923991	AB2-040 C O1	2.9124	80/20	2.9124
924301	AB2-077 C O1 (Suspended)	2.6978	80/20	2.6978
924311	AB2-078 C O1 (Suspended)	2.6978	80/20	2.6978
924321	AB2-079 C O1 (Suspended)	2.6978	80/20	2.6978
925611	AC1-036 C	0.4353	80/20	0.4353
925661	AC1-042 C	0.8285	80/20	0.8285
926023	AC1-080 C	0.2642	80/20	0.2642
926645	AC1-145 C	0.1556	80/20	0.1556
927145	AC1-208 C	2.9650	80/20	2.9650
927251	AC1-221 C	1.6730	80/20	1.6730
927261	AC1-222 C	4.1099	80/20	4.1099

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
932761	AC2-100 C	3.8502	80/20	3.8502
934311	AD1-055 C	2.8536	80/20	2.8536
934341	AD1-058 C	4.1940	80/20	4.1940
934615	AD1-087 C	13.1026	80/20	13.1026
934625	AD1-088 C	29.0577	80/20	29.0577
934991	AD1-131 C	1.3751	80/20	1.3751
935171	AD1-152 C O1	14.3918	80/20	14.3918
935221	AD1-157 C	0.6066	80/20	0.6066
936161	AD2-022 C O1	4.1088	80/20	4.1088
936171	AD2-023 C O1	2.3968	80/20	2.3968
936265	AD2-033 C	23.6457	80/20	23.6457
936361	AD2-046 C O1	9.3407	80/20	9.3407
936485	AD2-063 C	23.7960	80/20	23.7960
937481	AD2-202 C O1	3.8378	80/20	3.8378
938371	AE1-056 C	16.5765	80/20	16.5765
939181	AE1-148 C	9.3317	80/20	9.3317
939941	AE1-230 C	0.3738	80/20	0.3738
940661	AE2-053 O1	3.4562	80/20	3.4562
941791	AE2-182 C	4.7209	80/20	4.7209
941801	AE2-185 C	1.8688	80/20	1.8688
941821	AE2-187 C	1.8688	80/20	1.8688
942451	AE2-258	3.2296	80/20	3.2296
942461	AE2-259 C O1	30.1872	80/20	30.1872
942671	AE2-283 C	2.0556	80/20	2.0556
942751	AE2-291 C	6.7167	80/20	6.7167
942761	AE2-292 C O1	8.3629	80/20	8.3629
943901	AF1-058 C	2.3171	80/20	2.3171
943911	AF1-059	15.5704	80/20	15.5704
945081	AF1-173	0.7241	80/20	0.7241
945811	AF1-246 C O1	12.6298	80/20	12.6298
946281	AF1-292 C	0.6048	80/20	0.6048
946301	AF1-294 C	10.1827	80/20	10.1827
957481	AF2-042 C	90.2130	80/20	90.2130
958211	AF2-115 C	5.9898	80/20	5.9898
958801	AF2-171 C	35.7993	80/20	35.7993
959311	AF2-222 C	33.2020	80/20	33.2020
959751	AF2-266	15.0360	80/20	15.0360
960061	AF2-297 C	9.2683	80/20	9.2683
960081	AF2-299 C	1.0193	80/20	1.0193
961121	AF2-403	0.4153	80/20	0.4153
961791	AG1-021 C	4.7918	80/20	4.7918
961891	AG1-030 C	33.4746	80/20	33.4746
962041	AG1-048 C	29.9490	80/20	29.9490
962441	AG1-093 C O1	18.4478	80/20	18.4478
962491	AG1-098 C O1	26.7967	80/20	26.7967
962561	AG1-105 C O1	16.8396	80/20	16.8396
963171	AG1-166 C	4.7918	80/20	4.7918
963181	AG1-167 C	4.7918	80/20	4.7918
963191	AG1-168 C	4.7918	80/20	4.7918
963201	AG1-169 C	4.7918	80/20	4.7918
963211	AG1-170 C	4.7918	80/20	4.7918
963271	AG1-176 C O1	37.8660	80/20	37.8660

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963301	AG1-179 C	4.3384	80/20	4.3384
963311	AG1-180	2.1138	80/20	2.1138
963321	AG1-181 C O1	31.0801	80/20	31.0801
963361	AG1-185 O1	15.0374	80/20	15.0374
963601	AG1-209 C	0.1453	80/20	0.1453
963641	AG1-215 C	2.2362	80/20	2.2362
964111	AG1-272 C	4.9469	80/20	4.9469
964121	AG1-273 C	4.9469	80/20	4.9469
964131	AG1-274 C	4.9469	80/20	4.9469
964141	AG1-275 C	0.6229	80/20	0.6229
964151	AG1-276 C	0.6229	80/20	0.6229
964241	AG1-285 C O1	19.0605	80/20	19.0605
964261	AG1-287 C	1.7378	80/20	1.7378
964471	AG1-310 C	2.3305	80/20	2.3305
964501	AG1-313 C O1	1.4752	80/20	1.4752
964791	AG1-342 C	5.2424	80/20	5.2424
964821	AG1-345 C	1.9122	80/20	1.9122
964841	AG1-347 C	23.6925	80/20	23.6925
965191	AG1-384 C	4.9469	80/20	4.9469
965281	AG1-393 C	4.7918	80/20	4.7918
965451	AG1-413 C O1	6.5452	80/20	6.5452
965591	AG1-427 C	18.1909	80/20	18.1909
965601	AG1-428 C O1	3.6218	80/20	3.6218
965641	AG1-432 C O1	60.3744	80/20	60.3744
965721	AG1-440 C	6.4543	80/20	6.4543
965731	AG1-441 C	6.4543	80/20	6.4543
965771	AG1-445	3.7292	80/20	3.7292
965781	AG1-446	3.7292	80/20	3.7292
965831	AG1-451	10.0624	80/20	10.0624
966621	AG1-532 C	0.5504	80/20	0.5504
966691	AG1-539 C	3.5120	80/20	3.5120
966751	AG1-546 C	10.8553	80/20	10.8553
966761	AG1-547 C	1.6892	80/20	1.6892
966811	AG1-552 C	0.8056	80/20	0.8056
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	6.0374	80/20	6.0374
WEC	WEC	0.2983	Confirmed LTF	0.2983
LGEE	LGEE	0.6138	Confirmed LTF	0.6138
CPL	CPL	3.6343	Confirmed LTF	3.6343
CBM-W2	CBM-W2	13.5744	Confirmed LTF	13.5744
NY	NY	0.3943	Confirmed LTF	0.3943
TVA	TVA	2.5928	Confirmed LTF	2.5928
SIGE	SIGE	0.1956	Confirmed LTF	0.1956
CBM-S2	CBM-S2	41.6974	Confirmed LTF	41.6974
CBM-S1	CBM-S1	0.6433	Confirmed LTF	0.6433
MEC	MEC	1.8162	Confirmed LTF	1.8162
LAGN	LAGN	3.2200	Confirmed LTF	3.2200
AA2-074	AA2-074	2.3999	LTF	2.3999
CBM-W1	CBM-W1	12.4217	Confirmed LTF	12.4217

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169111970	314697	6SEEDGE HILL	DVP	927250	AC1-221 TAP	DVP	1	DVP_P1-2: LN 556-C	single	674.92	143.42	149.23	DC	39.19

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
247284	05LEESVG	0.4591	80/20	0.4591
313527	AB2-043 C	0.6777	80/20	0.6777
314333	6POWHATN	0.1206	80/20	0.1206
314429	3JTRSVLE	0.6020	80/20	0.6020
314677	6BUCKING	0.3988	80/20	0.3988
314704	3LAWRENC	0.1701	80/20	0.1701
315153	1CLOVER1	35.6962	80/20	35.6962
315154	1CLOVER2	35.3404	80/20	35.3404
315156	1HALLBR1	1.0288	80/20	1.0288
315158	1KERR 1	0.3313	80/20	0.3313
315159	1KERR 2	0.9277	80/20	0.9277
315160	1KERR 3	0.9277	80/20	0.9277
315161	1KERR 4	0.9277	80/20	0.9277
315162	1KERR 5	0.9277	80/20	0.9277
315163	1KERR 6	0.9277	80/20	0.9277
315164	1KERR 7	0.9277	80/20	0.9277
315191	1BEARGRDN G1	3.3141	80/20	3.3141
315192	1BEARGRDN G2	3.3141	80/20	3.3141
315193	1BEARGRDN S1	4.2858	80/20	4.2858
315266	1PLYWOOD A	3.0479	80/20	3.0479
316118	AC1-105 C	14.6956	80/20	14.6956
316123	AC1-075 C	1.8835	80/20	1.8835
316129	AC1-054 C	4.0299	80/20	4.0299
316131	AB2-060 C	1.9554	80/20	1.9554
924301	AB2-077 C O1 (Suspended)	2.7590	80/20	2.7590
924311	AB2-078 C O1 (Suspended)	2.7590	80/20	2.7590
924321	AB2-079 C O1 (Suspended)	2.7590	80/20	2.7590
925611	AC1-036 C	0.3165	80/20	0.3165
925661	AC1-042 C	1.5979	80/20	1.5979
926023	AC1-080 C	0.6295	80/20	0.6295
926451	AC1-116 C	0.0446	80/20	0.0446
926645	AC1-145 C	0.3001	80/20	0.3001
927251	AC1-221 C	-2.4502	Adder	-2.88
927261	AC1-222 C	10.1051	80/20	10.1051
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.3929	80/20	0.3929
933501	AC2-165 C	3.6987	80/20	3.6987
934311	AD1-055 C	7.0162	80/20	7.0162
934341	AD1-058 C	-6.1424	Adder	-7.23

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934615	AD1-087 C	22.4303	80/20	22.4303
934625	AD1-088 C	29.6903	80/20	29.6903
935171	AD1-152 C O1	24.6374	80/20	24.6374
935221	AD1-157 C	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1048	80/20	0.1048
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8236	80/20	4.8236
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7132	80/20	14.7132
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5649	80/20	0.5649
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5206	80/20	0.5206
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1206	80/20	7.1206
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O1	39.1883	80/20	39.1883
962491	AG1-098 C O1	34.5765	80/20	34.5765
962561	AG1-105 C O1	31.8432	80/20	31.8432
963171	AG1-166 C	2.8618	80/20	2.8618
963181	AG1-167 C	2.8618	80/20	2.8618
963191	AG1-168 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	2.8618	80/20	2.8618
963211	AG1-170 C	2.8618	80/20	2.8618
963271	AG1-176 C O1	36.0621	80/20	36.0621
963301	AG1-179 C	3.8207	80/20	3.8207
963311	AG1-180	1.8616	80/20	1.8616
963321	AG1-181 C O1	23.4953	80/20	23.4953
963361	AG1-185 O1	11.3677	80/20	11.3677
963601	AG1-209 C	0.2803	80/20	0.2803
963641	AG1-215 C	1.3355	80/20	1.3355
964111	AG1-272 C	3.5975	80/20	3.5975
964121	AG1-273 C	3.5975	80/20	3.5975
964131	AG1-274 C	3.5975	80/20	3.5975
964141	AG1-275 C	1.2014	80/20	1.2014
964151	AG1-276 C	1.2014	80/20	1.2014
964231	AG1-284 C O1	3.9711	80/20	3.9711
964241	AG1-285 C O1	17.1705	80/20	17.1705
964251	AG1-286 C	0.4497	80/20	0.4497
964261	AG1-287 C	4.2981	80/20	4.2981
964471	AG1-310 C	5.7147	80/20	5.7147
964791	AG1-342 C	9.4188	80/20	9.4188
964821	AG1-345 C	1.1444	80/20	1.1444
964841	AG1-347 C	22.4655	80/20	22.4655
964931	AG1-357 C	61.4988	80/20	61.4988
965191	AG1-384 C	3.5975	80/20	3.5975
965281	AG1-393 C	2.8618	80/20	2.8618
965451	AG1-413 C O1	6.0628	80/20	6.0628
965581	AG1-426	1.5862	80/20	1.5862
965591	AG1-427 C	16.2855	80/20	16.2855
965601	AG1-428 C O1	3.1896	80/20	3.1896
965641	AG1-432 C O1	29.4264	80/20	29.4264
965721	AG1-440 C	5.4864	80/20	5.4864
965731	AG1-441 C	5.4864	80/20	5.4864
965771	AG1-445	3.1699	80/20	3.1699
965781	AG1-446	3.1699	80/20	3.1699
965831	AG1-451	4.9044	80/20	4.9044
966691	AG1-539 C	8.1754	80/20	8.1754
966751	AG1-546 C	8.2011	80/20	8.2011
966761	AG1-547 C	3.2579	80/20	3.2579
966791	AG1-550 O1	2.6947	80/20	2.6947
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	2.9426	80/20	2.9426
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	1.4443	Confirmed LTF	1.4443
PRAIRIE	PRAIRIE	4.6726	Confirmed LTF	4.6726
AC1-131	AC1-131	5.2830	LTF	5.2830
CHEOAH	CHEOAH	1.4865	Confirmed LTF	1.4865
CBM-N	CBM-N	0.2328	Confirmed LTF	0.2328
COTTONWOOD	COTTONWOOD	5.2395	Confirmed LTF	5.2395
HAMLET	HAMLET	3.2011	Confirmed LTF	3.2011
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912
BLUEG	BLUEG	2.4078	Confirmed LTF	2.4078

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TRIMBLE	TRIMBLE	0.7618	Confirmed LTF	0.7618
CATAWBA	CATAWBA	1.6965	Confirmed LTF	1.6965

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163512165	314702	3KERR	DVP	304102	3GW KING TAP	CPL	1	DVP_P4-6: CAROLIN T122	breaker	199.0	146.44	148.7	DC	10.17

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5797	50/50	0.5797
313853	3PONTONDP	0.4064	Adder	0.48
314713	3PAMPLIN	0.8873	Adder	1.04
315158	1KERR 1	0.8424	50/50	0.8424
315159	1KERR 2	2.3588	50/50	2.3588
315160	1KERR 3	2.3588	50/50	2.3588
315161	1KERR 4	2.3588	50/50	2.3588
315162	1KERR 5	2.3588	50/50	2.3588
315163	1KERR 6	2.3588	50/50	2.3588
315164	1KERR 7	2.3588	50/50	2.3588
316118	AC1-105 C	2.4862	Adder	2.92
316129	AC1-054 C	15.8416	50/50	15.8416
316131	AB2-060 C	1.6441	50/50	1.6441
924022	AB2-043 E O1	3.2854	50/50	3.2854
924162	AB2-060 E OP	4.9039	50/50	4.9039
924301	AB2-077 C O1 (Suspended)	2.3786	50/50	2.3786
924302	AB2-077 E O1 (Suspended)	1.5858	50/50	1.5858
924311	AB2-078 C O1 (Suspended)	2.3786	50/50	2.3786
924312	AB2-078 E O1 (Suspended)	1.5858	50/50	1.5858
924321	AB2-079 C O1 (Suspended)	2.3786	50/50	2.3786
924322	AB2-079 E O1 (Suspended)	1.5858	50/50	1.5858
925611	AC1-036 C	0.2090	50/50	0.2090
925612	AC1-036 E	0.7934	50/50	0.7934
925785	AC1-054 E	7.2978	50/50	7.2978
926274	AC1-105 E	1.2215	Adder	1.44
935222	AD1-157 E	0.5470	Adder	0.64
936265	AD2-033 C	12.6220	50/50	12.6220
936266	AD2-033 E	8.4146	50/50	8.4146
936361	AD2-046 C O1	18.0396	50/50	18.0396
936362	AD2-046 E O1	8.2956	50/50	8.2956
936485	AD2-063 C	16.0974	50/50	16.0974
936486	AD2-063 E	10.7316	50/50	10.7316
938371	AE1-056 C	3.5374	Adder	4.16
938372	AE1-056 E	1.9328	Adder	2.27
939181	AE1-148 C	17.4836	50/50	17.4836

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939182	AE1-148 E	11.6557	50/50	11.6557
940661	AE2-053 O1	6.4754	50/50	6.4754
942451	AE2-258	2.7410	50/50	2.7410
942461	AE2-259 C O1	3.7689	Adder	4.43
942462	AE2-259 E O1	2.5126	Adder	2.96
943911	AF1-059	10.7887	Adder	12.69
946301	AF1-294 C	2.5908	Adder	3.05
946302	AF1-294 E	1.7272	Adder	2.03
958211	AF2-115 C	1.5240	Adder	1.79
958212	AF2-115 E	1.0160	Adder	1.2
958801	AF2-171 C	9.1968	Adder	10.82
958802	AF2-171 E	6.1312	Adder	7.21
959311	AF2-222 C	14.9130	50/50	14.9130
959312	AF2-222 E	9.9917	50/50	9.9917
961791	AG1-021 C	0.6462	Adder	1.43
961792	AG1-021 E	0.4308	Adder	0.96
961891	AG1-030 C	11.8413	50/50	11.8413
961892	AG1-030 E	7.8942	50/50	7.8942
962041	AG1-048 C	4.0386	Adder	8.96
962042	AG1-048 E	2.6924	Adder	5.98
962441	AG1-093 C O1	3.5138	Adder	7.8
962442	AG1-093 E O1	1.0694	Adder	2.37
963171	AG1-166 C	0.6462	Adder	1.43
963172	AG1-166 E	0.4308	Adder	0.96
963181	AG1-167 C	0.6462	Adder	1.43
963182	AG1-167 E	0.4308	Adder	0.96
963191	AG1-168 C	0.6462	Adder	1.43
963192	AG1-168 E	0.4308	Adder	0.96
963201	AG1-169 C	0.6462	Adder	1.43
963202	AG1-169 E	0.4308	Adder	0.96
963211	AG1-170 C	0.6462	Adder	1.43
963212	AG1-170 E	0.4308	Adder	0.96
963301	AG1-179 C	1.5479	Adder	3.44
963311	AG1-180	0.7542	Adder	1.67
963321	AG1-181 C O1	16.1673	50/50	16.1673
963361	AG1-185 O1	7.8222	50/50	7.8222
963641	AG1-215 C	0.3016	Adder	0.67
963642	AG1-215 E	0.4523	Adder	1.0
964111	AG1-272 C	2.3755	50/50	2.3755
964112	AG1-272 E	0.7055	50/50	0.7055
964121	AG1-273 C	2.3755	50/50	2.3755
964122	AG1-273 E	0.7055	50/50	0.7055
964131	AG1-274 C	2.3755	50/50	2.3755
964132	AG1-274 E	0.7055	50/50	0.7055
964241	AG1-285 C O1	13.7527	50/50	13.7527
964242	AG1-285 E O1	9.1685	50/50	9.1685
964791	AG1-342 C	1.2895	Adder	2.86
964792	AG1-342 E	1.0132	Adder	2.25
964821	AG1-345 C	0.2594	Adder	0.58
964822	AG1-345 E	0.1729	Adder	0.38
965191	AG1-384 C	2.3755	50/50	2.3755
965192	AG1-384 E	0.7055	50/50	0.7055

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965281	AG1-393 C	0.6462	Adder	1.43
965282	AG1-393 E	0.4308	Adder	0.96
965451	AG1-413 C O1	2.4036	Adder	5.34
965452	AG1-413 E O1	1.6024	Adder	3.56
965591	AG1-427 C	12.9843	50/50	12.9843
965592	AG1-427 E	8.6745	50/50	8.6745
965601	AG1-428 C O1	1.2922	Adder	2.87
965602	AG1-428 E O1	0.8600	Adder	1.91
965641	AG1-432 C O1	3.9950	Adder	8.87
965642	AG1-432 E O1	2.6634	Adder	5.91
965721	AG1-440 C	16.0191	50/50	16.0191
965722	AG1-440 E	10.6794	50/50	10.6794
965731	AG1-441 C	16.0191	50/50	16.0191
965732	AG1-441 E	10.6794	50/50	10.6794
965771	AG1-445	9.2555	50/50	9.2555
965781	AG1-446	9.2555	50/50	9.2555
965831	AG1-451	0.6658	Adder	1.48
966751	AG1-546 C	34.7517	50/50	34.7517
966752	AG1-546 E	18.6468	50/50	18.6468
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	0.3995	Adder	0.89
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	0.2663	Adder	0.59
G-007A	G-007A	0.1654	Confirmed LTF	0.1654
VFT	VFT	0.4386	Confirmed LTF	0.4386
CALDERWOOD	CALDERWOOD	0.3713	Confirmed LTF	0.3713
PRAIRIE	PRAIRIE	1.2528	Confirmed LTF	1.2528
CHEOAH	CHEOAH	0.3809	Confirmed LTF	0.3809
CBM-N	CBM-N	0.0792	Confirmed LTF	0.0792
COTTONWOOD	COTTONWOOD	1.3629	Confirmed LTF	1.3629
HAMLET	HAMLET	0.8062	Confirmed LTF	0.8062
GIBSON	GIBSON	0.2184	Confirmed LTF	0.2184
BLUEG	BLUEG	0.6701	Confirmed LTF	0.6701
TRIMBLE	TRIMBLE	0.2126	Confirmed LTF	0.2126
CATAWBA	CATAWBA	0.4161	Confirmed LTF	0.4161

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169331327	314747	6BREMO	DVP	313867	6BREMODIST	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	130.41	131.79	DC	9.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1780	80/20	2.1780
313527	AB2-043 C	0.4243	80/20	0.4243
314429	3JTRSVLE	0.6669	80/20	0.6669
314572	3EMPORIA	0.1382	80/20	0.1382
314677	6BUCKING	1.0571	80/20	1.0571
314704	3LAWRENC	0.1410	80/20	0.1410
315126	1ROARAP2	0.4085	80/20	0.4085
315128	1ROARAP4	0.3898	80/20	0.3898
315153	1CLOVER1	7.5116	80/20	7.5116
315154	1CLOVER2	7.4368	80/20	7.4368
315158	1KERR 1	0.2345	80/20	0.2345
315159	1KERR 2	0.6567	80/20	0.6567
315160	1KERR 3	0.6567	80/20	0.6567
315161	1KERR 4	0.6567	80/20	0.6567
315162	1KERR 5	0.6567	80/20	0.6567
315163	1KERR 6	0.6567	80/20	0.6567
315164	1KERR 7	0.6567	80/20	0.6567
315191	1BEARGRDN G1	18.4998	80/20	18.4998
315192	1BEARGRDN G2	18.4998	80/20	18.4998
315193	1BEARGRDN S1	23.9239	80/20	23.9239
315266	1PLYWOOD A	0.6737	80/20	0.6737
316087	AB2-174 C	0.3606	80/20	0.3606
316118	AC1-105 C	3.4200	80/20	3.4200
316123	AC1-075 C	0.3763	80/20	0.3763
316129	AC1-054 C	3.4710	80/20	3.4710
316131	AB2-060 C	1.2610	80/20	1.2610
923991	AB2-040 C O1	2.3720	80/20	2.3720
924301	AB2-077 C O1 (Suspended)	1.6661	80/20	1.6661
924311	AB2-078 C O1 (Suspended)	1.6661	80/20	1.6661
924321	AB2-079 C O1 (Suspended)	1.6661	80/20	1.6661
925611	AC1-036 C	0.2822	80/20	0.2822
926023	AC1-080 C	0.1258	80/20	0.1258
927251	AC1-221 C	0.7947	80/20	0.7947
927261	AC1-222 C	1.8844	80/20	1.8844
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.0415	80/20	1.0415
932761	AC2-100 C	1.8288	80/20	1.8288

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0262	80/20	11.0262
938821	AE1-108 C O1	11.0132	80/20	11.0132
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7368	80/20	6.7368
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9629	80/20	3.9629
958801	AF2-171 C	23.6781	80/20	23.6781
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1703	80/20	3.1703
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0131	80/20	22.0131
962041	AG1-048 C	19.8142	80/20	19.8142
962441	AG1-093 C O1	9.1200	80/20	9.1200
962491	AG1-098 C O1	12.3900	80/20	12.3900
962561	AG1-105 C O1	6.1674	80/20	6.1674
963171	AG1-166 C	3.1703	80/20	3.1703
963181	AG1-167 C	3.1703	80/20	3.1703
963191	AG1-168 C	3.1703	80/20	3.1703
963201	AG1-169 C	3.1703	80/20	3.1703
963211	AG1-170 C	3.1703	80/20	3.1703
963271	AG1-176 C O1	20.7171	80/20	20.7171
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O1	20.0593	80/20	20.0593
963361	AG1-185 O1	9.7052	80/20	9.7052
963641	AG1-215 C	1.4795	80/20	1.4795
964111	AG1-272 C	3.2072	80/20	3.2072
964121	AG1-273 C	3.2072	80/20	3.2072
964131	AG1-274 C	3.2072	80/20	3.2072
964231	AG1-284 C O1	2.9513	80/20	2.9513
964241	AG1-285 C O1	12.0195	80/20	12.0195
964261	AG1-287 C	0.7911	80/20	0.7911
964471	AG1-310 C	1.0720	80/20	1.0720
964791	AG1-342 C	2.7843	80/20	2.7843
964821	AG1-345 C	1.2648	80/20	1.2648
964841	AG1-347 C	12.9875	80/20	12.9875
964931	AG1-357 C	8.6556	80/20	8.6556
965191	AG1-384 C	3.2072	80/20	3.2072
965281	AG1-393 C	3.1703	80/20	3.1703
965451	AG1-413 C O1	4.3205	80/20	4.3205
965581	AG1-426	2.3994	80/20	2.3994
965591	AG1-427 C	11.4819	80/20	11.4819
965601	AG1-428 C O1	2.4880	80/20	2.4880
965641	AG1-432 C O1	40.6200	80/20	40.6200
965721	AG1-440 C	4.1121	80/20	4.1121
965731	AG1-441 C	4.1121	80/20	4.1121
965771	AG1-445	2.3759	80/20	2.3759
965781	AG1-446	2.3759	80/20	2.3759
965831	AG1-451	6.7700	80/20	6.7700
966361	AG1-505 C	4.9734	80/20	4.9734
966371	AG1-506 C	4.9734	80/20	4.9734
966621	AG1-532 C	0.4522	80/20	0.4522
966691	AG1-539 C	1.7146	80/20	1.7146
966751	AG1-546 C	7.3410	80/20	7.3410
966811	AG1-552 C	0.6485	80/20	0.6485
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	4.0620	80/20	4.0620
WEC	WEC	0.0699	Confirmed LTF	0.0699
LGEE	LGEE	0.1483	Confirmed LTF	0.1483
CPL	CPL	2.3396	Confirmed LTF	2.3396
CBM-W2	CBM-W2	5.8061	Confirmed LTF	5.8061
NY	NY	0.4076	Confirmed LTF	0.4076
TVA	TVA	1.2558	Confirmed LTF	1.2558
SIGE	SIGE	0.1120	Confirmed LTF	0.1120
CBM-S2	CBM-S2	25.9121	Confirmed LTF	25.9121
CBM-S1	CBM-S1	0.2953	Confirmed LTF	0.2953
MEC	MEC	0.5863	Confirmed LTF	0.5863
LAGN	LAGN	1.5645	Confirmed LTF	1.5645
AA2-074	AA2-074	1.5426	LTF	1.5426
CBM-W1	CBM-W1	2.5236	Confirmed LTF	2.5236

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169331317	314765	6MTEAGLE	DVP	314749	6CHARLVL	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	130.36	131.66	DC	8.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1286	80/20	0.1286
315153	1CLOVER1	6.8555	80/20	6.8555
315154	1CLOVER2	6.7871	80/20	6.7871
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6056	80/20	0.6056
315160	1KERR 3	0.6056	80/20	0.6056
315161	1KERR 4	0.6056	80/20	0.6056
315162	1KERR 5	0.6056	80/20	0.6056
315163	1KERR 6	0.6056	80/20	0.6056
315164	1KERR 7	0.6056	80/20	0.6056
315191	1BEARGRDN G1	16.8015	80/20	16.8015
315192	1BEARGRDN G2	16.8015	80/20	16.8015
315193	1BEARGRDN S1	21.7276	80/20	21.7276
315266	1PLYWOOD A	0.6337	80/20	0.6337
316118	AC1-105 C	3.2095	80/20	3.2095
316123	AC1-075 C	0.3995	80/20	0.3995
316129	AC1-054 C	3.1893	80/20	3.1893
316131	AB2-060 C	1.1579	80/20	1.1579
924301	AB2-077 C O1 (Suspended)	1.5318	80/20	1.5318
924311	AB2-078 C O1 (Suspended)	1.5318	80/20	1.5318
924321	AB2-079 C O1 (Suspended)	1.5318	80/20	1.5318
925611	AC1-036 C	0.2579	80/20	0.2579
926023	AC1-080 C	0.1335	80/20	0.1335
926451	AC1-116 C	0.5713	80/20	0.5713
927251	AC1-221 C	0.7553	80/20	0.7553
927261	AC1-222 C	1.8201	80/20	1.8201
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9462	80/20	0.9462
932761	AC2-100 C	1.7381	80/20	1.7381
933501	AC2-165 C	31.7798	80/20	31.7798
934311	AD1-055 C	1.2637	80/20	1.2637
934341	AD1-058 C	1.8933	80/20	1.8933
934615	AD1-087 C	4.2927	80/20	4.2927

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934625	AD1-088 C	14.0087	80/20	14.0087
934991	AD1-131 C	0.6208	80/20	0.6208
935171	AD1-152 C O1	4.7150	80/20	4.7150
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9363	80/20	13.9363
936361	AD2-046 C O1	5.3660	80/20	5.3660
936485	AD2-063 C	13.8249	80/20	13.8249
937481	AD2-202 C O1	1.2573	80/20	1.2573
938371	AE1-056 C	10.0469	80/20	10.0469
938821	AE1-108 C O1	34.7022	80/20	34.7022
939181	AE1-148 C	5.3595	80/20	5.3595
940661	AE2-053 O1	1.9850	80/20	1.9850
941011	AE2-092 C	28.7092	80/20	28.7092
941791	AE2-182 C	2.2759	80/20	2.2759
942451	AE2-258	1.8436	80/20	1.8436
942461	AE2-259 C O1	18.4818	80/20	18.4818
942751	AE2-291 C	3.6916	80/20	3.6916
942761	AE2-292 C O1	4.5964	80/20	4.5964
943901	AF1-058 C	0.9986	80/20	0.9986
943911	AF1-059	9.4111	80/20	9.4111
945811	AF1-246 C O1	3.3281	80/20	3.3281
946281	AF1-292 C	0.4501	80/20	0.4501
946291	AF1-293 C O1	46.3226	80/20	46.3226
946301	AF1-294 C	6.1424	80/20	6.1424
946591	AF1-323 C	11.1045	80/20	11.1045
957481	AF2-042 C	23.7720	80/20	23.7720
958131	AF2-107 C	5.0062	80/20	5.0062
958211	AF2-115 C	3.6132	80/20	3.6132
958801	AF2-171 C	21.5901	80/20	21.5901
959311	AF2-222 C	19.7350	80/20	19.7350
959751	AF2-266	4.9210	80/20	4.9210
960061	AF2-297 C	3.9946	80/20	3.9946
960081	AF2-299 C	0.7586	80/20	0.7586
960111	AF2-302 C	4.0380	80/20	4.0380
961061	AF2-397 C	49.3795	80/20	49.3795
961791	AG1-021 C	2.8906	80/20	2.8906
961801	AG1-022 C	4.0380	80/20	4.0380
961891	AG1-030 C	20.0853	80/20	20.0853
962041	AG1-048 C	18.0660	80/20	18.0660
962441	AG1-093 C O1	8.5588	80/20	8.5588
962491	AG1-098 C O1	11.2860	80/20	11.2860
962561	AG1-105 C O1	5.6484	80/20	5.6484
962741	AG1-123 C O1	3.4609	80/20	3.4609
962751	AG1-124 C O1	3.7955	80/20	3.7955
963171	AG1-166 C	2.8906	80/20	2.8906
963181	AG1-167 C	2.8906	80/20	2.8906
963191	AG1-168 C	2.8906	80/20	2.8906
963201	AG1-169 C	2.8906	80/20	2.8906
963211	AG1-170 C	2.8906	80/20	2.8906
963271	AG1-176 C O1	18.8522	80/20	18.8522
963301	AG1-179 C	2.7231	80/20	2.7231
963311	AG1-180	1.3268	80/20	1.3268

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O1	18.3438	80/20	18.3438
963361	AG1-185 O1	8.8752	80/20	8.8752
963641	AG1-215 C	1.3489	80/20	1.3489
964111	AG1-272 C	2.9313	80/20	2.9313
964121	AG1-273 C	2.9313	80/20	2.9313
964131	AG1-274 C	2.9313	80/20	2.9313
964231	AG1-284 C O1	20.2247	80/20	20.2247
964241	AG1-285 C O1	11.0228	80/20	11.0228
964261	AG1-287 C	0.7490	80/20	0.7490
964471	AG1-310 C	1.0445	80/20	1.0445
964791	AG1-342 C	2.5943	80/20	2.5943
964821	AG1-345 C	1.1533	80/20	1.1533
964841	AG1-347 C	11.8182	80/20	11.8182
964931	AG1-357 C	7.8312	80/20	7.8312
965191	AG1-384 C	2.9313	80/20	2.9313
965281	AG1-393 C	2.8906	80/20	2.8906
965451	AG1-413 C O1	3.9561	80/20	3.9561
965581	AG1-426	7.5604	80/20	7.5604
965591	AG1-427 C	10.5285	80/20	10.5285
965601	AG1-428 C O1	2.2733	80/20	2.2733
965641	AG1-432 C O1	36.9636	80/20	36.9636
965721	AG1-440 C	3.7881	80/20	3.7881
965731	AG1-441 C	3.7881	80/20	3.7881
965771	AG1-445	2.1887	80/20	2.1887
965781	AG1-446	2.1887	80/20	2.1887
965831	AG1-451	6.1606	80/20	6.1606
966251	AG1-494 C	1.8190	80/20	1.8190
966621	AG1-532 C	0.4096	80/20	0.4096
966691	AG1-539 C	1.9302	80/20	1.9302
966751	AG1-546 C	6.7407	80/20	6.7407
966791	AG1-550 O1	24.3684	80/20	24.3684
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.6964	80/20	3.6964
WEC	WEC	0.1332	Confirmed LTF	0.1332
LGEE	LGEE	0.2859	Confirmed LTF	0.2859
CPL	CPL	2.2666	Confirmed LTF	2.2666
CBM-W2	CBM-W2	7.4995	Confirmed LTF	7.4995
NY	NY	0.4413	Confirmed LTF	0.4413
TVA	TVA	1.5190	Confirmed LTF	1.5190
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.1835	Confirmed LTF	26.1835
CBM-S1	CBM-S1	0.3690	Confirmed LTF	0.3690
MEC	MEC	0.9010	Confirmed LTF	0.9010
LAGN	LAGN	1.8743	Confirmed LTF	1.8743
AA2-074	AA2-074	1.4958	LTF	1.4958
CBM-W1	CBM-W1	5.2575	Confirmed LTF	5.2575

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163512333	927250	AC1-221 TAP	DVP	304070	6PERSON230 T	CPL	1	DVP_P1-2: LN 556-C	single	718.0	146.79	152.24	DC	39.19

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
247284	05LEESVG	0.4591	80/20	0.4591
313527	AB2-043 C	0.6777	80/20	0.6777
314333	6POWHATN	0.1206	80/20	0.1206
314429	3JTRSVLE	0.6020	80/20	0.6020
314677	6BUCKING	0.3988	80/20	0.3988
314704	3LAWRENC	0.1701	80/20	0.1701
315153	1CLOVER1	35.6962	80/20	35.6962
315154	1CLOVER2	35.3404	80/20	35.3404
315156	1HALLBR1	1.0288	80/20	1.0288
315158	1KERR 1	0.3313	80/20	0.3313
315159	1KERR 2	0.9277	80/20	0.9277
315160	1KERR 3	0.9277	80/20	0.9277
315161	1KERR 4	0.9277	80/20	0.9277
315162	1KERR 5	0.9277	80/20	0.9277
315163	1KERR 6	0.9277	80/20	0.9277
315164	1KERR 7	0.9277	80/20	0.9277
315191	1BEARGRDN G1	3.3141	80/20	3.3141
315192	1BEARGRDN G2	3.3141	80/20	3.3141
315193	1BEARGRDN S1	4.2858	80/20	4.2858
315266	1PLYWOOD A	3.0479	80/20	3.0479
316118	AC1-105 C	14.6956	80/20	14.6956
316123	AC1-075 C	1.8835	80/20	1.8835
316129	AC1-054 C	4.0299	80/20	4.0299
316131	AB2-060 C	1.9554	80/20	1.9554
924301	AB2-077 C O1 (Suspended)	2.7590	80/20	2.7590
924311	AB2-078 C O1 (Suspended)	2.7590	80/20	2.7590
924321	AB2-079 C O1 (Suspended)	2.7590	80/20	2.7590
925611	AC1-036 C	0.3165	80/20	0.3165
925661	AC1-042 C	1.5979	80/20	1.5979
926023	AC1-080 C	0.6295	80/20	0.6295
926451	AC1-116 C	0.0446	80/20	0.0446
926645	AC1-145 C	0.3001	80/20	0.3001
927251	AC1-221 C	11.7174	80/20	11.7174
927261	AC1-222 C	10.1051	80/20	10.1051
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.3929	80/20	0.3929
932761	AC2-100 C	26.9660	80/20	26.9660
933501	AC2-165 C	3.6987	80/20	3.6987
934311	AD1-055 C	7.0162	80/20	7.0162

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934341	AD1-058 C	29.3737	80/20	29.3737
934615	AD1-087 C	22.4303	80/20	22.4303
934625	AD1-088 C	29.6903	80/20	29.6903
934991	AD1-131 C	9.6307	80/20	9.6307
935171	AD1-152 C O1	24.6374	80/20	24.6374
935221	AD1-157 C	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1048	80/20	0.1048
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8236	80/20	4.8236
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7132	80/20	14.7132
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5649	80/20	0.5649
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5206	80/20	0.5206
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1206	80/20	7.1206
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O1	39.1883	80/20	39.1883
962491	AG1-098 C O1	34.5765	80/20	34.5765
962561	AG1-105 C O1	31.8432	80/20	31.8432
963171	AG1-166 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963181	AG1-167 C	2.8618	80/20	2.8618
963191	AG1-168 C	2.8618	80/20	2.8618
963201	AG1-169 C	2.8618	80/20	2.8618
963211	AG1-170 C	2.8618	80/20	2.8618
963271	AG1-176 C O1	36.0621	80/20	36.0621
963301	AG1-179 C	3.8207	80/20	3.8207
963311	AG1-180	1.8616	80/20	1.8616
963321	AG1-181 C O1	23.4953	80/20	23.4953
963361	AG1-185 O1	11.3677	80/20	11.3677
963601	AG1-209 C	0.2803	80/20	0.2803
963641	AG1-215 C	1.3355	80/20	1.3355
964111	AG1-272 C	3.5975	80/20	3.5975
964121	AG1-273 C	3.5975	80/20	3.5975
964131	AG1-274 C	3.5975	80/20	3.5975
964141	AG1-275 C	1.2014	80/20	1.2014
964151	AG1-276 C	1.2014	80/20	1.2014
964231	AG1-284 C O1	3.9711	80/20	3.9711
964241	AG1-285 C O1	17.1705	80/20	17.1705
964251	AG1-286 C	0.4497	80/20	0.4497
964261	AG1-287 C	4.2981	80/20	4.2981
964471	AG1-310 C	5.7147	80/20	5.7147
964791	AG1-342 C	9.4188	80/20	9.4188
964821	AG1-345 C	1.1444	80/20	1.1444
964841	AG1-347 C	22.4655	80/20	22.4655
964931	AG1-357 C	61.4988	80/20	61.4988
965191	AG1-384 C	3.5975	80/20	3.5975
965281	AG1-393 C	2.8618	80/20	2.8618
965451	AG1-413 C O1	6.0628	80/20	6.0628
965581	AG1-426	1.5862	80/20	1.5862
965591	AG1-427 C	16.2855	80/20	16.2855
965601	AG1-428 C O1	3.1896	80/20	3.1896
965641	AG1-432 C O1	29.4264	80/20	29.4264
965721	AG1-440 C	5.4864	80/20	5.4864
965731	AG1-441 C	5.4864	80/20	5.4864
965771	AG1-445	3.1699	80/20	3.1699
965781	AG1-446	3.1699	80/20	3.1699
965831	AG1-451	4.9044	80/20	4.9044
966691	AG1-539 C	8.1754	80/20	8.1754
966751	AG1-546 C	8.2011	80/20	8.2011
966761	AG1-547 C	3.2579	80/20	3.2579
966791	AG1-550 O1	2.6947	80/20	2.6947
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	2.9426	80/20	2.9426
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	1.4443	Confirmed LTF	1.4443
PRAIRIE	PRAIRIE	4.6726	Confirmed LTF	4.6726
AC1-131	AC1-131	5.2830	LTF	5.2830
CHEOAH	CHEOAH	1.4865	Confirmed LTF	1.4865
CBM-N	CBM-N	0.2328	Confirmed LTF	0.2328
COTTONWOOD	COTTONWOOD	5.2395	Confirmed LTF	5.2395
HAMLET	HAMLET	3.2011	Confirmed LTF	3.2011

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912
BLUEG	BLUEG	2.4078	Confirmed LTF	2.4078
TRIMBLE	TRIMBLE	0.7618	Confirmed LTF	0.7618
CATAWBA	CATAWBA	1.6965	Confirmed LTF	1.6965

11.6.21 Index 21

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169560485	934620	AD1-088 TAP	DVP	963270	AG1-176 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	121.17	123.03	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934625	AD1-088 C	33.5073	80/20	33.5073
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
941791	AE2-182 C	5.4438	80/20	5.4438
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964931	AG1-357 C	39.0228	80/20	39.0228
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734
SIGE	SIGE	0.1586	Confirmed LTF	0.1586

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.22 Index 22

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169865441	961060	AF2-397 TAP	DVP	966790	AG1-550 TAP	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	133.93	135.23	DC	8.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1287	80/20	0.1287
315153	1CLOVER1	6.8569	80/20	6.8569
315154	1CLOVER2	6.7885	80/20	6.7885
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6058	80/20	0.6058
315160	1KERR 3	0.6058	80/20	0.6058
315161	1KERR 4	0.6058	80/20	0.6058
315162	1KERR 5	0.6058	80/20	0.6058
315163	1KERR 6	0.6058	80/20	0.6058
315164	1KERR 7	0.6058	80/20	0.6058
315191	1BEARGRDN G1	16.8024	80/20	16.8024
315192	1BEARGRDN G2	16.8024	80/20	16.8024
315193	1BEARGRDN S1	21.7287	80/20	21.7287
315266	1PLYWOOD A	0.6338	80/20	0.6338
316118	AC1-105 C	3.2102	80/20	3.2102
316123	AC1-075 C	0.3997	80/20	0.3997
316129	AC1-054 C	3.1902	80/20	3.1902
316131	AB2-060 C	1.1581	80/20	1.1581
924301	AB2-077 C O1 (Suspended)	1.5320	80/20	1.5320
924311	AB2-078 C O1 (Suspended)	1.5320	80/20	1.5320
924321	AB2-079 C O1 (Suspended)	1.5320	80/20	1.5320
925611	AC1-036 C	0.2580	80/20	0.2580
926023	AC1-080 C	0.1336	80/20	0.1336
927251	AC1-221 C	0.7557	80/20	0.7557
927261	AC1-222 C	1.8205	80/20	1.8205
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9463	80/20	0.9463
932761	AC2-100 C	1.7391	80/20	1.7391
933501	AC2-165 C	31.7815	80/20	31.7815
934311	AD1-055 C	1.2640	80/20	1.2640
934341	AD1-058 C	1.8944	80/20	1.8944
934615	AD1-087 C	4.2935	80/20	4.2935
934625	AD1-088 C	14.0108	80/20	14.0108

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961061	AF2-397 C	49.3810	80/20	49.3810
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963361	AG1-185 O1	8.8762	80/20	8.8762
963641	AG1-215 C	1.3491	80/20	1.3491
964111	AG1-272 C	2.9318	80/20	2.9318
964121	AG1-273 C	2.9318	80/20	2.9318
964131	AG1-274 C	2.9318	80/20	2.9318
964231	AG1-284 C O1	20.2255	80/20	20.2255
964241	AG1-285 C O1	11.0250	80/20	11.0250
964261	AG1-287 C	0.7492	80/20	0.7492
964471	AG1-310 C	1.0449	80/20	1.0449
964791	AG1-342 C	2.5948	80/20	2.5948
964821	AG1-345 C	1.1534	80/20	1.1534
964841	AG1-347 C	11.8194	80/20	11.8194
964931	AG1-357 C	7.8348	80/20	7.8348
965191	AG1-384 C	2.9318	80/20	2.9318
965281	AG1-393 C	2.8909	80/20	2.8909
965451	AG1-413 C O1	3.9569	80/20	3.9569
965581	AG1-426	7.5610	80/20	7.5610
965591	AG1-427 C	10.5299	80/20	10.5299
965601	AG1-428 C O1	2.2741	80/20	2.2741
965641	AG1-432 C O1	36.9672	80/20	36.9672
965721	AG1-440 C	3.7895	80/20	3.7895
965731	AG1-441 C	3.7895	80/20	3.7895
965771	AG1-445	2.1895	80/20	2.1895
965781	AG1-446	2.1895	80/20	2.1895
965831	AG1-451	6.1612	80/20	6.1612
966251	AG1-494 C	1.8194	80/20	1.8194
966621	AG1-532 C	0.4099	80/20	0.4099
966691	AG1-539 C	1.9309	80/20	1.9309
966751	AG1-546 C	6.7436	80/20	6.7436
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.6967	80/20	3.6967
WEC	WEC	0.1342	Confirmed LTF	0.1342
LGEE	LGEE	0.2878	Confirmed LTF	0.2878
CPL	CPL	2.2686	Confirmed LTF	2.2686
CBM-W2	CBM-W2	7.5264	Confirmed LTF	7.5264
NY	NY	0.4396	Confirmed LTF	0.4396
TVA	TVA	1.5232	Confirmed LTF	1.5232
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.2148	Confirmed LTF	26.2148
CBM-S1	CBM-S1	0.3701	Confirmed LTF	0.3701
MEC	MEC	0.9057	Confirmed LTF	0.9057
LAGN	LAGN	1.8795	Confirmed LTF	1.8795
AA2-074	AA2-074	1.4972	LTF	1.4972
CBM-W1	CBM-W1	5.2996	Confirmed LTF	5.2996

11.6.23 Index 23

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169560499	962490	AG1-098 TAP	DVP	934620	AD1-088 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	114.43	116.29	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964931	AG1-357 C	39.0228	80/20	39.0228
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734
SIGE	SIGE	0.1586	Confirmed LTF	0.1586
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.24 Index 24

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169865483	963270	AG1-176 TAP	DVP	964840	AG1-347 TAP	DVP	1	DVP_P1-2: LN 556-B	single	571.52	121.19	123.05	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934625	AD1-088 C	33.5073	80/20	33.5073
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
941791	AE2-182 C	5.4438	80/20	5.4438
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
963271	AG1-176 C O1	43.9413	80/20	43.9413
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734
SIGE	SIGE	0.1586	Confirmed LTF	0.1586

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

11.6.25 Index 25

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168640344	964840	AG1-347 TAP	DVP	314268	6BRIERY	DVP	1	DVP_P1-2: LN 556-B	single	571.52	121.19	123.05	DC	10.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315153	1CLOVER1	22.6526	80/20	22.6526
315154	1CLOVER2	22.4268	80/20	22.4268
315266	1PLYWOOD A	0.8741	80/20	0.8741
316118	AC1-105 C	3.9872	80/20	3.9872
316123	AC1-075 C	0.6040	80/20	0.6040
926023	AC1-080 C	0.2018	80/20	0.2018
927251	AC1-221 C	1.4969	80/20	1.4969
927261	AC1-222 C	3.1206	80/20	3.1206
932761	AC2-100 C	3.4450	80/20	3.4450
934311	AD1-055 C	2.1667	80/20	2.1667
934341	AD1-058 C	3.7526	80/20	3.7526
934615	AD1-087 C	14.1588	80/20	14.1588
934625	AD1-088 C	33.5073	80/20	33.5073
934991	AD1-131 C	1.2304	80/20	1.2304
935171	AD1-152 C O1	15.5520	80/20	15.5520
936161	AD2-022 C O1	3.4044	80/20	3.4044
936171	AD2-023 C O1	1.9859	80/20	1.9859
937481	AD2-202 C O1	4.1472	80/20	4.1472
941791	AE2-182 C	5.4438	80/20	5.4438
942751	AE2-291 C	5.1524	80/20	5.1524
942761	AE2-292 C O1	6.4153	80/20	6.4153
943901	AF1-058 C	1.7574	80/20	1.7574
945811	AF1-246 C O1	13.6584	80/20	13.6584
957481	AF2-042 C	97.5600	80/20	97.5600
959751	AF2-266	16.2605	80/20	16.2605
960061	AF2-297 C	7.0296	80/20	7.0296
962441	AG1-093 C O1	10.6324	80/20	10.6324
962491	AG1-098 C O1	30.1440	80/20	30.1440
962561	AG1-105 C O1	17.8794	80/20	17.8794
963271	AG1-176 C O1	43.9413	80/20	43.9413
964261	AG1-287 C	1.3180	80/20	1.3180
964471	AG1-310 C	1.7705	80/20	1.7705
964791	AG1-342 C	2.1254	80/20	2.1254
964841	AG1-347 C	27.5044	80/20	27.5044
966691	AG1-539 C	2.6941	80/20	2.6941
WEC	WEC	0.2463	Confirmed LTF	0.2463
LGEE	LGEE	0.5083	Confirmed LTF	0.5083
CPL	CPL	2.7976	Confirmed LTF	2.7976
CBM-W2	CBM-W2	10.9312	Confirmed LTF	10.9312
NY	NY	0.3113	Confirmed LTF	0.3113
TVA	TVA	2.0734	Confirmed LTF	2.0734

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
SIGE	SIGE	0.1586	Confirmed LTF	0.1586
CBM-S2	CBM-S2	32.5206	Confirmed LTF	32.5206
CBM-S1	CBM-S1	0.5164	Confirmed LTF	0.5164
MEC	MEC	1.4841	Confirmed LTF	1.4841
LAGN	LAGN	2.5707	Confirmed LTF	2.5707
AA2-074	AA2-074	1.8477	LTF	1.8477
CBM-W1	CBM-W1	10.2907	Confirmed LTF	10.2907

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169865451	966790	AG1-550 TAP	DVP	314765	6MTEAGLE	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	133.9	135.2	DC	8.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1287	80/20	0.1287
315153	1CLOVER1	6.8569	80/20	6.8569
315154	1CLOVER2	6.7885	80/20	6.7885
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6058	80/20	0.6058
315160	1KERR 3	0.6058	80/20	0.6058
315161	1KERR 4	0.6058	80/20	0.6058
315162	1KERR 5	0.6058	80/20	0.6058
315163	1KERR 6	0.6058	80/20	0.6058
315164	1KERR 7	0.6058	80/20	0.6058
315191	1BEARGRDN G1	16.8024	80/20	16.8024
315192	1BEARGRDN G2	16.8024	80/20	16.8024
315193	1BEARGRDN S1	21.7287	80/20	21.7287
315266	1PLYWOOD A	0.6338	80/20	0.6338
316118	AC1-105 C	3.2102	80/20	3.2102
316123	AC1-075 C	0.3997	80/20	0.3997
316129	AC1-054 C	3.1902	80/20	3.1902
316131	AB2-060 C	1.1581	80/20	1.1581
924301	AB2-077 C O1 (Suspended)	1.5320	80/20	1.5320
924311	AB2-078 C O1 (Suspended)	1.5320	80/20	1.5320
924321	AB2-079 C O1 (Suspended)	1.5320	80/20	1.5320
925611	AC1-036 C	0.2580	80/20	0.2580
926023	AC1-080 C	0.1336	80/20	0.1336
927251	AC1-221 C	0.7557	80/20	0.7557
927261	AC1-222 C	1.8205	80/20	1.8205
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9463	80/20	0.9463
932761	AC2-100 C	1.7391	80/20	1.7391
933501	AC2-165 C	31.7815	80/20	31.7815
934311	AD1-055 C	1.2640	80/20	1.2640
934341	AD1-058 C	1.8944	80/20	1.8944
934615	AD1-087 C	4.2935	80/20	4.2935
934625	AD1-088 C	14.0108	80/20	14.0108

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961061	AF2-397 C	49.3810	80/20	49.3810
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963361	AG1-185 O1	8.8762	80/20	8.8762
963641	AG1-215 C	1.3491	80/20	1.3491
964111	AG1-272 C	2.9318	80/20	2.9318
964121	AG1-273 C	2.9318	80/20	2.9318
964131	AG1-274 C	2.9318	80/20	2.9318
964231	AG1-284 C O1	20.2255	80/20	20.2255
964241	AG1-285 C O1	11.0250	80/20	11.0250
964261	AG1-287 C	0.7492	80/20	0.7492
964471	AG1-310 C	1.0449	80/20	1.0449
964791	AG1-342 C	2.5948	80/20	2.5948
964821	AG1-345 C	1.1534	80/20	1.1534
964841	AG1-347 C	11.8194	80/20	11.8194
964931	AG1-357 C	7.8348	80/20	7.8348
965191	AG1-384 C	2.9318	80/20	2.9318
965281	AG1-393 C	2.8909	80/20	2.8909
965451	AG1-413 C O1	3.9569	80/20	3.9569
965581	AG1-426	7.5610	80/20	7.5610
965591	AG1-427 C	10.5299	80/20	10.5299
965601	AG1-428 C O1	2.2741	80/20	2.2741
965641	AG1-432 C O1	36.9672	80/20	36.9672
965721	AG1-440 C	3.7895	80/20	3.7895
965731	AG1-441 C	3.7895	80/20	3.7895
965771	AG1-445	2.1895	80/20	2.1895
965781	AG1-446	2.1895	80/20	2.1895
965831	AG1-451	6.1612	80/20	6.1612
966251	AG1-494 C	1.8194	80/20	1.8194
966621	AG1-532 C	0.4099	80/20	0.4099
966691	AG1-539 C	1.9309	80/20	1.9309
966751	AG1-546 C	6.7436	80/20	6.7436
966791	AG1-550 O1	24.3694	80/20	24.3694
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.6967	80/20	3.6967
WEC	WEC	0.1342	Confirmed LTF	0.1342
LGEE	LGEE	0.2878	Confirmed LTF	0.2878
CPL	CPL	2.2686	Confirmed LTF	2.2686
CBM-W2	CBM-W2	7.5264	Confirmed LTF	7.5264
NY	NY	0.4396	Confirmed LTF	0.4396
TVA	TVA	1.5232	Confirmed LTF	1.5232
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.2148	Confirmed LTF	26.2148
CBM-S1	CBM-S1	0.3701	Confirmed LTF	0.3701
MEC	MEC	0.9057	Confirmed LTF	0.9057
LAGN	LAGN	1.8795	Confirmed LTF	1.8795
AA2-074	AA2-074	1.4972	LTF	1.4972
CBM-W1	CBM-W1	5.2996	Confirmed LTF	5.2996

11.7 Queue Dependencies

The Queue Projects below are listed in one or more indices for the overloads identified in your report. These projects contribute to the loading of the overloaded facilities identified in your report. The percent overload of a facility and cost allocation you may have towards a particular reinforcement could vary depending on the action of these earlier projects. The status of each project at the time of the analysis is presented in the table. This list may change as earlier projects withdraw or modify their requests.

Queue Number	Project Name	Status
AA1-063	Huntsville (Cabin Creek) 69kV	Withdrawn
AA2-053	Carolina-Jackson 115kV	In Service
AA2-074	CPLP-PJM	Confirmed
AA2-088	Boykins-Handsome 115kV	In Service
AA2-165	Hornertown-Whitakers 115kV	In Service
AB1-081	Anaconda-Mayo Dunbar 115kV	In Service
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB2-015	Franklin 115kV	Engineering and Procurement
AB2-040	Brink 115kV	Engineering and Procurement
AB2-043	Chase City 115kV	Under Construction
AB2-059	Benson-Dunbar 115kV	Partially in Service - Under Construction
AB2-060	Chase City-Lunenburg 115kV	In Service
AB2-077	Buggs Island-Chase City 115kV	Suspended
AB2-078	Buggs Island-Chase City 115kV	Suspended
AB2-079	Buggs Island-Chase City 115kV	Suspended
AB2-099	Ahoskie 34.5kV	Suspended
AB2-100	Clubhouse-Lakeview 230kV	Partially in Service - Under Construction
AB2-174	Emporia-Trego 115kV	In Service
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Engineering and Procurement
AC1-036	Twittys Creek 34.5kV	Partially in Service - Under Construction
AC1-042	Altavista-Mt. Airy 69kV	Engineering and Procurement
AC1-054	Kerr Dam-Eatons Ferry 115 kV	Engineering and Procurement
AC1-075	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-080	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-083	Smith Mountain-Bearskin 138kV	Active
AC1-086	Thelma 230kV	Active
AC1-098	Dawson-South Justice 115kV	Engineering and Procurement
AC1-099	Dawson-South Justice 115kV	Engineering and Procurement
AC1-105	Halifax-Mt. Laurel 115kV	Engineering and Procurement
AC1-116	Mount Eagle 34.5kV	Engineering and Procurement
AC1-131	PJM-CPLP	Confirmed
AC1-145	Gretna DP 69 kV	Engineering and Procurement
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-208	Cox-Whitakers 115kV	Engineering and Procurement
AC1-221	Halifax-Person 230kV	Engineering and Procurement
AC1-222	Crystal Hill-Halifax 115kV	Engineering and Procurement
AC2-071	Buckingham 35kV	Withdrawn
AC2-084	Dawson-South Justice 115kV	Active
AC2-100	Halifax-Person 230kV	Engineering and Procurement

Queue Number	Project Name	Status
AC2-165	Bremo-Powhatan 230kV	Engineering and Procurement
AD1-017	Smith Mountain-Bearskin 138 kV	Active
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-055	Crystal Hill-Halifax 115 kV	Engineering and Procurement
AD1-057	Hornertown-Hathaway 230 kV	Active
AD1-058	Halifax-Person 230 kV	Engineering and Procurement
AD1-087	Clover-Sedge Hill 230 kV	Active
AD1-088	Briery-Clover 230 kV	Active
AD1-131	Sedge Hill-Person 230 kV	Engineering and Procurement
AD1-152	Clover-Sedge Hill 230 kV	Active
AD1-157	South Creek 34.5 kV	Engineering and Procurement
AD2-022	East Danville-Roxborough 230 kV	Active
AD2-023	E. Danville-Roxborough 230 kV	Active
AD2-033	Chase City-Lunenburg 115 kV	Active
AD2-046	Boydton DP-Kerr Dam 115 kV	Active
AD2-051	Earleys – Northampton 230kV	Active
AD2-063	Central-Chase City 115kV	Active
AD2-202	Clover-Sedge Hill 230kV	Active
AE1-056	Red House-South Creek 115 kV	Active
AE1-064	Rockcastle 138 kV	Active
AE1-075	Powhatan 34.5 kV	Engineering and Procurement
AE1-108	Bremo-Scottsville 138 kV	Active
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE1-230	Shockoe 69 kV	Active
AE1-250	Smith Mountain-E. Danville 138 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-092	Kidds Store-Sherwood 115 kV	Active
AE2-151	Earleys 34.5kV	Withdrawn
AE2-182	Briery-Clover 230 kV	Active
AE2-185	Gladys DP-Stonemill Switching Station 69 kV	Active
AE2-187	Shockoe DP-Chatham 69 kV	Active
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active
AE2-283	Gladys-Stone Mill 69 kV	Active
AE2-291	Grit DP-Perth 115 kV	Active
AE2-292	Grit DP-Perth 115 kV	Active
AE2-346	Ahoskie 34.5 kV	Active
AF1-058	Welco 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-173	Gretna DP-Shockoe DP 69 kV	Active
AF1-246	Clover-Rawlings 500 kV	Active
AF1-292	Fields 34.5kV	Active
AF1-293	Kidds Store-Fort Union 115 kV	Active
AF1-294	Jetersville-Ponton 115 kV	Active
AF1-323	Scottsville-Colleen 138 kV	Active
AF2-042	Clover-Rawlings 500 kV	Active
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-107	Clifford 138 kV	Active
AF2-115	Jetersville-Ponton 115 kV	Active

Queue Number	Project Name	Status
AF2-144	Powhatan 34.5 kV	Active
AF2-171	Madisonville 115 kV	Active
AF2-222	Madisonville DP-Twitty's Creek 115 kV	Active
AF2-242	Wharton 115 kV	Active
AF2-244	Powhatan 34.5 kV	Withdrawn
AF2-266	Clover 230 kV	Active
AF2-297	Sedge Hill 115 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-302	Scottsville-Colleen 138 kV	Active
AF2-397	Fork Union-Mt. Eagle 230 kV	Active
AF2-400	Franklin 13.2 kV	Engineering and Procurement
AF2-403	Shockoe DP-Chatham 69 kV	Active
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-022	Scottsville-Colleen 138 kV	Active
AG1-030	Victoria DP-Martin DP 115 kV	Active
AG1-036	Tunis 34.5 kV	Active
AG1-037	Ahoskie 34.5 kV	Active
AG1-048	Jetersville-Ponton 115 kV	Active
AG1-082	Ahoskie 34.5 kV	Active
AG1-083	Ahoskie 34.5 kV	Active
AG1-084	Earlys 34.5 kV	Active
AG1-085	Earlys 34.5	Active
AG1-093	Halifax-Chase City 115 kV	Active
AG1-098	Briery-Clover 230 kV	Active
AG1-105	Clover-Sedge Hill 230 kV	Active
AG1-106	Thelma 230 kV	Active
AG1-123	Amherst-Riverville 138 kV	Active
AG1-124	Gladstone 138 kV	Active
AG1-166	Lone Pine 115 kV	Active
AG1-167	Lone Pine 115 kV	Active
AG1-168	Lone Pine 115 kV	Active
AG1-169	Lone Pine 115 kV	Active
AG1-170	Lone Pine 115 kV	Active
AG1-176	Briery-Clover 230 kV	Active
AG1-179	Brunswick 69 kV	Active
AG1-180	Brunswick 69 kV	Active
AG1-181	Pamplin-Chase City 115 kV	Active
AG1-185	Pamplin-Chase City 115 kV	Active
AG1-209	Gretna 12.5 kV	Active
AG1-215	Fort Pickett 13.2 kV	Active
AG1-272	Twitty's Creek 115 kV	Active
AG1-273	Twitty's Creek 115 kV	Active
AG1-274	Twitty's Creek 115 kV	Active
AG1-275	Gladys DP-Stone Mill 69 kV	Active
AG1-276	Gladys DP-Stone Mill 69 kV	Active
AG1-284	Bremo-Cunningham DP 115 kV	Active
AG1-285	Chase City-Central 115 kV	Active
AG1-286	Johnson Mountain 138 kV	Active
AG1-287	South Boston 12.5 kV	Active
AG1-310	Crystal Hill-Perth 115 kV	Active

Queue Number	Project Name	Status
AG1-312	Earleys-Cashie 230 kV	Active
AG1-313	Jackson DP-Oconeechee 115 kV	Active
AG1-316	Rustburg 138 kV	Active
AG1-342	Dryburg 115 kV	Active
AG1-343	Boykins-Murphy 115 kV	Active
AG1-345	Crewe 12.5 kV	Active
AG1-347	Briery DP-Clover 230 kV	Active
AG1-357	Clover-Rawlings 500 kV	Active
AG1-384	Twitty's Creek 115 kV	Active
AG1-393	Fort Pickett DP 34.5 kV	Active
AG1-394	Boykins 34.5 kV	Active
AG1-413	South Hill-Bordnax 115 kV	Active
AG1-426	Bremo-Scottsville 138 kV	Active
AG1-427	Chase City-Drakes Branch 115 kV	Active
AG1-428	Danieltown 69 kV	Active
AG1-432	Curdsville DP-Willis Mt. 115 kV	Active
AG1-437	Cashie-Earleys 230 kV	Active
AG1-438	Cashie-Earleys 230 kV	Active
AG1-439	Chinquapin 230 kV	Active
AG1-440	Palmer Springs 115 kV	Active
AG1-441	Palmer Springs 115 kV	Active
AG1-442	Cashie-Earleys 230 kV	Active
AG1-443	Cashie-Earleys 230 kV	Active
AG1-444	Chinquapin 230 kV	Active
AG1-445	Palmer Spring 115 kV	Active
AG1-446	Palmer Springs 115 kV	Active
AG1-451	Curdsville DP-Willis Mt. 115 kV	Active
AG1-494	Boxwood-Riverville 138 kV	Active
AG1-505	Rawlings-Clover 500 kV	Active
AG1-506	Rawlings-Clover 500 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-539	Grit DP-Perth 115 kV	Active
AG1-546	Ebony-Elams Road 115 kV	Active
AG1-547	Mount Airy-Chatham 69 kV	Active
AG1-550	Mount Eagle-Fork Union 230 kV	Active
AG1-551	Parmele 12.5 kV	Active
AG1-552	Carolina 13.2 kV	Active
AG1-557	Curdsville DP 115 kV	Withdrawn

11.8 Contingency Descriptions - Primary POI

Contingency Name	Contingency Definition
DVP_P1-2: LN 90	CONTINGENCY 'DVP_P1-2: LN 90' OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END
DVP_P1-2: LN 130	CONTINGENCY 'DVP_P1-2: LN 130' OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314595 TO BUS 314600 CKT 1 /* 3PL HILL 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314600 TO BUS 314615 CKT 1 /* 3PLHITP 115.00 - 3SKIPPERS 115.00 OPEN BUS 314595 /* ISLAND: 3PL HILL 115.00 OPEN BUS 314600 /* ISLAND: 3PLHITP 115.00 END
AEP_P2-1_242575 05CAMDLM 138 242737 05OPOSSUMCK 138 1	CONTINGENCY 'AEP_P2-1_242575 05CAMDLM 138 242737 05OPOSSUMCK 138 1' OPEN BRANCH FROM BUS 242575 TO BUS 242737 CKT 1 END
AEP_P2-2_#6213_05WLAKE 138_1	CONTINGENCY 'AEP_P2-2_#6213_05WLAKE 138_1' OPEN BRANCH FROM BUS 242748 TO BUS 243951 CKT 1 / 242748 05PENHOK 138 243951 05REDWOOD 138 1 OPEN BRANCH FROM BUS 242748 TO BUS 242802 CKT 1 / 242748 05PENHOK 138 242802 05SMITHMTN 138 1 OPEN BRANCH FROM BUS 242843 TO BUS 243951 CKT 1 / 242843 05WLAKE 138 243951 05REDWOOD 138 1 END
AEP_P2-1_242687 05JOHNMT 138 242734 05NEWLDN 138 1	CONTINGENCY 'AEP_P2-1_242687 05JOHNMT 138 242734 05NEWLDN 138 1' OPEN BRANCH FROM BUS 242687 TO BUS 242734 CKT 1 END
314333 6POWHATN 230 933500 AC2-165 TAP 230 1	CONTINGENCY '314333 6POWHATN 230 933500 AC2-165 TAP 230 1' OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 40-A	CONTINGENCY 'DVP_P1-2: LN 40-A' OPEN BRANCH FROM BUS 314675 TO BUS 943910 CKT 1 /* 3BRODNAX 115.00 - AF1-059 TAP 115.00 END
DVP_P1-2: LN 2201	CONTINGENCY 'DVP_P1-2: LN 2201' OPEN BRANCH FROM BUS 313725 TO BUS 314563 CKT 1 /* 6DRY BREAD 230.00 - 6CLUBHSE 230.00 END
AEP_P1-2_#375_5201	CONTINGENCY 'AEP_P1-2_#375_5201' OPEN BRANCH FROM BUS 242687 TO BUS 242734 CKT 1 / 242687 05JOHNMT 138 242734 05NEWLDN 138 1 OPEN BRANCH FROM BUS 242687 TO BUS 242741 CKT 1 / 242687 05JOHNMT 138 242741 05OTTER 138 1 OPEN BRANCH FROM BUS 242741 TO BUS 314667 CKT 1 / 242741 05OTTER 138 314667 4ALTVSTA 138 1 END
DVP_P1-3: 6SEEDGE HILL-TX#1	CONTINGENCY 'DVP_P1-3: 6SEEDGE HILL-TX#1' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 1 /* 3SEEDGE HILL 115.00 - 6SEEDGE HILL 230.00 END
AEP_P7-1_#10829	CONTINGENCY 'AEP_P7-1_#10829' OPEN BRANCH FROM BUS 242555 TO BUS 242773 CKT 1 / 242555 05BLAINE 138 242773 05ROANO1 138 1 OPEN BRANCH FROM BUS 242736 TO BUS 243799 CKT 1 / 242736 05OAKLEV 138 243799 05FIELDAL2 138 1 OPEN BRANCH FROM BUS 242656 TO BUS 242736 CKT 1 / 242656 05GRASSH 138 242736 05OAKLEV 138 1 OPEN BRANCH FROM BUS 242656 TO BUS 242774 CKT 1 / 242656 05GRASSH 138 242774 05ROANO2 138 1 OPEN BRANCH FROM BUS 242656 TO BUS 242826 CKT 1 / 242656 05GRASSH 138 242826 05TANKHL 138 1 END
AEP_P2-2_#13260_05SKIMMR 69.0_1	CONTINGENCY 'AEP_P2-2_#13260_05SKIMMR 69.0_1' OPEN BRANCH FROM BUS 242886 TO BUS 314861 CKT 1 / 242886 05SKIMMR 69.0 314861 3SKIMMR 115 1 OPEN BRANCH FROM BUS 242886 TO BUS 314861 CKT 2 / 242886 05SKIMMR 69.0 314861 3SKIMMR 115 2 OPEN BRANCH FROM BUS 242860 TO BUS 242886 CKT 1 / 242860 05ABERT 69.0 242886 05SKIMMR 69.0 1 OPEN BRANCH FROM BUS 242884 TO BUS 242886 CKT 1 / 242884 05S.LYNCHB 69.0 242886 05SKIMMR 69.0 1 REMOVE SWSHUNT FROM BUS 242886 / 242886 05SKIMMR 69.0 END

Contingency Name	Contingency Definition
DVP_P4-2: 102802	CONTINGENCY 'DVP_P4-2: 102802' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END
DVP_P4-6: CAROLIN T122	CONTINGENCY 'DVP_P4-6: CAROLIN T122' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 315126 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP2 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 315128 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP4 14.400 OPEN BUS 315126 /* ISLAND: 1ROARAP2 14.400 OPEN BUS 315128 /* ISLAND: 1ROARAP4 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314578 CKT 1 /* 3CAROLNA 115.00 - 3HORNRTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 OPEN BUS 314559 /* 3CAROLNA 115.00 KV OPEN BUS 314835 /* ISLAND: 3CAROL_1 115.00 END
AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	CONTINGENCY 'AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1' OPEN BRANCH FROM BUS 242520 TO BUS 242514 CKT 1 END
AEP_P1-3_#8675_05EDANV1 230_5-B	CONTINGENCY 'AEP_P1-3_#8675_05EDANV1 230_5-B' OPEN BRANCH FROM BUS 936160 TO BUS 304024 CKT 1 / 936160 AD2-022 TAP 230 304024 6ROXSEP230 T 230 1 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 298	CONTINGENCY 'DVP_P1-2: LN 298' OPEN BRANCH FROM BUS 314677 TO BUS 314692 CKT 1 /* 6BUCKING 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 2 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 314677 /* ISLAND: 6BUCKING 230.00 OPEN BUS 924032 /* ISLAND: AB2-045 E 230.00 OPEN BUS 932511 /* ISLAND: AC2-071 C 230.00 OPEN BUS 932512 /* ISLAND: AC2-071 E 230.00 END
AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1	CONTINGENCY 'AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1' OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 END
DVP_P1-2: LN 2027	CONTINGENCY 'DVP_P1-2: LN 2027' OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 933500 CKT 1 /* 6CARTERV 230.00 - AC2-165 TAP 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314322 CKT 1 /* 6JUDES F 230.00 - 6MDLTHAN 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314333 CKT 1 /* 6JUDES F 230.00 - 6POWHATN 230.00 OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 /* 6POWHATN 230.00 - AC2-165 TAP 230.00 OPEN BUS 313868 /* ISLAND: 6CARTERV 230.00 OPEN BUS 314310 /* ISLAND: 6JUDES F 230.00 OPEN BUS 314333 /* ISLAND: 6POWHATN 230.00 OPEN BUS 923862 /* ISLAND: AB2-026 E 230.00 OPEN BUS 938561 /* ISLAND: AE1-075 C 230.00 OPEN BUS 938562 /* ISLAND: AE1-075 E 230.00 OPEN BUS 933500 /* ISLAND: AC2-165 TAP 230.00 OPEN BUS 933501 /* ISLAND: AC2-165 C 230.00 OPEN BUS 933502 /* ISLAND: AC2-165 E 230.00 END
Base Case	
AEP_P1-3_#1377_05J.FERR 765_1	CONTINGENCY 'AEP_P1-3_#1377_05J.FERR 765_1' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 556-D	CONTINGENCY 'DVP_P1-2: LN 556-D' OPEN BRANCH FROM BUS 966360 TO BUS 314936 CKT 1 /* AG1-055 TAP 500.00 - 8RAWLINGS 500.00 END
DVP_P1-2: LN 556-B	CONTINGENCY 'DVP_P1-2: LN 556-B' OPEN BRANCH FROM BUS 945810 TO BUS 964930 CKT 1 /* AF1-246 TAP 500.00 - AG1-357 TAP 500.00 END
DVP_P1-2: LN 556-C	CONTINGENCY 'DVP_P1-2: LN 556-C' OPEN BRANCH FROM BUS 964930 TO BUS 966360 CKT 1 /* AG1-357 TAP 500.00 - AG1-055 TAP 500.00 END
DVP_P7-1: LN 158-235	CONTINGENCY 'DVP_P7-1: LN 158-235' /* . OPEN BRANCH FROM BUS 313755 TO BUS 314701 CKT 1 /* 3FLAT CREEK 115.00 - 3LONEPN 115.00 OPEN BRANCH FROM BUS 313755 TO BUS 314707 CKT 1 /* 3FLAT CREEK 115.00 - 3MORAN 115.00 OPEN BRANCH FROM BUS 314519 TO BUS 314701 CKT 1 /* 3LONEPINE_1 115.00 - 3LONEPN 115.00 OPEN BRANCH FROM BUS 314691 TO BUS 314707 CKT 1 /* 3FARMVIL 115.00 - 3MORAN 115.00 OPEN BUS 313755 /* ISLAND: 3FLAT CREEK 115.00 OPEN BUS 314519 /* ISLAND: 3LONEPINE_1 115.00 OPEN BUS 314707 /* ISLAND: 3MORAN 115.00 OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 /* 6PRINCE EDW 230.00 - 6BRIERY 230.00 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 /* 6PRINCE EDW 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 /* 6BRIERY 230.00 - AG1- 347 TAP 230.00 OPEN BRANCH FROM BUS 314686 TO BUS 962490 CKT 1 /* 6CLOVER 230.00 - AG1- 098 TAP 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 313802 /* ISLAND: 6PRINCE EDW 230.00 OPEN BUS 314268 /* ISLAND: 6BRIERY 230.00 OPEN BUS 934620 /* ISLAND: AD1-088 TAP 230.00 OPEN BUS 934621 /* ISLAND: AD1-088 MAIN230.00 OPEN BUS 934622 /* ISLAND: AD1-088 COL134.500 OPEN BUS 934623 /* ISLAND: AD1-088 TER 13.800 OPEN BUS 934624 /* ISLAND: AD1-088 COL234.500 OPEN BUS 934625 /* ISLAND: AD1-088 C 0.6600 OPEN BUS 934626 /* ISLAND: AD1-088 E 0.6600 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 235-A	CONTINGENCY 'DVP_P1-2: LN 235-A' OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 /* 6PRINCE EDW 230.00 - 6BRIERY 230.00 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 /* 6PRINCE EDW 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 /* 6BRIERY 230.00 - AG1-347 TAP 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 313802 /* ISLAND: 6PRINCE EDW 230.00 OPEN BUS 314268 /* ISLAND: 6BRIERY 230.00 END
DVP_P7-1: LN 22-90	CONTINGENCY 'DVP_P7-1: LN 22-90' /* OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 314571 TO BUS 316125 CKT 1 /* 3EATON F 115.00 - AC1-054 TAP 115.00 OPEN BRANCH FROM BUS 314702 TO BUS 316125 CKT 1 /* 3KERR 115.00 - AC1-054 TAP 115.00 OPEN BUS 314571 /* ISLAND: 3EATON F 115.00 OPEN BUS 316125 /* ISLAND: AC1-054 TAP 115.00 OPEN BUS 316126 /* ISLAND: AC1-054 MAIN115.00 OPEN BUS 316127 /* ISLAND: AC1-054 COL222.860 OPEN BUS 316128 /* ISLAND: AC1-054 COL122.860 OPEN BUS 316129 /* ISLAND: AC1-054 C 0.3850 OPEN BUS 925785 /* ISLAND: AC1-054 E 0.3850 OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END
DVP_P1-3: 6SEEDGE HILL-TX#2	CONTINGENCY 'DVP_P1-3: 6SEEDGE HILL-TX#2' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 2 /* 3SEEDGE HILL 115.00 - 6SEEDGE HILL 230.00 END
DVP_P1-3: 4ALTVSTA-TX#4	CONTINGENCY 'DVP_P1-3: 4ALTVSTA-TX#4' OPEN BRANCH FROM BUS 314666 TO BUS 314667 CKT 2 /* 3ALTVSTA 115.00 - 4ALTVSTA 138.00 END

Contingency Name	Contingency Definition
DVP_P4-2: 13002	CONTINGENCY 'DVP_P4-2: 13002' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314595 TO BUS 314600 CKT 1 /* 3PL HILL 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314600 TO BUS 314615 CKT 1 /* 3PLHITP 115.00 - 3SKIPPER 115.00 OPEN BUS 314595 /* ISLAND: 3PL HILL 115.00 OPEN BUS 314600 /* ISLAND: 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END
AEP_P7-1_#10830	CONTINGENCY 'AEP_P7-1_#10830' OPEN BRANCH FROM BUS 242555 TO BUS 242843 CKT 1 / 242555 05BLAINE 138 242843 05WLAKE 138 1 OPEN BRANCH FROM BUS 242748 TO BUS 243951 CKT 1 / 242748 05PENHOK 138 243951 05REDWOOD 138 1 OPEN BRANCH FROM BUS 242748 TO BUS 242802 CKT 1 / 242748 05PENHOK 138 242802 05SMITHMTN 138 1 OPEN BRANCH FROM BUS 242843 TO BUS 243951 CKT 1 / 242843 05WLAKE 138 243951 05REDWOOD 138 1 END

12 Short Circuit Analysis - Primary POI

The following Breakers are overdutied:

None

12.1 System Reinforcements - Short Circuit

None

13 Summer Peak - Load Flow Analysis - Secondary POI

The Queue Project AG1-093 was evaluated as a 120.0 MW (Capacity 92.0 MW) injection tapping the Sedge Hill to Clover 230 kV line in the Dominion area. Project AG1-093 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-093 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

13.1 Generation Deliverability

(Single or N-1 contingencies for the Capacity portion only of the interconnection)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
175800899	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	285.76000976	99.05	101.85	DC	8.01
175800900	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	285.76000976	99.08	101.88	DC	8.01
175800889	314712	3OTTE RR	115.0	DVP	314666	3ALTVST A	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	269.779998779	97.57	100.54	DC	8.01
175800890	314712	3OTTE RR	115.0	DVP	314666	3ALTVST A	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	269.779998779	97.61	100.58	DC	8.01

13.2 Multiple Facility Contingency

(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies for the full energy output)

None

13.3 Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
168094487	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTI OC H 500 1	single	402.0	116.59	118.42	DC	7.43
168094489	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	single	275.0	105.91	108.16	DC	6.24
168339035	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	126.48	127.71	DC	8.13
173977109	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	121.8	126.29	DC	31.39
174996550	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	571.520019531	120.11	124.31	DC	24.01
163117125	313867	6BREMODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P7-1: LN 181-2027	tower	809.0	121.08	121.72	DC	11.51
168339057	313867	6BREMODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	128.25	129.58	DC	8.82

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
1739771 19	31386 7	6BREMODIST	230.0	DVP	31370 7	6FORK UNION	230.0	DVP	1	DVP_P4-2: 202712	breaker	809.0	121.04	121.68	DC	11.51
1739771 08	31426 8	6BRIERY	230.0	DVP	31380 2	6PRINCE EDW	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	121.82	126.32	DC	31.39
1749965 48	31426 8	6BRIERY	230.0	DVP	31380 2	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	571.5200195 31	120.14	124.34	DC	24.01
1737934 98	31428 2	6CARSON	230.0	DVP	31428 5	6CHRL249	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	184.87	185.45	DC	8.84
1737934 99	31428 5	6CHRL249	230.0	DVP	31431 6	6LOCKS	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	181.74	182.32	DC	8.84
1743777 51	31429 9	6HARROW G	230.0	DVP	31426 3	6TYLER1	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	164.23	164.77	DC	6.54
1739771 06	31431 6	6LOCKS	230.0	DVP	31430 1	6HARR205	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	158.59	159.17	DC	6.95
1743777 49	31433 1	6POE	230.0	DVP	31429 9	6HARROW G	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	164.27	164.81	DC	6.54
1739770 70	31467 7	6BUCKING	230.0	DVP	31474 7	6BREMO	230.0	DVP	1	DVP_P4-2: 556T591	breaker	699.0	177.06	181.41	DC	30.47
1749964 50	31467 7	6BUCKING	230.0	DVP	31474 7	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	571.5200195 31	163.16	167.24	DC	23.3
1739771 68	31468 6	6CLOVER	230.0	DVP	93462 0	AD1-088 TAP	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	115.73	120.23	DC	31.39
1749965 60	31468 6	6CLOVER	230.0	DVP	93462 0	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	single	571.5200195 31	114.5	118.7	DC	24.01
1739770 69	31469 2	6FARMVIL	230.0	DVP	96686 0	AG1-557 TAP	230.0	DVP	1	DVP_P4-2: 556T591	breaker	684.0	180.01	184.46	DC	30.49
1749964 35	31469 2	6FARMVIL	230.0	DVP	96686 0	AG1-557 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	559.2999877 93	163.44	167.61	DC	23.31
1743778 24	31469 4	3GRIT	115.0	DVP	31471 2	3OTTER R	115.0	DVP	1	DVP_P4-2: 511T556	breaker	350.0	108.76	110.1	DC	10.46
1743778 25	31469 4	3GRIT	115.0	DVP	31471 2	3OTTER R	115.0	DVP	1	DVP_P4-2: 556T591	breaker	350.0	108.76	110.1	DC	10.46
1751981 19	31469 7	6SEDGE HILL	230.0	DVP	92725 0	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	single	674.9199829 1	143.39	150.96	DC	51.11
1758008 23	31469 7	6SEDGE HILL	230.0	DVP	92725 0	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	674.9199829 1	143.51	151.08	DC	51.11
1743778 32	31471 2	3OTTER R	115.0	DVP	31466 6	3ALTVSTA	115.0	DVP	1	DVP_P4-2: 556T591	breaker	342.0	105.54	106.92	DC	10.46
1743778 33	31471 2	3OTTER R	115.0	DVP	31466 6	3ALTVSTA	115.0	DVP	1	DVP_P4-2: 511T556	breaker	342.0	105.54	106.92	DC	10.46
1631171 10	31474 7	6BREMO	230.0	DVP	31386 7	6BREMODIST	230.0	DVP	1	DVP_P7-1: LN 181-2027	tower	809.0	122.85	123.49	DC	11.51

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
1693313 27	31474 7	6BREMO	230.0	DVP	31386 7	6BREMODIST	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.7600097 66	130.41	131.74	DC	8.82
1739771 15	31474 7	6BREMO	230.0	DVP	31386 7	6BREMODIST	230.0	DVP	1	DVP_P4-2: 202712	breaker	809.0	122.8	123.44	DC	11.51
1693313 17	31476 5	6MTEAGLE	230.0	DVP	31474 9	6CHARVL	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.7600097 66	130.36	131.59	DC	8.13
1737935 00	31490 2	8CARSON	500.0	DVP	31428 2	6CARSON	230.0	DVP	1	DVP_P4-2: 562T563	breaker	1039.699951 17	173.6	175.06	DC	15.11
1733033 10	92725 0	AC1-221 TAP	230.0	DVP	30407 0	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-C	single	718.0	146.76	153.88	DC	51.11
1733033 11	92725 0	AC1-221 TAP	230.0	DVP	30407 0	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-B	single	718.0	146.85	153.97	DC	51.11
1739771 55	93462 0	AD1-088 TAP	230.0	DVP	96484 0	AG1-347 TAP	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	122.8	127.29	DC	31.39
1749965 44	93462 0	AD1-088 TAP	230.0	DVP	96484 0	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	single	571.5200195 31	121.14	125.34	DC	24.01
1743778 16	94275 0	AE2-291 TAP	115.0	DVP	31469 4	3GRIT	115.0	DVP	1	DVP_P4-2: 556T591	breaker	350.0	109.64	110.99	DC	10.46
1743778 17	94275 0	AE2-291 TAP	115.0	DVP	31469 4	3GRIT	115.0	DVP	1	DVP_P4-2: 511T556	breaker	350.0	109.64	110.99	DC	10.46
1758008 94	94275 0	AE2-291 TAP	115.0	DVP	31469 4	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	285.7600097 66	100.1	102.9	DC	8.01
1758008 95	94275 0	AE2-291 TAP	115.0	DVP	31469 4	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	285.7600097 66	100.13	102.93	DC	8.01
1749964 95	96106 0	AF2-397 TAP	230.0	DVP	31476 5	6MTEAGLE	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.7600097 66	133.89	135.11	DC	8.13
1739771 01	96244 0	AG1-093 TAP	230.0	DVP	31469 7	6SEDGE HILL	230.0	DVP	1	DVP_P4-2: 556T591	breaker	997.0	122.11	130.94	DC	88.05
1743777 61	96244 0	AG1-093 TAP	230.0	DVP	31469 7	6SEDGE HILL	230.0	DVP	1	DVP_P4-2: 511T556	breaker	997.0	122.11	130.94	DC	88.05
1749965 40	96244 0	AG1-093 TAP	230.0	DVP	31469 7	6SEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	814.9799804 69	123.2	131.49	DC	67.56
1739771 44	96484 0	AG1-347 TAP	230.0	DVP	31426 8	6BRIERY	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	122.8	127.29	DC	31.39
1749965 38	96484 0	AG1-347 TAP	230.0	DVP	31426 8	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-B-C	single	571.5200195 31	121.14	125.34	DC	24.01
1739770 68	96686 0	AG1-557 TAP	230.0	DVP	31467 7	6BUCKING	230.0	DVP	1	DVP_P4-2: 511T556	breaker	684.0	179.99	184.44	DC	30.49
1749964 43	96686 0	AG1-557 TAP	230.0	DVP	31467 7	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	559.2999877 93	163.44	167.61	DC	23.31

13.4 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
168094486	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	operati on	275.0	126.79	128.13	DC	8.14
175198209	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_24252005J.FERR5003067198ANTIOC H 500 1	operati on	402.0	143.82	144.91	DC	9.7
174996549	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	571.520019531	146.35	151.83	DC	31.32
168339055	313867	6BREMODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	3143336POWHA TN 230933500AC2-165TAP 230 1	operati on	661.760009766	148.02	148.8	DC	11.51
168339059	313867	6BREMODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	Base Case	operati on	661.760009766	100.59	101.28	DC	10.1
174996547	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	571.520019531	146.39	151.87	DC	31.32
169111965	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	Base Case	operati on	571.520019531	126.21	127.32	DC	14.06
174996449	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	571.520019531	214.67	219.98	DC	30.39
174996559	314686	6CLOVER	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	571.520019531	138.76	144.24	DC	31.32
174996434	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	559.299987793	220.88	226.31	DC	30.41
174996436	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	Base Case	operati on	559.299987793	125.16	126.29	DC	14.08
175800897	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	285.760009766	132.37	134.02	DC	10.45
175198118	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	674.91998291	188.18	198.01	DC	66.66
175800887	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	269.779998779	132.87	134.62	DC	10.45

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
169331325	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	150.18	150.96	DC	11.51
169331329	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	Base Case	operati on	661.760009766	102.75	103.44	DC	10.1
168640366	314902	8CARSON	500.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 563	operati on	903.903991699	169.36	169.9	DC	10.89
163512593	314935	8HERITAGE	500.0	DVP	314940	8ROGERS RD	500.0	DVP	1	DVP_P1-2: LN 511-A	operati on	3256.15991211	99.03	100.29	DC	43.93
163512501	314936	8RAWLING S	500.0	DVP	942930	AE2-313 TAP	500.0	DVP	1	DVP_P1-2: LN 585-A	operati on	4070.19995117	124.36	125.53	DC	47.49
163512569	314940	8ROGERS RD	500.0	DVP	938490	AE1-068_POI	500.0	DVP	1	DVP_P1-2: LN 511-A	operati on	4070.19995117	112.09	113.14	DC	42.9
163512337	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	Base Case	operati on	542.0	99.07	106.02	DC	37.61
173303305	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-C	operati on	718.0	194.25	203.49	DC	66.66
174996543	934620	AD1-088 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	571.520019531	147.38	152.86	DC	31.32
163512533	938490	AE1-068_POI	500.0	DVP	941030	AE2-094 TAP	500.0	DVP	1	DVP_P1-2: LN 511-A	operati on	4070.19995117	122.73	123.65	DC	42.9
163512440	940470	AE2-031 TAP	500.0	DVP	314902	8CARSON	500.0	DVP	1	DVP_P1-2: LN 585-A	operati on	4070.19995117	132.16	133.32	DC	47.49
163512493	941030	AE2-094 TAP	500.0	DVP	314902	8CARSON	500.0	DVP	1	DVP_P1-2: LN 511-A	operati on	4070.19995117	129.41	130.33	DC	42.9
175800892	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	285.760009766	133.42	135.07	DC	10.45
163512474	942930	AE2-313 TAP	500.0	DVP	940470	AE2-031 TAP	500.0	DVP	1	DVP_P1-2: LN 585-A	operati on	4070.19995117	129.3	130.47	DC	47.49
174996539	962440	AG1-093 TAP	230.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	814.979980469	152.26	163.07	DC	88.12
174996537	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operati on	571.520019531	147.38	152.86	DC	31.32
174996442	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	559.299987793	217.0	222.43	DC	30.41
174996444	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	Base Case	operati on	559.299987793	125.15	126.29	DC	14.08

13.5 Flow Gate Details - Secondary POI

The following indices contain additional information about each facility presented in the body of the report. For each index, a description of the flowgate and its contingency was included for convenience. The intent of the indices is to provide more details on which projects/generators have contributions to the flowgate in question. All New Service Queue Requests, through the end of the Queue under study, that are contributors to a flowgate will be listed in the indices. Please note that there may be contributors that are subsequently queued after the queue under study that are not listed in the indices. Although this information is not used "as is" for cost allocation purposes, it can be used to gage the impact of other projects/generators. It should be noted the project/generator MW contributions presented in the body of the report are Full MW Impact contributions which are also noted in the indices column named "Full MW Impact", whereas the loading percentages reported in the body of the report, take into consideration the PJM Generator Deliverability Test rules such as commercial probability of each project as well as the ramping impact of "Adder" contributions. The MW Impact found and used in the analysis is shown in the indices column named "Gendeliv MW Impact".

13.5.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174377825	314694	3GRIT	DVP	314712	3OTTER R	DVP	1	DVP_P4-2: 556T591	breaker	350.0	108.76	110.1	DC	10.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.2132	Adder	0.25
314713	3PAMPLIN	0.4970	Adder	0.58
315266	1PLYWOOD A	1.0286	50/50	1.0286
316118	AC1-105 C	4.9180	50/50	4.9180
316123	AC1-075 C	2.6602	50/50	2.6602
924022	AB2-043 E O1	1.1292	Adder	1.33
924162	AB2-060 E OP	1.6982	Adder	2.0
924301	AB2-077 C O1 (Suspended)	0.8161	Adder	0.96
924302	AB2-077 E O1 (Suspended)	0.5441	Adder	0.64
924311	AB2-078 C O1 (Suspended)	0.8161	Adder	0.96
924312	AB2-078 E O1 (Suspended)	0.5441	Adder	0.64
924321	AB2-079 C O1 (Suspended)	0.8161	Adder	0.96
924322	AB2-079 E O1 (Suspended)	0.5441	Adder	0.64
925612	AC1-036 E	0.3066	Adder	0.36
925661	AC1-042 C	-2.7373	Adder	-3.22
925997	AC1-075 E	9.5532	50/50	9.5532
926023	AC1-080 C	0.8890	50/50	0.8890
926024	AC1-080 E	3.1697	50/50	3.1697
926274	AC1-105 E	2.4162	50/50	2.4162
927261	AC1-222 C	5.0538	50/50	5.0538
927262	AC1-222 E	4.8110	50/50	4.8110
934311	AD1-055 C	3.5090	50/50	3.5090
934312	AD1-055 E	0.9048	50/50	0.9048
934615	AD1-087 C	3.0206	Adder	3.55
934616	AD1-087 E	1.2926	Adder	1.52
934625	AD1-088 C	4.1166	Adder	4.84
934626	AD1-088 E	1.0782	Adder	1.27
935171	AD1-152 C O1	3.3179	Adder	3.9
935172	AD1-152 E O1	2.2119	Adder	2.6
935222	AD1-157 E	0.3064	Adder	0.36
936265	AD2-033 C	4.7544	Adder	5.59
936266	AD2-033 E	3.1696	Adder	3.73
936361	AD2-046 C O1	3.0375	Adder	3.57
936362	AD2-046 E O1	1.3968	Adder	1.64
936485	AD2-063 C	5.7605	Adder	6.78
936486	AD2-063 E	3.8403	Adder	4.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
937481	AD2-202 C O1	0.8848	Adder	1.04
937482	AD2-202 E O1	0.4977	Adder	0.59
938371	AE1-056 C	1.9814	Adder	2.33
938372	AE1-056 E	1.0826	Adder	1.27
939181	AE1-148 C	3.0184	Adder	3.55
939182	AE1-148 E	2.0123	Adder	2.37
939943	AE1-230 BAT	1.6142	50/50	1.6142
940661	AE2-053 O1	1.1179	Adder	1.32
941791	AE2-182 C	0.6688	Adder	0.79
941792	AE2-182 E	0.3113	Adder	0.37
942451	AE2-258	0.9421	Adder	1.11
942751	AE2-291 C	32.7726	50/50	32.7726
942752	AE2-291 E	21.8484	50/50	21.8484
942761	AE2-292 C O1	40.8051	50/50	40.8051
942762	AE2-292 E O1	27.2034	50/50	27.2034
943901	AF1-058 C	1.9100	50/50	1.9100
943902	AF1-058 E	1.2734	50/50	1.2734
945811	AF1-246 C O1	2.8992	Adder	3.41
945812	AF1-246 E O1	4.0037	Adder	4.71
946301	AF1-294 C	1.3590	Adder	1.6
946302	AF1-294 E	0.9060	Adder	1.07
957481	AF2-042 C	20.7086	Adder	24.36
957482	AF2-042 E	13.8057	Adder	16.24
958211	AF2-115 C	0.7994	Adder	0.94
958212	AF2-115 E	0.5330	Adder	0.63
958801	AF2-171 C	4.8065	Adder	5.65
958802	AF2-171 E	3.2043	Adder	3.77
959311	AF2-222 C	5.8633	Adder	6.9
959312	AF2-222 E	3.9284	Adder	4.62
959751	AF2-266	3.4514	Adder	4.06
960061	AF2-297 C	7.6402	50/50	7.6402
960062	AF2-297 E	5.0934	50/50	5.0934
961122	AF2-403 BAT	4.0356	50/50	4.0356
961131	AF2-404 BAT	4.0356	50/50	4.0356
961791	AG1-021 C	0.3390	Adder	0.75
961792	AG1-021 E	0.2260	Adder	0.5
961891	AG1-030 C	2.6464	Adder	5.87
961892	AG1-030 E	1.7642	Adder	3.92
962041	AG1-048 C	2.1185	Adder	4.7
962042	AG1-048 E	1.4123	Adder	3.13
962441	AG1-093 C O2	3.6124	Adder	8.02
962442	AG1-093 E O2	1.0994	Adder	2.44
962491	AG1-098 C O2	2.6003	Adder	5.77
962492	AG1-098 E O2	1.7335	Adder	3.85
962561	AG1-105 C O2	7.0980	50/50	7.0980
962562	AG1-105 E O2	4.7320	50/50	4.7320
963171	AG1-166 C	0.3390	Adder	0.75
963172	AG1-166 E	0.2260	Adder	0.5
963181	AG1-167 C	0.3390	Adder	0.75
963182	AG1-167 E	0.2260	Adder	0.5
963191	AG1-168 C	0.3390	Adder	0.75
963192	AG1-168 E	0.2260	Adder	0.5

Bus #	Bus	Gendoliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	0.3390	Adder	0.75
963202	AG1-169 E	0.2260	Adder	0.5
963211	AG1-170 C	0.3390	Adder	0.75
963212	AG1-170 E	0.2260	Adder	0.5
963321	AG1-181 C O2	3.2243	Adder	7.16
963361	AG1-185 O2	1.5600	Adder	3.46
963603	AG1-209 BAT	1.4125	50/50	1.4125
963641	AG1-215 C	0.1582	Adder	0.35
963642	AG1-215 E	0.2373	Adder	0.53
964111	AG1-272 C	0.4865	Adder	1.08
964112	AG1-272 E	0.1445	Adder	0.32
964121	AG1-273 C	0.4865	Adder	1.08
964122	AG1-273 E	0.1445	Adder	0.32
964131	AG1-274 C	0.4865	Adder	1.08
964132	AG1-274 E	0.1445	Adder	0.32
964241	AG1-285 C O2	2.7439	Adder	6.09
964242	AG1-285 E O2	1.8293	Adder	4.06
964261	AG1-287 C	1.4325	50/50	1.4325
964262	AG1-287 E	0.9550	50/50	0.9550
964471	AG1-310 C	3.2931	50/50	3.2931
964472	AG1-310 E	1.6219	50/50	1.6219
964533	AG1-316 BAT	1.4338	Merchant Transmission	1.4338
964791	AG1-342 C	3.1689	50/50	3.1689
964792	AG1-342 E	2.4899	50/50	2.4899
964821	AG1-345 C	0.1358	Adder	0.3
964822	AG1-345 E	0.0905	Adder	0.2
964841	AG1-347 C	1.6603	Adder	3.69
964842	AG1-347 E	1.3045	Adder	2.9
964931	AG1-357 C O2	4.0794	Adder	9.06
964932	AG1-357 E O2	2.7196	Adder	6.04
965191	AG1-384 C	0.4865	Adder	1.08
965192	AG1-384 E	0.1445	Adder	0.32
965281	AG1-393 C	0.3390	Adder	0.75
965282	AG1-393 E	0.2260	Adder	0.5
965591	AG1-427 C	2.4375	Adder	5.41
965592	AG1-427 E	1.6284	Adder	3.61
966361	AG1-505 C	3.2931	Adder	7.31
966362	AG1-505 E	2.1954	Adder	4.87
966371	AG1-506 C	3.2931	Adder	7.31
966372	AG1-506 E	2.1954	Adder	4.87
966691	AG1-539 C	17.1360	50/50	17.1360
966692	AG1-539 E	23.0265	50/50	23.0265
966763	AG1-547 BAT	2.4214	50/50	2.4214
CPLE	CPLE	1.2456	Confirmed LTF	1.2456
G-007A	G-007A	0.2278	Confirmed LTF	0.2278
VFT	VFT	0.5998	Confirmed LTF	0.5998
PRAIRIE	PRAIRIE	0.4701	Confirmed LTF	0.4701
CBM-S2	CBM-S2	11.0351	Confirmed LTF	11.0351
CBM-N	CBM-N	0.1080	Confirmed LTF	0.1080
GIBSON	GIBSON	0.1611	Confirmed LTF	0.1611
BLUEG	BLUEG	0.5711	Confirmed LTF	0.5711
TRIMBLE	TRIMBLE	0.1859	Confirmed LTF	0.1859

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	0.0472	Confirmed LTF	0.0472

13.5.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174377833	314712	3OTTER R	DVP	314666	3ALTVSTA	DVP	1	DVP_P4-2: 511T556	breaker	342.0	105.54	106.92	DC	10.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.2132	Adder	0.25
314713	3PAMPLIN	0.4970	Adder	0.58
315266	1PLYWOOD A	1.0286	50/50	1.0286
316118	AC1-105 C	4.9180	50/50	4.9180
316123	AC1-075 C	2.6602	50/50	2.6602
924022	AB2-043 E O1	1.1292	Adder	1.33
924162	AB2-060 E OP	1.6982	Adder	2.0
924301	AB2-077 C O1 (Suspended)	0.8161	Adder	0.96
924302	AB2-077 E O1 (Suspended)	0.5441	Adder	0.64
924311	AB2-078 C O1 (Suspended)	0.8161	Adder	0.96
924312	AB2-078 E O1 (Suspended)	0.5441	Adder	0.64
924321	AB2-079 C O1 (Suspended)	0.8161	Adder	0.96
924322	AB2-079 E O1 (Suspended)	0.5441	Adder	0.64
925612	AC1-036 E	0.3066	Adder	0.36
925661	AC1-042 C	-2.7373	Adder	-3.22
925997	AC1-075 E	9.5532	50/50	9.5532
926023	AC1-080 C	0.8890	50/50	0.8890
926024	AC1-080 E	3.1697	50/50	3.1697
926274	AC1-105 E	2.4162	50/50	2.4162
927261	AC1-222 C	5.0538	50/50	5.0538
927262	AC1-222 E	4.8110	50/50	4.8110
934311	AD1-055 C	3.5090	50/50	3.5090
934312	AD1-055 E	0.9048	50/50	0.9048
934615	AD1-087 C	3.0206	Adder	3.55
934616	AD1-087 E	1.2926	Adder	1.52
934625	AD1-088 C	4.1166	Adder	4.84
934626	AD1-088 E	1.0782	Adder	1.27
935171	AD1-152 C O1	3.3179	Adder	3.9
935172	AD1-152 E O1	2.2119	Adder	2.6
935222	AD1-157 E	0.3064	Adder	0.36
936265	AD2-033 C	4.7544	Adder	5.59
936266	AD2-033 E	3.1696	Adder	3.73
936361	AD2-046 C O1	3.0375	Adder	3.57
936362	AD2-046 E O1	1.3968	Adder	1.64
936485	AD2-063 C	5.7605	Adder	6.78
936486	AD2-063 E	3.8403	Adder	4.52

Bus #	Bus	Gendoliv MW Impact	Type	Full MW Impact
937481	AD2-202 C O1	0.8848	Adder	1.04
937482	AD2-202 E O1	0.4977	Adder	0.59
938371	AE1-056 C	1.9814	Adder	2.33
938372	AE1-056 E	1.0826	Adder	1.27
939181	AE1-148 C	3.0184	Adder	3.55
939182	AE1-148 E	2.0123	Adder	2.37
939943	AE1-230 BAT	1.6142	50/50	1.6142
940661	AE2-053 O1	1.1179	Adder	1.32
941791	AE2-182 C	0.6688	Adder	0.79
941792	AE2-182 E	0.3113	Adder	0.37
942451	AE2-258	0.9421	Adder	1.11
942751	AE2-291 C	32.7726	50/50	32.7726
942752	AE2-291 E	21.8484	50/50	21.8484
942761	AE2-292 C O1	40.8051	50/50	40.8051
942762	AE2-292 E O1	27.2034	50/50	27.2034
943901	AF1-058 C	1.9100	50/50	1.9100
943902	AF1-058 E	1.2734	50/50	1.2734
945811	AF1-246 C O1	2.8992	Adder	3.41
945812	AF1-246 E O1	4.0037	Adder	4.71
946301	AF1-294 C	1.3590	Adder	1.6
946302	AF1-294 E	0.9060	Adder	1.07
957481	AF2-042 C	20.7086	Adder	24.36
957482	AF2-042 E	13.8057	Adder	16.24
958211	AF2-115 C	0.7994	Adder	0.94
958212	AF2-115 E	0.5330	Adder	0.63
958801	AF2-171 C	4.8065	Adder	5.65
958802	AF2-171 E	3.2043	Adder	3.77
959311	AF2-222 C	5.8633	Adder	6.9
959312	AF2-222 E	3.9284	Adder	4.62
959751	AF2-266	3.4514	Adder	4.06
960061	AF2-297 C	7.6402	50/50	7.6402
960062	AF2-297 E	5.0934	50/50	5.0934
961122	AF2-403 BAT	4.0356	50/50	4.0356
961131	AF2-404 BAT	4.0356	50/50	4.0356
961791	AG1-021 C	0.3390	Adder	0.75
961792	AG1-021 E	0.2260	Adder	0.5
961891	AG1-030 C	2.6464	Adder	5.87
961892	AG1-030 E	1.7642	Adder	3.92
962041	AG1-048 C	2.1185	Adder	4.7
962042	AG1-048 E	1.4123	Adder	3.13
962441	AG1-093 C O2	3.6124	Adder	8.02
962442	AG1-093 E O2	1.0994	Adder	2.44
962491	AG1-098 C O2	2.6003	Adder	5.77
962492	AG1-098 E O2	1.7335	Adder	3.85
962561	AG1-105 C O2	7.0980	50/50	7.0980
962562	AG1-105 E O2	4.7320	50/50	4.7320
963171	AG1-166 C	0.3390	Adder	0.75
963172	AG1-166 E	0.2260	Adder	0.5
963181	AG1-167 C	0.3390	Adder	0.75
963182	AG1-167 E	0.2260	Adder	0.5
963191	AG1-168 C	0.3390	Adder	0.75
963192	AG1-168 E	0.2260	Adder	0.5

Bus #	Bus	Gendoliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	0.3390	Adder	0.75
963202	AG1-169 E	0.2260	Adder	0.5
963211	AG1-170 C	0.3390	Adder	0.75
963212	AG1-170 E	0.2260	Adder	0.5
963321	AG1-181 C O2	3.2243	Adder	7.16
963361	AG1-185 O2	1.5600	Adder	3.46
963603	AG1-209 BAT	1.4125	50/50	1.4125
963641	AG1-215 C	0.1582	Adder	0.35
963642	AG1-215 E	0.2373	Adder	0.53
964111	AG1-272 C	0.4865	Adder	1.08
964112	AG1-272 E	0.1445	Adder	0.32
964121	AG1-273 C	0.4865	Adder	1.08
964122	AG1-273 E	0.1445	Adder	0.32
964131	AG1-274 C	0.4865	Adder	1.08
964132	AG1-274 E	0.1445	Adder	0.32
964241	AG1-285 C O2	2.7439	Adder	6.09
964242	AG1-285 E O2	1.8293	Adder	4.06
964261	AG1-287 C	1.4325	50/50	1.4325
964262	AG1-287 E	0.9550	50/50	0.9550
964471	AG1-310 C	3.2931	50/50	3.2931
964472	AG1-310 E	1.6219	50/50	1.6219
964533	AG1-316 BAT	1.4338	Merchant Transmission	1.4338
964791	AG1-342 C	3.1689	50/50	3.1689
964792	AG1-342 E	2.4899	50/50	2.4899
964821	AG1-345 C	0.1358	Adder	0.3
964822	AG1-345 E	0.0905	Adder	0.2
964841	AG1-347 C	1.6603	Adder	3.69
964842	AG1-347 E	1.3045	Adder	2.9
964931	AG1-357 C O2	4.0794	Adder	9.06
964932	AG1-357 E O2	2.7196	Adder	6.04
965191	AG1-384 C	0.4865	Adder	1.08
965192	AG1-384 E	0.1445	Adder	0.32
965281	AG1-393 C	0.3390	Adder	0.75
965282	AG1-393 E	0.2260	Adder	0.5
965591	AG1-427 C	2.4375	Adder	5.41
965592	AG1-427 E	1.6284	Adder	3.61
966361	AG1-505 C	3.2931	Adder	7.31
966362	AG1-505 E	2.1954	Adder	4.87
966371	AG1-506 C	3.2931	Adder	7.31
966372	AG1-506 E	2.1954	Adder	4.87
966691	AG1-539 C	17.1360	50/50	17.1360
966692	AG1-539 E	23.0265	50/50	23.0265
966763	AG1-547 BAT	2.4214	50/50	2.4214
CPLE	CPLE	1.2456	Confirmed LTF	1.2456
G-007A	G-007A	0.2278	Confirmed LTF	0.2278
VFT	VFT	0.5998	Confirmed LTF	0.5998
PRAIRIE	PRAIRIE	0.4701	Confirmed LTF	0.4701
CBM-S2	CBM-S2	11.0351	Confirmed LTF	11.0351
CBM-N	CBM-N	0.1080	Confirmed LTF	0.1080
GIBSON	GIBSON	0.1611	Confirmed LTF	0.1611
BLUEG	BLUEG	0.5711	Confirmed LTF	0.5711
TRIMBLE	TRIMBLE	0.1859	Confirmed LTF	0.1859

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	0.0472	Confirmed LTF	0.0472

13.5.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168094487	242631	05EDAN 1	AEP	242620	05DANVL2	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1	single	402.0	116.59	118.42	DC	7.43

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.2723	Adder	2.67
313527	AB2-043 C	0.2209	80/20	0.2209
313719	3CHESTNUT	0.5595	80/20	0.5595
314572	3EMPORIA	0.1370	Adder	0.16
314582	3KELFORD	0.1465	80/20	0.1465
314623	3WITAKRS	0.1084	80/20	0.1084
315126	1ROARAP2	0.5492	80/20	0.5492
315128	1ROARAP4	0.5241	80/20	0.5241
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.9062	80/20	4.9062
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.9062	80/20	4.9062
315136	1ROSEMG1	0.8438	80/20	0.8438
315137	1ROSEMS1	0.5232	80/20	0.5232
315138	1ROSEMG2	0.3955	80/20	0.3955
315153	1CLOVER1	4.8431	80/20	4.8431
315154	1CLOVER2	4.7949	80/20	4.7949
315158	1KERR 1	0.1936	80/20	0.1936
315159	1KERR 2	0.5421	80/20	0.5421
315160	1KERR 3	0.5421	80/20	0.5421
315161	1KERR 4	0.5421	80/20	0.5421
315162	1KERR 5	0.5421	80/20	0.5421
315163	1KERR 6	0.5421	80/20	0.5421
315164	1KERR 7	0.5421	80/20	0.5421
315266	1PLYWOOD A	0.5917	80/20	0.5917
315293	1DOMTR9	2.2091	Adder	2.6
315294	1DOMTR10	2.7072	Adder	3.18
315601	1CONETOE2SOL	0.6666	80/20	0.6666
315606	3AA2-053SOLA	0.5921	80/20	0.5921
316020	AB2-059 C OP	0.8793	80/20	0.8793
316118	AC1-105 C	2.8038	80/20	2.8038
316129	AC1-054 C	3.3922	80/20	3.3922
316131	AB2-060 C	0.6316	80/20	0.6316
316140	AB2-099 C (Suspended)	0.1921	Adder	0.23
920591	AA2-165 C	0.0751	80/20	0.0751
922922	AB1-081 C OP	0.7460	80/20	0.7460
923991	AB2-040 C O1	2.4748	Adder	2.91
924301	AB2-077 C O1 (Suspended)	0.8962	80/20	0.8962

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	0.8962	80/20	0.8962
924321	AB2-079 C O1 (Suspended)	0.8962	80/20	0.8962
925591	AC1-034 C	3.6098	80/20	3.6098
926051	AC1-083 C O1	4.9267	80/20	4.9267
926070	AC1-086 C	7.1225	Adder	8.38
926201	AC1-098 C	2.7689	80/20	2.7689
926211	AC1-099 C	0.9279	80/20	0.9279
927024	AC1-189 C	4.1711	80/20	4.1711
927145	AC1-208 C	4.1616	80/20	4.1616
927251	AC1-221 C	1.8225	80/20	1.8225
927261	AC1-222 C	1.7942	80/20	1.7942
932631	AC2-084 C	3.9471	80/20	3.9471
932761	AC2-100 C	4.1943	80/20	4.1943
933941	AD1-017 C	0.9853	80/20	0.9853
933991	AD1-023 C	4.0525	Adder	4.77
934311	AD1-055 C	1.2458	80/20	1.2458
934331	AD1-057 C O1	4.7373	80/20	4.7373
934341	AD1-058 C	4.5688	80/20	4.5688
934615	AD1-087 C	3.0476	80/20	3.0476
934625	AD1-088 C	3.7118	Adder	4.37
934991	AD1-131 C	1.4980	80/20	1.4980
935171	AD1-152 C O1	3.3475	80/20	3.3475
936161	AD2-022 C O1	12.2316	80/20	12.2316
936171	AD2-023 C O1	7.1351	80/20	7.1351
936265	AD2-033 C	5.3407	80/20	5.3407
936361	AD2-046 C O1	4.4130	80/20	4.4130
936401	AD2-051 C O1	2.8492	Adder	3.35
936485	AD2-063 C	6.4260	80/20	6.4260
937481	AD2-202 C O1	0.8927	80/20	0.8927
939181	AE1-148 C	4.3346	80/20	4.3346
940081	AE1-250 C	16.7625	80/20	16.7625
940571	AE2-044 C	2.3643	80/20	2.3643
940661	AE2-053 O1	1.6054	80/20	1.6054
941791	AE2-182 C	0.6030	Adder	0.71
942451	AE2-258	1.0445	80/20	1.0445
943171	AE2-346 C	0.4611	Adder	0.54
943901	AF1-058 C	0.9977	80/20	0.9977
943911	AF1-059	6.8914	80/20	6.8914
944141	AF1-082	1.5199	80/20	1.5199
945811	AF1-246 C O1	2.3280	Adder	2.74
946281	AF1-292 C	0.4826	Adder	0.57
946301	AF1-294 C	1.3261	Adder	1.56
957481	AF2-042 C	16.6285	Adder	19.56
957521	AF2-046 C	5.3511	Adder	6.3
957861	AF2-080 C	3.7883	80/20	3.7883
958211	AF2-115 C	0.7800	Adder	0.92
958801	AF2-171 C	4.6894	Adder	5.52
959311	AF2-222 C	5.6338	Adder	6.63
959511	AF2-242 C	3.1500	80/20	3.1500
959751	AF2-266	3.4765	80/20	3.4765
960061	AF2-297 C	3.9907	80/20	3.9907

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960081	AF2-299 C	0.8133	Adder	0.96
961671	AG1-007 C	0.6235	80/20	0.6235
961681	AG1-008 C	2.8418	Adder	6.31
961791	AG1-021 C	0.3307	Adder	0.73
961891	AG1-030 C	2.5649	Adder	5.69
961931	AG1-036 C	0.2331	Adder	0.52
961941	AG1-037 C	0.0873	Adder	0.19
962041	AG1-048 C	2.0671	Adder	4.59
962331	AG1-082 C	0.3491	Adder	0.77
962341	AG1-083 C	0.3491	Adder	0.77
962351	AG1-084 C	0.3084	Adder	0.68
962361	AG1-085 C	0.3084	Adder	0.68
962441	AG1-093 C O2	7.4345	80/20	7.4345
962491	AG1-098 C O2	5.4540	80/20	5.4540
962561	AG1-105 C O2	4.7124	80/20	4.7124
962571	AG1-106 C	1.0498	Adder	2.33
963171	AG1-166 C	0.3307	Adder	0.73
963181	AG1-167 C	0.3307	Adder	0.73
963191	AG1-168 C	0.3307	Adder	0.73
963201	AG1-169 C	0.3307	Adder	0.73
963211	AG1-170 C	0.3307	Adder	0.73
963301	AG1-179 C	1.0263	Adder	2.28
963311	AG1-180	0.5000	Adder	1.11
963321	AG1-181 C O2	6.8488	80/20	6.8488
963361	AG1-185 O2	3.3137	80/20	3.3137
963641	AG1-215 C	0.1543	Adder	0.34
964111	AG1-272 C	0.4663	Adder	1.04
964121	AG1-273 C	0.4663	Adder	1.04
964131	AG1-274 C	0.4663	Adder	1.04
964241	AG1-285 C O2	2.1715	Adder	4.82
964261	AG1-287 C	0.7483	80/20	0.7483
964471	AG1-310 C	1.0236	80/20	1.0236
964491	AG1-312 C O1	3.2055	Adder	7.12
964501	AG1-313 C O2	0.8400	Adder	1.86
964791	AG1-342 C	2.0004	80/20	2.0004
964801	AG1-343 C	0.9747	Adder	2.16
964821	AG1-345 C	0.1324	Adder	0.29
964931	AG1-357 C O2	8.5812	80/20	8.5812
965191	AG1-384 C	0.4663	Adder	1.04
965281	AG1-393 C	0.3307	Adder	0.73
965291	AG1-394 C	0.3332	Adder	0.74
965451	AG1-413 C O2	2.9136	80/20	2.9136
965591	AG1-427 C	5.1228	80/20	5.1228
965601	AG1-428 C O2	0.8568	Adder	1.9
965691	AG1-437 C O1	1.6775	Adder	3.72
965701	AG1-438 C O1	1.6775	Adder	3.72
965711	AG1-439 C O1	11.9580	80/20	11.9580
965721	AG1-440 C	3.5896	80/20	3.5896
965731	AG1-441 C	3.5896	80/20	3.5896
965741	AG1-442 O1	0.9785	Adder	2.17
965751	AG1-443 O1	0.9785	Adder	2.17
965761	AG1-444 O1	6.3776	80/20	6.3776

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965771	AG1-445	2.0740	80/20	2.0740
965781	AG1-446	2.0740	80/20	2.0740
966621	AG1-532 C	0.2328	Adder	0.52
966751	AG1-546 C	7.3693	80/20	7.3693
966801	AG1-551 C	1.0116	80/20	1.0116
966811	AG1-552 C	0.8720	80/20	0.8720
CPLE	CPLE	6.7370	Confirmed LTF	6.7370
G-007A	G-007A	1.0861	Confirmed LTF	1.0861
VFT	VFT	2.8767	Confirmed LTF	2.8767
CBM-W2	CBM-W2	2.6701	Confirmed LTF	2.6701
PRAIRIE	PRAIRIE	0.7439	Confirmed LTF	0.7439
TVA	TVA	1.3328	Confirmed LTF	1.3328
CBM-S2	CBM-S2	76.2955	Confirmed LTF	76.2955
CBM-S1	CBM-S1	0.2120	Confirmed LTF	0.2120
CBM-N	CBM-N	0.5172	Confirmed LTF	0.5172
GIBSON	GIBSON	0.5700	Confirmed LTF	0.5700
BLUEG	BLUEG	2.1804	Confirmed LTF	2.1804
TRIMBLE	TRIMBLE	0.7173	Confirmed LTF	0.7173
LAGN	LAGN	1.9565	Confirmed LTF	1.9565
AA2-074	AA2-074	4.4334	LTF	4.4334

13.5.4 Index 4

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339035	313707	6FORK UNION	DVP	961060	AF2-397 TAP	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	126.48	127.71	DC	8.13

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1287	80/20	0.1287
315153	1CLOVER1	6.8569	80/20	6.8569
315154	1CLOVER2	6.7885	80/20	6.7885
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6058	80/20	0.6058
315160	1KERR 3	0.6058	80/20	0.6058
315161	1KERR 4	0.6058	80/20	0.6058
315162	1KERR 5	0.6058	80/20	0.6058
315163	1KERR 6	0.6058	80/20	0.6058
315164	1KERR 7	0.6058	80/20	0.6058
315191	1BEARGRDN G1	16.8024	80/20	16.8024
315192	1BEARGRDN G2	16.8024	80/20	16.8024
315193	1BEARGRDN S1	21.7287	80/20	21.7287
315266	1PLYWOOD A	0.6338	80/20	0.6338
316118	AC1-105 C	3.2102	80/20	3.2102
316123	AC1-075 C	0.3997	80/20	0.3997
316129	AC1-054 C	3.1902	80/20	3.1902
316131	AB2-060 C	1.1581	80/20	1.1581
924301	AB2-077 C O1 (Suspended)	1.5320	80/20	1.5320
924311	AB2-078 C O1 (Suspended)	1.5320	80/20	1.5320
924321	AB2-079 C O1 (Suspended)	1.5320	80/20	1.5320
925611	AC1-036 C	0.2580	80/20	0.2580
926023	AC1-080 C	0.1336	80/20	0.1336
927251	AC1-221 C	0.7557	80/20	0.7557
927261	AC1-222 C	1.8205	80/20	1.8205
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9463	80/20	0.9463
932761	AC2-100 C	1.7391	80/20	1.7391
933501	AC2-165 C	31.7815	80/20	31.7815
934311	AD1-055 C	1.2640	80/20	1.2640
934341	AD1-058 C	1.8944	80/20	1.8944
934615	AD1-087 C	4.2935	80/20	4.2935
934625	AD1-088 C	14.0115	80/20	14.0115

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9378	80/20	13.9378
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8267	80/20	13.8267
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0476	80/20	10.0476
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2764	80/20	2.2764
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4830	80/20	18.4830
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9990	80/20	0.9990
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1429	80/20	6.1429
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6135	80/20	3.6135
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7370	80/20	19.7370
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9960	80/20	3.9960
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961791	AG1-021 C	2.8908	80/20	2.8908
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0675	80/20	18.0675
962441	AG1-093 C O2	8.1291	80/20	8.1291
962491	AG1-098 C O2	10.6807	80/20	10.6807
962561	AG1-105 C O2	6.4428	80/20	6.4428
962741	AG1-123 C O2	3.0883	80/20	3.0883
962751	AG1-124 C O2	4.3368	80/20	4.3368
963171	AG1-166 C	2.8908	80/20	2.8908
963181	AG1-167 C	2.8908	80/20	2.8908
963191	AG1-168 C	2.8908	80/20	2.8908
963201	AG1-169 C	2.8908	80/20	2.8908
963211	AG1-170 C	2.8908	80/20	2.8908
963271	AG1-176 C O2	26.6508	80/20	26.6508
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O2	18.6814	80/20	18.6814
963361	AG1-185 O2	9.0386	80/20	9.0386

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963641	AG1-215 C	1.3490	80/20	1.3490
964111	AG1-272 C	2.9318	80/20	2.9318
964121	AG1-273 C	2.9318	80/20	2.9318
964131	AG1-274 C	2.9318	80/20	2.9318
964231	AG1-284 C O2	20.2377	80/20	20.2377
964241	AG1-285 C O2	5.6317	80/20	5.6317
964261	AG1-287 C	0.7493	80/20	0.7493
964471	AG1-310 C	1.0449	80/20	1.0449
964791	AG1-342 C	2.5948	80/20	2.5948
964821	AG1-345 C	1.1534	80/20	1.1534
964841	AG1-347 C	11.8188	80/20	11.8188
964931	AG1-357 C O2	18.3312	80/20	18.3312
965191	AG1-384 C	2.9318	80/20	2.9318
965281	AG1-393 C	2.8908	80/20	2.8908
965451	AG1-413 C O2	4.0845	80/20	4.0845
965581	AG1-426	7.5610	80/20	7.5610
965591	AG1-427 C	10.5299	80/20	10.5299
965601	AG1-428 C O2	2.2741	80/20	2.2741
965641	AG1-432 C O2	36.9660	80/20	36.9660
965721	AG1-440 C	3.7895	80/20	3.7895
965731	AG1-441 C	3.7895	80/20	3.7895
965771	AG1-445	2.1895	80/20	2.1895
965781	AG1-446	2.1895	80/20	2.1895
965831	AG1-451	6.1610	80/20	6.1610
966251	AG1-494 C	1.8194	80/20	1.8194
966621	AG1-532 C	0.4099	80/20	0.4099
966691	AG1-539 C	1.9309	80/20	1.9309
966751	AG1-546 C	6.7436	80/20	6.7436
966791	AG1-550 O2	16.8647	80/20	16.8647
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	5.0279	80/20	5.0279
WEC	WEC	0.1342	Confirmed LTF	0.1342
LGEE	LGEE	0.2878	Confirmed LTF	0.2878
CPL	CPL	2.2686	Confirmed LTF	2.2686
CBM-W2	CBM-W2	7.5264	Confirmed LTF	7.5264
NY	NY	0.4396	Confirmed LTF	0.4396
TVA	TVA	1.5232	Confirmed LTF	1.5232
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.2148	Confirmed LTF	26.2148
CBM-S1	CBM-S1	0.3701	Confirmed LTF	0.3701
MEC	MEC	0.9057	Confirmed LTF	0.9057
LAGN	LAGN	1.8795	Confirmed LTF	1.8795
AA2-074	AA2-074	1.4972	LTF	1.4972
CBM-W1	CBM-W1	5.2996	Confirmed LTF	5.2996

13.5.5 Index 5

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977109	313802	6PRINCE EDW	DVP	314692	6FARMVIL	DVP	1	DVP_P4-2: 511T556	breaker	699.0	121.8	126.29	DC	31.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	-0.4636	Adder	-0.55
315153	1CLOVER1	22.6895	50/50	22.6895
315154	1CLOVER2	22.4633	50/50	22.4633
315266	1PLYWOOD A	0.8779	50/50	0.8779
316118	AC1-105 C	4.0048	50/50	4.0048
316123	AC1-075 C	0.6069	50/50	0.6069
925997	AC1-075 E	2.1793	50/50	2.1793
926023	AC1-080 C	0.2028	50/50	0.2028
926024	AC1-080 E	0.7231	50/50	0.7231
926274	AC1-105 E	1.9676	50/50	1.9676
927251	AC1-221 C	1.5101	50/50	1.5101
927252	AC1-221 E	1.5101	50/50	1.5101
927261	AC1-222 C	3.1332	50/50	3.1332
927262	AC1-222 E	2.9827	50/50	2.9827
932761	AC2-100 C	3.4752	50/50	3.4752
932762	AC2-100 E	1.6963	50/50	1.6963
934311	AD1-055 C	2.1754	50/50	2.1754
934312	AD1-055 E	0.5610	50/50	0.5610
934341	AD1-058 C	3.7855	50/50	3.7855
934342	AD1-058 E	0.9619	50/50	0.9619
934615	AD1-087 C	14.1820	50/50	14.1820
934616	AD1-087 E	6.0687	50/50	6.0687
934625	AD1-088 C	33.5344	50/50	33.5344
934626	AD1-088 E	8.7828	50/50	8.7828
934991	AD1-131 C	1.2412	50/50	1.2412
934992	AD1-131 E	0.8274	50/50	0.8274
935171	AD1-152 C O1	15.5774	50/50	15.5774
935172	AD1-152 E O1	10.3850	50/50	10.3850
937481	AD2-202 C O1	4.1540	50/50	4.1540
937482	AD2-202 E O1	2.3366	50/50	2.3366
941791	AE2-182 C	5.4482	50/50	5.4482
941792	AE2-182 E	2.5362	50/50	2.5362
942751	AE2-291 C	4.4025	Adder	5.18
942752	AE2-291 E	2.9350	Adder	3.45
942761	AE2-292 C O1	5.4815	Adder	6.45
942762	AE2-292 E O1	3.6543	Adder	4.3
943901	AF1-058 C	1.7642	50/50	1.7642
943902	AF1-058 E	1.1762	50/50	1.1762
945811	AF1-246 C O1	13.6807	50/50	13.6807
945812	AF1-246 E O1	18.8923	50/50	18.8923
946293	AF1-293 BAT	7.7876	Merchant Transmission	7.7876

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	97.7190	50/50	97.7190
957482	AF2-042 E	65.1460	50/50	65.1460
959751	AF2-266	16.2870	50/50	16.2870
960061	AF2-297 C	7.0570	50/50	7.0570
960062	AF2-297 E	4.7046	50/50	4.7046
961063	AF2-397 BAT	5.4682	50/50	5.4682
962441	AG1-093 C O2	24.0672	50/50	24.0672
962442	AG1-093 E O2	7.3248	50/50	7.3248
962561	AG1-105 C O2	1.9170	Adder	4.26
962562	AG1-105 E O2	1.2780	Adder	2.84
963271	AG1-176 C O2	55.4481	50/50	55.4481
963272	AG1-176 E O2	36.9654	50/50	36.9654
963362	AG1-185 BAT	3.2622	Merchant Transmission	3.2622
963643	AG1-215 BAT	1.9088	50/50	1.9088
964113	AG1-272 BAT	0.7934	Merchant Transmission	0.7934
964123	AG1-273 BAT	0.7934	Merchant Transmission	0.7934
964133	AG1-274 BAT	0.7934	Merchant Transmission	0.7934
964241	AG1-285 C O2	24.4297	50/50	24.4297
964242	AG1-285 E O2	16.2865	50/50	16.2865
964261	AG1-287 C	1.3232	50/50	1.3232
964262	AG1-287 E	0.8821	50/50	0.8821
964471	AG1-310 C	1.7778	50/50	1.7778
964472	AG1-310 E	0.8756	50/50	0.8756
964791	AG1-342 C	0.9627	Adder	2.14
964792	AG1-342 E	0.7564	Adder	1.68
964841	AG1-347 C	27.5223	50/50	27.5223
964842	AG1-347 E	21.6247	50/50	21.6247
965193	AG1-384 BAT	0.3400	Merchant Transmission	0.3400
965582	AG1-426 BAT	0.8211	Merchant Transmission	0.8211
965832	AG1-451 BAT	4.3542	50/50	4.3542
966361	AG1-505 C	29.3139	50/50	29.3139
966362	AG1-505 E	19.5426	50/50	19.5426
966371	AG1-506 C	29.3139	50/50	29.3139
966372	AG1-506 E	19.5426	50/50	19.5426
966691	AG1-539 C	1.2200	Adder	2.71
966692	AG1-539 E	1.6394	Adder	3.64
966792	AG1-550 BAT	3.6662	50/50	3.6662
WEC	WEC	0.2533	Confirmed LTF	0.2533
LGEE	LGEE	0.5221	Confirmed LTF	0.5221
CPL	CPL	2.8672	Confirmed LTF	2.8672
CBM-W2	CBM-W2	11.2358	Confirmed LTF	11.2358
NY	NY	0.3207	Confirmed LTF	0.3207
TVA	TVA	2.1308	Confirmed LTF	2.1308
O-066	O-066	4.4754	Confirmed LTF	4.4754
SIGE	SIGE	0.1632	Confirmed LTF	0.1632
CBM-S2	CBM-S2	33.3871	Confirmed LTF	33.3871
CBM-S1	CBM-S1	0.5309	Confirmed LTF	0.5309
G-007	G-007	0.7035	Confirmed LTF	0.7035
MEC	MEC	1.5254	Confirmed LTF	1.5254
LAGN	LAGN	2.6425	Confirmed LTF	2.6425
AA2-074	AA2-074	1.8936	LTF	1.8936
CBM-W1	CBM-W1	10.5711	Confirmed LTF	10.5711

13.5.6 Index 6

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168339057	313867	6BREMODIST	DVP	313707	6FORK UNION	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	128.25	129.58	DC	8.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1784	80/20	2.1784
313527	AB2-043 C	0.4243	80/20	0.4243
314429	3JTRSVLE	0.6669	80/20	0.6669
314572	3EMPORIA	0.1382	80/20	0.1382
314677	6BUCKING	1.0571	80/20	1.0571
314704	3LAWRENC	0.1410	80/20	0.1410
315126	1ROARAP2	0.4085	80/20	0.4085
315128	1ROARAP4	0.3898	80/20	0.3898
315153	1CLOVER1	7.5116	80/20	7.5116
315154	1CLOVER2	7.4368	80/20	7.4368
315158	1KERR 1	0.2345	80/20	0.2345
315159	1KERR 2	0.6567	80/20	0.6567
315160	1KERR 3	0.6567	80/20	0.6567
315161	1KERR 4	0.6567	80/20	0.6567
315162	1KERR 5	0.6567	80/20	0.6567
315163	1KERR 6	0.6567	80/20	0.6567
315164	1KERR 7	0.6567	80/20	0.6567
315191	1BEARGRDN G1	18.4998	80/20	18.4998
315192	1BEARGRDN G2	18.4998	80/20	18.4998
315193	1BEARGRDN S1	23.9239	80/20	23.9239
315266	1PLYWOOD A	0.6737	80/20	0.6737
316087	AB2-174 C	0.3606	80/20	0.3606
316118	AC1-105 C	3.4200	80/20	3.4200
316123	AC1-075 C	0.3763	80/20	0.3763
316129	AC1-054 C	3.4710	80/20	3.4710
316131	AB2-060 C	1.2609	80/20	1.2609
923991	AB2-040 C O1	2.3725	80/20	2.3725
924301	AB2-077 C O1 (Suspended)	1.6661	80/20	1.6661
924311	AB2-078 C O1 (Suspended)	1.6661	80/20	1.6661
924321	AB2-079 C O1 (Suspended)	1.6661	80/20	1.6661
925611	AC1-036 C	0.2822	80/20	0.2822
926023	AC1-080 C	0.1258	80/20	0.1258
927251	AC1-221 C	0.7947	80/20	0.7947
927261	AC1-222 C	1.8844	80/20	1.8844
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.0414	80/20	1.0414
932761	AC2-100 C	1.8288	80/20	1.8288

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0258	80/20	11.0258
938821	AE1-108 C O1	11.0123	80/20	11.0123
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7366	80/20	6.7366
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9627	80/20	3.9627
958801	AF2-171 C	23.6772	80/20	23.6772
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1702	80/20	3.1702
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0122	80/20	22.0122
962041	AG1-048 C	19.8135	80/20	19.8135
962441	AG1-093 C O2	8.8246	80/20	8.8246
962491	AG1-098 C O2	11.6385	80/20	11.6385
962561	AG1-105 C O2	6.9312	80/20	6.9312
963171	AG1-166 C	3.1702	80/20	3.1702
963181	AG1-167 C	3.1702	80/20	3.1702
963191	AG1-168 C	3.1702	80/20	3.1702
963201	AG1-169 C	3.1702	80/20	3.1702
963211	AG1-170 C	3.1702	80/20	3.1702
963271	AG1-176 C O2	29.3068	80/20	29.3068
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O2	20.4293	80/20	20.4293
963361	AG1-185 O2	9.8842	80/20	9.8842
963641	AG1-215 C	1.4794	80/20	1.4794
964111	AG1-272 C	3.2072	80/20	3.2072
964121	AG1-273 C	3.2072	80/20	3.2072
964131	AG1-274 C	3.2072	80/20	3.2072
964231	AG1-284 C O2	6.3853	80/20	6.3853
964241	AG1-285 C O2	6.2010	80/20	6.2010
964261	AG1-287 C	0.7911	80/20	0.7911
964471	AG1-310 C	1.0721	80/20	1.0721
964791	AG1-342 C	2.7841	80/20	2.7841
964821	AG1-345 C	1.2648	80/20	1.2648
964841	AG1-347 C	12.9864	80/20	12.9864
964931	AG1-357 C O2	19.9968	80/20	19.9968
965191	AG1-384 C	3.2072	80/20	3.2072
965281	AG1-393 C	3.1702	80/20	3.1702
965451	AG1-413 C O2	4.4581	80/20	4.4581
965581	AG1-426	2.3992	80/20	2.3992
965591	AG1-427 C	11.4819	80/20	11.4819
965601	AG1-428 C O2	2.4880	80/20	2.4880
965641	AG1-432 C O2	40.6200	80/20	40.6200
965721	AG1-440 C	4.1121	80/20	4.1121
965731	AG1-441 C	4.1121	80/20	4.1121
965771	AG1-445	2.3759	80/20	2.3759
965781	AG1-446	2.3759	80/20	2.3759
965831	AG1-451	6.7700	80/20	6.7700
966361	AG1-505 C	4.9734	80/20	4.9734
966371	AG1-506 C	4.9734	80/20	4.9734
966621	AG1-532 C	0.4522	80/20	0.4522
966691	AG1-539 C	1.7146	80/20	1.7146
966751	AG1-546 C	7.3410	80/20	7.3410
966791	AG1-550 O2	5.3211	80/20	5.3211
966811	AG1-552 C	0.6485	80/20	0.6485
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	5.5327	80/20	5.5327
WEC	WEC	0.0699	Confirmed LTF	0.0699
LGEE	LGEE	0.1483	Confirmed LTF	0.1483
CPL	CPL	2.3396	Confirmed LTF	2.3396
CBM-W2	CBM-W2	5.8061	Confirmed LTF	5.8061
NY	NY	0.4076	Confirmed LTF	0.4076
TVA	TVA	1.2558	Confirmed LTF	1.2558
SIGE	SIGE	0.1120	Confirmed LTF	0.1120
CBM-S2	CBM-S2	25.9121	Confirmed LTF	25.9121
CBM-S1	CBM-S1	0.2953	Confirmed LTF	0.2953
MEC	MEC	0.5863	Confirmed LTF	0.5863
LAGN	LAGN	1.5645	Confirmed LTF	1.5645
AA2-074	AA2-074	1.5426	LTF	1.5426
CBM-W1	CBM-W1	2.5236	Confirmed LTF	2.5236

13.5.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977108	314268	6BRIERY	DVP	313802	6PRINCE EDW	DVP	1	DVP_P4-2: 511T556	breaker	699.0	121.82	126.32	DC	31.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	-0.4636	Adder	-0.55
315153	1CLOVER1	22.6895	50/50	22.6895
315154	1CLOVER2	22.4633	50/50	22.4633
315266	1PLYWOOD A	0.8779	50/50	0.8779
316118	AC1-105 C	4.0048	50/50	4.0048
316123	AC1-075 C	0.6069	50/50	0.6069
925997	AC1-075 E	2.1793	50/50	2.1793
926023	AC1-080 C	0.2028	50/50	0.2028
926024	AC1-080 E	0.7231	50/50	0.7231
926274	AC1-105 E	1.9676	50/50	1.9676
927251	AC1-221 C	1.5101	50/50	1.5101
927252	AC1-221 E	1.5101	50/50	1.5101
927261	AC1-222 C	3.1332	50/50	3.1332
927262	AC1-222 E	2.9827	50/50	2.9827
932761	AC2-100 C	3.4752	50/50	3.4752
932762	AC2-100 E	1.6963	50/50	1.6963
934311	AD1-055 C	2.1754	50/50	2.1754
934312	AD1-055 E	0.5610	50/50	0.5610
934341	AD1-058 C	3.7855	50/50	3.7855
934342	AD1-058 E	0.9619	50/50	0.9619
934615	AD1-087 C	14.1820	50/50	14.1820
934616	AD1-087 E	6.0687	50/50	6.0687
934625	AD1-088 C	33.5344	50/50	33.5344
934626	AD1-088 E	8.7828	50/50	8.7828
934991	AD1-131 C	1.2412	50/50	1.2412
934992	AD1-131 E	0.8274	50/50	0.8274
935171	AD1-152 C O1	15.5774	50/50	15.5774
935172	AD1-152 E O1	10.3850	50/50	10.3850
937481	AD2-202 C O1	4.1540	50/50	4.1540
937482	AD2-202 E O1	2.3366	50/50	2.3366
941791	AE2-182 C	5.4482	50/50	5.4482
941792	AE2-182 E	2.5362	50/50	2.5362
942751	AE2-291 C	4.4025	Adder	5.18
942752	AE2-291 E	2.9350	Adder	3.45
942761	AE2-292 C O1	5.4815	Adder	6.45
942762	AE2-292 E O1	3.6543	Adder	4.3
943901	AF1-058 C	1.7642	50/50	1.7642
943902	AF1-058 E	1.1762	50/50	1.1762
945811	AF1-246 C O1	13.6807	50/50	13.6807
945812	AF1-246 E O1	18.8923	50/50	18.8923
946293	AF1-293 BAT	7.7876	Merchant Transmission	7.7876

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	97.7190	50/50	97.7190
957482	AF2-042 E	65.1460	50/50	65.1460
959751	AF2-266	16.2870	50/50	16.2870
960061	AF2-297 C	7.0570	50/50	7.0570
960062	AF2-297 E	4.7046	50/50	4.7046
961063	AF2-397 BAT	5.4682	50/50	5.4682
962441	AG1-093 C O2	24.0672	50/50	24.0672
962442	AG1-093 E O2	7.3248	50/50	7.3248
962561	AG1-105 C O2	1.9170	Adder	4.26
962562	AG1-105 E O2	1.2780	Adder	2.84
963271	AG1-176 C O2	55.4481	50/50	55.4481
963272	AG1-176 E O2	36.9654	50/50	36.9654
963362	AG1-185 BAT	3.2622	Merchant Transmission	3.2622
963643	AG1-215 BAT	1.9088	50/50	1.9088
964113	AG1-272 BAT	0.7934	Merchant Transmission	0.7934
964123	AG1-273 BAT	0.7934	Merchant Transmission	0.7934
964133	AG1-274 BAT	0.7934	Merchant Transmission	0.7934
964241	AG1-285 C O2	24.4297	50/50	24.4297
964242	AG1-285 E O2	16.2865	50/50	16.2865
964261	AG1-287 C	1.3232	50/50	1.3232
964262	AG1-287 E	0.8821	50/50	0.8821
964471	AG1-310 C	1.7778	50/50	1.7778
964472	AG1-310 E	0.8756	50/50	0.8756
964791	AG1-342 C	0.9627	Adder	2.14
964792	AG1-342 E	0.7564	Adder	1.68
964841	AG1-347 C	27.5223	50/50	27.5223
964842	AG1-347 E	21.6247	50/50	21.6247
965193	AG1-384 BAT	0.3400	Merchant Transmission	0.3400
965582	AG1-426 BAT	0.8211	Merchant Transmission	0.8211
965832	AG1-451 BAT	4.3542	50/50	4.3542
966361	AG1-505 C	29.3139	50/50	29.3139
966362	AG1-505 E	19.5426	50/50	19.5426
966371	AG1-506 C	29.3139	50/50	29.3139
966372	AG1-506 E	19.5426	50/50	19.5426
966691	AG1-539 C	1.2200	Adder	2.71
966692	AG1-539 E	1.6394	Adder	3.64
966792	AG1-550 BAT	3.6662	50/50	3.6662
WEC	WEC	0.2533	Confirmed LTF	0.2533
LGEE	LGEE	0.5221	Confirmed LTF	0.5221
CPL	CPL	2.8672	Confirmed LTF	2.8672
CBM-W2	CBM-W2	11.2358	Confirmed LTF	11.2358
NY	NY	0.3207	Confirmed LTF	0.3207
TVA	TVA	2.1308	Confirmed LTF	2.1308
O-066	O-066	4.4754	Confirmed LTF	4.4754
SIGE	SIGE	0.1632	Confirmed LTF	0.1632
CBM-S2	CBM-S2	33.3871	Confirmed LTF	33.3871
CBM-S1	CBM-S1	0.5309	Confirmed LTF	0.5309
G-007	G-007	0.7035	Confirmed LTF	0.7035
MEC	MEC	1.5254	Confirmed LTF	1.5254
LAGN	LAGN	2.6425	Confirmed LTF	2.6425
AA2-074	AA2-074	1.8936	LTF	1.8936
CBM-W1	CBM-W1	10.5711	Confirmed LTF	10.5711

13.5.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173793498	314282	6CARSON	DVP	314285	6CHRL249	DVP	1	DVP_P4-2: 562T563	breaker	684.0	184.87	185.45	DC	8.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	4.7486	50/50	4.7486
314331	6POE	0.8146	Adder	0.96
314435	6SAPONY	0.4521	50/50	0.4521
314572	3EMPORIA	0.3240	50/50	0.3240
314704	3LAWRENC	0.2021	50/50	0.2021
315073	1STONECA	-2.4134	Adder	-2.84
315131	1EDGECEMA (Deactivation : 22/04/2019)	3.8982	Adder	4.59
315132	1EDGECEMB (Deactivation : 22/04/2019)	3.8982	Adder	4.59
315136	1ROSEMG1	1.3048	50/50	1.3048
315137	1ROSEMS1	0.8091	50/50	0.8091
315138	1ROSEMG2	0.6115	50/50	0.6115
315139	1GASTONA	1.9432	50/50	1.9432
315141	1GASTONB	1.9432	50/50	1.9432
315241	1Z1-086 GT1	5.4571	50/50	5.4571
315242	1Z1-086 GT2	5.4571	50/50	5.4571
315243	1Z1-086 GT3	5.4571	50/50	5.4571
315244	1Z1-086 ST	9.4865	50/50	9.4865
316087	AB2-174 C	0.8080	50/50	0.8080
316088	AB2-174 E	4.6337	50/50	4.6337
316096	AB2-100 C1	0.8297	50/50	0.8297
316097	AB2-100 E1	2.5902	50/50	2.5902
316098	AB2-100 C2	0.8297	50/50	0.8297
316099	AB2-100 E2	2.5902	50/50	2.5902
316118	AC1-105 C	1.9774	Adder	2.33
316129	AC1-054 C	3.2170	Adder	3.78
316140	AB2-099 C (Suspended)	0.2094	Adder	0.25
316141	AB2-099 E (Suspended)	0.0897	Adder	0.11
900672	V4-068 E	0.1043	Adder	0.12
917332	Z2-043 E	0.4044	Adder	0.48
917342	Z2-044 E	0.2448	Adder	0.29
917512	Z2-088 E OP1	3.0954	Adder	3.64
918492	AA1-063AE OP	1.7391	Adder	2.05
918512	AA1-065 E OP	1.3507	Adder	1.59
918532	AA1-067 E	0.2589	Adder	0.3
919692	AA2-053 E OP	1.7503	Adder	2.06
919702	AA2-057 E OP	1.4587	Adder	1.72
920042	AA2-088 E OP	3.5188	Adder	4.14
920592	AA2-165 E	0.2005	Adder	0.24
922923	AB1-081 E OP	1.6067	Adder	1.89

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923262	AB1-132 C OP (Suspended)	9.4055	50/50	9.4055
923263	AB1-132 E OP (Suspended)	4.0309	50/50	4.0309
923573	AB1-173 E OP	0.7405	50/50	0.7405
923852	AB2-025 E	1.2874	50/50	1.2874
923991	AB2-040 C O1	5.1718	50/50	5.1718
923992	AB2-040 E O1	4.2314	50/50	4.2314
924022	AB2-043 E O1	1.0525	Adder	1.24
924152	AB2-059 E OP	2.2762	Adder	2.68
924162	AB2-060 E OP	1.5783	Adder	1.86
924301	AB2-077 C O1 (Suspended)	0.7468	Adder	0.88
924302	AB2-077 E O1 (Suspended)	0.4979	Adder	0.59
924311	AB2-078 C O1 (Suspended)	0.7468	Adder	0.88
924312	AB2-078 E O1 (Suspended)	0.4979	Adder	0.59
924321	AB2-079 C O1 (Suspended)	0.7468	Adder	0.88
924322	AB2-079 E O1 (Suspended)	0.4979	Adder	0.59
925591	AC1-034 C	2.8619	Adder	3.37
925592	AC1-034 E	2.1590	Adder	2.54
925785	AC1-054 E	1.4820	Adder	1.74
926070	AC1-086 C	13.8507	50/50	13.8507
926071	AC1-086 E	6.3039	50/50	6.3039
926201	AC1-098 C	2.5766	Adder	3.03
926202	AC1-098 E	1.5350	Adder	1.81
926211	AC1-099 C	0.8634	Adder	1.02
926212	AC1-099 E	0.5071	Adder	0.6
926274	AC1-105 E	0.9715	Adder	1.14
927024	AC1-189 C	3.2477	Adder	3.82
927025	AC1-189 E	1.6177	Adder	1.9
927145	AC1-208 C	3.9843	Adder	4.69
927146	AC1-208 E	1.7620	Adder	2.07
932631	AC2-084 C	3.6730	Adder	4.32
932632	AC2-084 E	1.8091	Adder	2.13
934331	AD1-057 C O1	4.8775	Adder	5.74
934332	AD1-057 E O1	2.6019	Adder	3.06
934615	AD1-087 C	2.9073	Adder	3.42
934616	AD1-087 E	1.2441	Adder	1.46
935171	AD1-152 C O1	3.1934	Adder	3.76
935172	AD1-152 E O1	2.1289	Adder	2.5
936265	AD2-033 C	4.3009	Adder	5.06
936266	AD2-033 E	2.8673	Adder	3.37
936361	AD2-046 C O1	3.5308	Adder	4.15
936362	AD2-046 E O1	1.6236	Adder	1.91
936401	AD2-051 C O1	3.0038	Adder	3.53
936402	AD2-051 E O1	1.2898	Adder	1.52
936485	AD2-063 C	5.2992	Adder	6.23
936486	AD2-063 E	3.5328	Adder	4.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936761	AD2-097 C	-0.6942	Adder	-0.82
936762	AD2-097 E	-3.4712	Adder	-4.08
937481	AD2-202 C O1	0.8516	Adder	1.0
937482	AD2-202 E O1	0.4790	Adder	0.56
938222	AE1-035 E	0.3714	Adder	0.44
938494	AE1-068_C1	16.3608	50/50	16.3608
938497	AE1-068_C2	16.3608	50/50	16.3608
938498	AE1-068_E1	9.0442	50/50	9.0442
938499	AE1-068_E2	9.0442	50/50	9.0442
938504	AE1-069_C1	12.4688	50/50	12.4688
938507	AE1-069_C2	13.4443	50/50	13.4443
938508	AE1-069_E1	7.0931	50/50	7.0931
938509	AE1-069_E2	7.6418	50/50	7.6418
939181	AE1-148 C	3.4742	Adder	4.09
939182	AE1-148 E	2.3161	Adder	2.72
939414	AE1-173_C1	10.8599	Adder	12.78
939415	AE1-173_C2	9.3085	Adder	10.95
939416	AE1-173_C3	10.8599	Adder	12.78
939423	AE1-173_E1	7.2400	Adder	8.52
939424	AE1-173_E2	6.2057	Adder	7.3
939425	AE1-173_E3	7.2400	Adder	8.52
940471	AE2-031 C	17.8211	50/50	17.8211
940472	AE2-031 E	11.8807	50/50	11.8807
940481	AE2-033 C	17.8899	50/50	17.8899
940482	AE2-033 E	12.0606	50/50	12.0606
940541	AE2-040	3.2601	50/50	3.2601
940571	AE2-044 C	1.8745	Adder	2.21
940572	AE2-044 E	0.8034	Adder	0.95
940661	AE2-053_O1	1.2867	Adder	1.51
941031	AE2-094 C	21.4701	50/50	21.4701
941032	AE2-094 E	9.6159	50/50	9.6159
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2105	Adder	0.25
942161	AE2-228 C	-1.6624	Adder	-1.96
942451	AE2-258	0.8781	Adder	1.03
942471	AE2-260 C O1	13.4478	50/50	13.4478
942472	AE2-260 E O1	19.0742	50/50	19.0742
942931	AE2-313 C	19.2639	50/50	19.2639
942932	AE2-313 E	12.8426	50/50	12.8426
943171	AE2-346 C	0.5025	Adder	0.59
943172	AE2-346 E	0.2154	Adder	0.25
943901	AF1-058 C	0.6723	Adder	0.79
943902	AF1-058 E	0.4482	Adder	0.53
943911	AF1-059	9.9815	50/50	9.9815
944011	AF1-069 C	7.0151	50/50	7.0151
944012	AF1-069 E	2.7252	50/50	2.7252
944141	AF1-082	1.2050	Adder	1.42
945811	AF1-246 C O1	3.0477	Adder	3.59
945812	AF1-246 E O1	4.2087	Adder	4.95
946011	AF1-266	14.9752	50/50	14.9752
946261	AF1-291 C	-1.0134	Adder	-1.19
946281	AF1-292 C	1.1961	50/50	1.1961

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946282	AF1-292 E	0.8063	50/50	0.8063
957481	AF2-042 C	21.7693	Adder	25.61
957482	AF2-042 E	14.5129	Adder	17.07
957521	AF2-046 C	5.8965	Adder	6.94
957522	AF2-046 E	2.9660	Adder	3.49
957861	AF2-080 C	2.9496	Adder	3.47
957862	AF2-080 E	1.3076	Adder	1.54
958142	AF2-108 BAT	2.9401	50/50	2.9401
959511	AF2-242 C	2.4159	Adder	2.84
959512	AF2-242 E	1.8790	Adder	2.21
959651	AF2-256 C	-0.4156	Adder	-0.49
959751	AF2-266	3.3303	Adder	3.92
960061	AF2-297 C	2.6891	Adder	3.16
960062	AF2-297 E	1.7928	Adder	2.11
960081	AF2-299 C	2.0159	50/50	2.0159
960082	AF2-299 E	1.3439	50/50	1.3439
961671	AG1-007 C	0.2597	Adder	0.58
961672	AG1-007 E	0.1451	Adder	0.32
961681	AG1-008 C	3.1314	Adder	6.95
961682	AG1-008 E	1.5657	Adder	3.48
961931	AG1-036 C	0.2554	Adder	0.57
961932	AG1-036 E	0.1702	Adder	0.38
961941	AG1-037 C	0.0951	Adder	0.21
961942	AG1-037 E	0.0634	Adder	0.14
962271	AG1-075 C O2	18.7341	50/50	18.7341
962272	AG1-075 E O2	11.4174	50/50	11.4174
962331	AG1-082 C	0.3805	Adder	0.84
962332	AG1-082 E	0.2536	Adder	0.56
962341	AG1-083 C	0.3805	Adder	0.84
962342	AG1-083 E	0.2536	Adder	0.56
962351	AG1-084 C	0.3346	Adder	0.74
962352	AG1-084 E	0.2231	Adder	0.5
962361	AG1-085 C	0.3346	Adder	0.74
962362	AG1-085 E	0.2231	Adder	0.5
962441	AG1-093 C O2	3.0521	Adder	6.77
962442	AG1-093 E O2	0.9289	Adder	2.06
962491	AG1-098 C O2	2.4063	Adder	5.34
962492	AG1-098 E O2	1.6042	Adder	3.56
962561	AG1-105 C O2	1.8824	Adder	4.18
962562	AG1-105 E O2	1.2549	Adder	2.79
962571	AG1-106 C	3.8518	50/50	3.8518
962572	AG1-106 E	1.7467	50/50	1.7467
963041	AG1-153 C	1.3392	Adder	2.97
963042	AG1-153 E	2.0088	Adder	4.46
963111	AG1-160 C	3.0165	50/50	3.0165
963112	AG1-160 E	4.5248	50/50	4.5248
963291	AG1-178 C O2	14.0340	Adder	31.15
963301	AG1-179 C	3.7453	50/50	3.7453
963311	AG1-180	1.8248	50/50	1.8248
963321	AG1-181 C O2	2.9060	Adder	6.45
963351	AG1-184 O2	7.5607	Adder	16.78
963361	AG1-185 O2	1.4060	Adder	3.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964241	AG1-285 C O2	2.9361	Adder	6.52
964242	AG1-285 E O2	1.9574	Adder	4.34
964261	AG1-287 C	0.2672	Adder	0.59
964262	AG1-287 E	0.1782	Adder	0.4
964491	AG1-312 C O1	3.2796	Adder	7.28
964492	AG1-312 E O1	0.8199	Adder	1.82
964501	AG1-313 C O2	1.0656	Adder	2.37
964502	AG1-313 E O2	0.7104	Adder	1.58
964791	AG1-342 C	0.7829	Adder	1.74
964792	AG1-342 E	0.6151	Adder	1.37
964801	AG1-343 C	1.0845	Adder	2.41
964802	AG1-343 E	0.8521	Adder	1.89
964931	AG1-357 C O2	3.7523	Adder	8.33
964932	AG1-357 E O2	2.5015	Adder	5.55
965291	AG1-394 C	0.3712	Adder	0.82
965292	AG1-394 E	0.2475	Adder	0.55
965451	AG1-413 C O2	1.8465	Adder	4.1
965452	AG1-413 E O2	1.2310	Adder	2.73
965591	AG1-427 C	2.2498	Adder	4.99
965592	AG1-427 E	1.5030	Adder	3.34
965601	AG1-428 C O2	3.1267	50/50	3.1267
965602	AG1-428 E O2	2.0807	50/50	2.0807
965711	AG1-439 C O1	4.9614	Adder	11.01
965712	AG1-439 E O1	3.3076	Adder	7.34
965721	AG1-440 C	1.6117	Adder	3.58
965722	AG1-440 E	1.0744	Adder	2.38
965731	AG1-441 C	1.6117	Adder	3.58
965732	AG1-441 E	1.0744	Adder	2.38
965761	AG1-444 O1	2.6461	Adder	5.87
965771	AG1-445	0.9312	Adder	2.07
965781	AG1-446	0.9312	Adder	2.07
965811	AG1-449	12.4952	50/50	12.4952
966361	AG1-505 C	3.9008	Adder	8.66
966362	AG1-505 E	2.6006	Adder	5.77
966371	AG1-506 C	3.9008	Adder	8.66
966372	AG1-506 E	2.6006	Adder	5.77
966621	AG1-532 C	1.0886	50/50	1.0886
966622	AG1-532 E	0.7257	50/50	0.7257
966751	AG1-546 C	3.7913	Adder	8.42
966752	AG1-546 E	2.0343	Adder	4.52
966801	AG1-551 C	0.4118	Adder	0.91
966802	AG1-551 E	0.1765	Adder	0.39
966811	AG1-552 C	0.5452	Adder	1.21
966812	AG1-552 E	0.2337	Adder	0.52
WEC	WEC	0.3670	Confirmed LTF	0.3670
LGEE	LGEE	0.7552	Confirmed LTF	0.7552
CPL	CPL	3.8575	Confirmed LTF	3.8575
CBM-W2	CBM-W2	16.1818	Confirmed LTF	16.1818
NY	NY	0.5253	Confirmed LTF	0.5253
TVA	TVA	3.0590	Confirmed LTF	3.0590
O-066	O-066	7.3895	Confirmed LTF	7.3895
SIGE	SIGE	0.2502	Confirmed LTF	0.2502

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	45.9778	Confirmed LTF	45.9778
CBM-S1	CBM-S1	0.7623	Confirmed LTF	0.7623
G-007	G-007	1.1624	Confirmed LTF	1.1624
MEC	MEC	2.2039	Confirmed LTF	2.2039
LAGN	LAGN	3.8028	Confirmed LTF	3.8028
AA2-074	AA2-074	2.5479	LTF	2.5479
CBM-W1	CBM-W1	15.3519	Confirmed LTF	15.3519

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173793499	314285	6CHRL249	DVP	314316	6LOCKS	DVP	1	DVP_P4-2: 562T563	breaker	684.0	181.74	182.32	DC	8.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	4.7486	50/50	4.7486
314331	6POE	0.8146	Adder	0.96
314435	6SAPONY	0.4521	50/50	0.4521
314572	3EMPORIA	0.3240	50/50	0.3240
314704	3LAWRENC	0.2021	50/50	0.2021
315073	1STONECA	-2.4134	Adder	-2.84
315131	1EDGECEMA (Deactivation : 22/04/2019)	3.8982	Adder	4.59
315132	1EDGECEMB (Deactivation : 22/04/2019)	3.8982	Adder	4.59
315136	1ROSEMG1	1.3048	50/50	1.3048
315137	1ROSEMS1	0.8091	50/50	0.8091
315138	1ROSEMG2	0.6115	50/50	0.6115
315139	1GASTONA	1.9432	50/50	1.9432
315141	1GASTONB	1.9432	50/50	1.9432
315241	1Z1-086 GT1	5.4571	50/50	5.4571
315242	1Z1-086 GT2	5.4571	50/50	5.4571
315243	1Z1-086 GT3	5.4571	50/50	5.4571
315244	1Z1-086 ST	9.4865	50/50	9.4865
316087	AB2-174 C	0.8080	50/50	0.8080
316088	AB2-174 E	4.6337	50/50	4.6337
316096	AB2-100 C1	0.8297	50/50	0.8297
316097	AB2-100 E1	2.5902	50/50	2.5902
316098	AB2-100 C2	0.8297	50/50	0.8297
316099	AB2-100 E2	2.5902	50/50	2.5902
316118	AC1-105 C	1.9774	Adder	2.33
316129	AC1-054 C	3.2170	Adder	3.78
316140	AB2-099 C (Suspended)	0.2094	Adder	0.25
316141	AB2-099 E (Suspended)	0.0897	Adder	0.11
900672	V4-068 E	0.1043	Adder	0.12
917332	Z2-043 E	0.4044	Adder	0.48
917342	Z2-044 E	0.2448	Adder	0.29
917512	Z2-088 E OP1	3.0954	Adder	3.64
918492	AA1-063AE OP	1.7391	Adder	2.05
918512	AA1-065 E OP	1.3507	Adder	1.59
918532	AA1-067 E	0.2589	Adder	0.3
919692	AA2-053 E OP	1.7503	Adder	2.06
919702	AA2-057 E OP	1.4587	Adder	1.72
920042	AA2-088 E OP	3.5188	Adder	4.14
920592	AA2-165 E	0.2005	Adder	0.24
922923	AB1-081 E OP	1.6067	Adder	1.89

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923262	AB1-132 C OP (Suspended)	9.4055	50/50	9.4055
923263	AB1-132 E OP (Suspended)	4.0309	50/50	4.0309
923573	AB1-173 E OP	0.7405	50/50	0.7405
923852	AB2-025 E	1.2874	50/50	1.2874
923991	AB2-040 C O1	5.1718	50/50	5.1718
923992	AB2-040 E O1	4.2314	50/50	4.2314
924022	AB2-043 E O1	1.0525	Adder	1.24
924152	AB2-059 E OP	2.2762	Adder	2.68
924162	AB2-060 E OP	1.5783	Adder	1.86
924301	AB2-077 C O1 (Suspended)	0.7468	Adder	0.88
924302	AB2-077 E O1 (Suspended)	0.4979	Adder	0.59
924311	AB2-078 C O1 (Suspended)	0.7468	Adder	0.88
924312	AB2-078 E O1 (Suspended)	0.4979	Adder	0.59
924321	AB2-079 C O1 (Suspended)	0.7468	Adder	0.88
924322	AB2-079 E O1 (Suspended)	0.4979	Adder	0.59
925591	AC1-034 C	2.8619	Adder	3.37
925592	AC1-034 E	2.1590	Adder	2.54
925785	AC1-054 E	1.4820	Adder	1.74
926070	AC1-086 C	13.8507	50/50	13.8507
926071	AC1-086 E	6.3039	50/50	6.3039
926201	AC1-098 C	2.5766	Adder	3.03
926202	AC1-098 E	1.5350	Adder	1.81
926211	AC1-099 C	0.8634	Adder	1.02
926212	AC1-099 E	0.5071	Adder	0.6
926274	AC1-105 E	0.9715	Adder	1.14
927024	AC1-189 C	3.2477	Adder	3.82
927025	AC1-189 E	1.6177	Adder	1.9
927145	AC1-208 C	3.9843	Adder	4.69
927146	AC1-208 E	1.7620	Adder	2.07
932631	AC2-084 C	3.6730	Adder	4.32
932632	AC2-084 E	1.8091	Adder	2.13
934331	AD1-057 C O1	4.8775	Adder	5.74
934332	AD1-057 E O1	2.6019	Adder	3.06
934615	AD1-087 C	2.9073	Adder	3.42
934616	AD1-087 E	1.2441	Adder	1.46
935171	AD1-152 C O1	3.1934	Adder	3.76
935172	AD1-152 E O1	2.1289	Adder	2.5
936265	AD2-033 C	4.3009	Adder	5.06
936266	AD2-033 E	2.8673	Adder	3.37
936361	AD2-046 C O1	3.5308	Adder	4.15
936362	AD2-046 E O1	1.6236	Adder	1.91
936401	AD2-051 C O1	3.0038	Adder	3.53
936402	AD2-051 E O1	1.2898	Adder	1.52
936485	AD2-063 C	5.2992	Adder	6.23
936486	AD2-063 E	3.5328	Adder	4.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936761	AD2-097 C	-0.6942	Adder	-0.82
936762	AD2-097 E	-3.4712	Adder	-4.08
937481	AD2-202 C O1	0.8516	Adder	1.0
937482	AD2-202 E O1	0.4790	Adder	0.56
938222	AE1-035 E	0.3714	Adder	0.44
938494	AE1-068_C1	16.3608	50/50	16.3608
938497	AE1-068_C2	16.3608	50/50	16.3608
938498	AE1-068_E1	9.0442	50/50	9.0442
938499	AE1-068_E2	9.0442	50/50	9.0442
938504	AE1-069_C1	12.4688	50/50	12.4688
938507	AE1-069_C2	13.4443	50/50	13.4443
938508	AE1-069_E1	7.0931	50/50	7.0931
938509	AE1-069_E2	7.6418	50/50	7.6418
939181	AE1-148 C	3.4742	Adder	4.09
939182	AE1-148 E	2.3161	Adder	2.72
939414	AE1-173_C1	10.8599	Adder	12.78
939415	AE1-173_C2	9.3085	Adder	10.95
939416	AE1-173_C3	10.8599	Adder	12.78
939423	AE1-173_E1	7.2400	Adder	8.52
939424	AE1-173_E2	6.2057	Adder	7.3
939425	AE1-173_E3	7.2400	Adder	8.52
940471	AE2-031 C	17.8211	50/50	17.8211
940472	AE2-031 E	11.8807	50/50	11.8807
940481	AE2-033 C	17.8899	50/50	17.8899
940482	AE2-033 E	12.0606	50/50	12.0606
940541	AE2-040	3.2601	50/50	3.2601
940571	AE2-044 C	1.8745	Adder	2.21
940572	AE2-044 E	0.8034	Adder	0.95
940661	AE2-053_O1	1.2867	Adder	1.51
941031	AE2-094 C	21.4701	50/50	21.4701
941032	AE2-094 E	9.6159	50/50	9.6159
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2105	Adder	0.25
942161	AE2-228 C	-1.6624	Adder	-1.96
942451	AE2-258	0.8781	Adder	1.03
942471	AE2-260 C O1	13.4478	50/50	13.4478
942472	AE2-260 E O1	19.0742	50/50	19.0742
942931	AE2-313 C	19.2639	50/50	19.2639
942932	AE2-313 E	12.8426	50/50	12.8426
943171	AE2-346 C	0.5025	Adder	0.59
943172	AE2-346 E	0.2154	Adder	0.25
943901	AF1-058 C	0.6723	Adder	0.79
943902	AF1-058 E	0.4482	Adder	0.53
943911	AF1-059	9.9815	50/50	9.9815
944011	AF1-069 C	7.0151	50/50	7.0151
944012	AF1-069 E	2.7252	50/50	2.7252
944141	AF1-082	1.2050	Adder	1.42
945811	AF1-246 C O1	3.0477	Adder	3.59
945812	AF1-246 E O1	4.2087	Adder	4.95
946011	AF1-266	14.9752	50/50	14.9752
946261	AF1-291 C	-1.0134	Adder	-1.19
946281	AF1-292 C	1.1961	50/50	1.1961

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946282	AF1-292 E	0.8063	50/50	0.8063
957481	AF2-042 C	21.7693	Adder	25.61
957482	AF2-042 E	14.5129	Adder	17.07
957521	AF2-046 C	5.8965	Adder	6.94
957522	AF2-046 E	2.9660	Adder	3.49
957861	AF2-080 C	2.9496	Adder	3.47
957862	AF2-080 E	1.3076	Adder	1.54
958142	AF2-108 BAT	2.9401	50/50	2.9401
959511	AF2-242 C	2.4159	Adder	2.84
959512	AF2-242 E	1.8790	Adder	2.21
959651	AF2-256 C	-0.4156	Adder	-0.49
959751	AF2-266	3.3303	Adder	3.92
960061	AF2-297 C	2.6891	Adder	3.16
960062	AF2-297 E	1.7928	Adder	2.11
960081	AF2-299 C	2.0159	50/50	2.0159
960082	AF2-299 E	1.3439	50/50	1.3439
961671	AG1-007 C	0.2597	Adder	0.58
961672	AG1-007 E	0.1451	Adder	0.32
961681	AG1-008 C	3.1314	Adder	6.95
961682	AG1-008 E	1.5657	Adder	3.48
961931	AG1-036 C	0.2554	Adder	0.57
961932	AG1-036 E	0.1702	Adder	0.38
961941	AG1-037 C	0.0951	Adder	0.21
961942	AG1-037 E	0.0634	Adder	0.14
962271	AG1-075 C O2	18.7341	50/50	18.7341
962272	AG1-075 E O2	11.4174	50/50	11.4174
962331	AG1-082 C	0.3805	Adder	0.84
962332	AG1-082 E	0.2536	Adder	0.56
962341	AG1-083 C	0.3805	Adder	0.84
962342	AG1-083 E	0.2536	Adder	0.56
962351	AG1-084 C	0.3346	Adder	0.74
962352	AG1-084 E	0.2231	Adder	0.5
962361	AG1-085 C	0.3346	Adder	0.74
962362	AG1-085 E	0.2231	Adder	0.5
962441	AG1-093 C O2	3.0521	Adder	6.77
962442	AG1-093 E O2	0.9289	Adder	2.06
962491	AG1-098 C O2	2.4063	Adder	5.34
962492	AG1-098 E O2	1.6042	Adder	3.56
962561	AG1-105 C O2	1.8824	Adder	4.18
962562	AG1-105 E O2	1.2549	Adder	2.79
962571	AG1-106 C	3.8518	50/50	3.8518
962572	AG1-106 E	1.7467	50/50	1.7467
963041	AG1-153 C	1.3392	Adder	2.97
963042	AG1-153 E	2.0088	Adder	4.46
963111	AG1-160 C	3.0165	50/50	3.0165
963112	AG1-160 E	4.5248	50/50	4.5248
963291	AG1-178 C O2	14.0340	Adder	31.15
963301	AG1-179 C	3.7453	50/50	3.7453
963311	AG1-180	1.8248	50/50	1.8248
963321	AG1-181 C O2	2.9060	Adder	6.45
963351	AG1-184 O2	7.5607	Adder	16.78
963361	AG1-185 O2	1.4060	Adder	3.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964241	AG1-285 C O2	2.9361	Adder	6.52
964242	AG1-285 E O2	1.9574	Adder	4.34
964261	AG1-287 C	0.2672	Adder	0.59
964262	AG1-287 E	0.1782	Adder	0.4
964491	AG1-312 C O1	3.2796	Adder	7.28
964492	AG1-312 E O1	0.8199	Adder	1.82
964501	AG1-313 C O2	1.0656	Adder	2.37
964502	AG1-313 E O2	0.7104	Adder	1.58
964791	AG1-342 C	0.7829	Adder	1.74
964792	AG1-342 E	0.6151	Adder	1.37
964801	AG1-343 C	1.0845	Adder	2.41
964802	AG1-343 E	0.8521	Adder	1.89
964931	AG1-357 C O2	3.7523	Adder	8.33
964932	AG1-357 E O2	2.5015	Adder	5.55
965291	AG1-394 C	0.3712	Adder	0.82
965292	AG1-394 E	0.2475	Adder	0.55
965451	AG1-413 C O2	1.8465	Adder	4.1
965452	AG1-413 E O2	1.2310	Adder	2.73
965591	AG1-427 C	2.2498	Adder	4.99
965592	AG1-427 E	1.5030	Adder	3.34
965601	AG1-428 C O2	3.1267	50/50	3.1267
965602	AG1-428 E O2	2.0807	50/50	2.0807
965711	AG1-439 C O1	4.9614	Adder	11.01
965712	AG1-439 E O1	3.3076	Adder	7.34
965721	AG1-440 C	1.6117	Adder	3.58
965722	AG1-440 E	1.0744	Adder	2.38
965731	AG1-441 C	1.6117	Adder	3.58
965732	AG1-441 E	1.0744	Adder	2.38
965761	AG1-444 O1	2.6461	Adder	5.87
965771	AG1-445	0.9312	Adder	2.07
965781	AG1-446	0.9312	Adder	2.07
965811	AG1-449	12.4952	50/50	12.4952
966361	AG1-505 C	3.9008	Adder	8.66
966362	AG1-505 E	2.6006	Adder	5.77
966371	AG1-506 C	3.9008	Adder	8.66
966372	AG1-506 E	2.6006	Adder	5.77
966621	AG1-532 C	1.0886	50/50	1.0886
966622	AG1-532 E	0.7257	50/50	0.7257
966751	AG1-546 C	3.7913	Adder	8.42
966752	AG1-546 E	2.0343	Adder	4.52
966801	AG1-551 C	0.4118	Adder	0.91
966802	AG1-551 E	0.1765	Adder	0.39
966811	AG1-552 C	0.5452	Adder	1.21
966812	AG1-552 E	0.2337	Adder	0.52
WEC	WEC	0.3670	Confirmed LTF	0.3670
LGEE	LGEE	0.7552	Confirmed LTF	0.7552
CPL	CPL	3.8575	Confirmed LTF	3.8575
CBM-W2	CBM-W2	16.1818	Confirmed LTF	16.1818
NY	NY	0.5253	Confirmed LTF	0.5253
TVA	TVA	3.0590	Confirmed LTF	3.0590
O-066	O-066	7.3895	Confirmed LTF	7.3895
SIGE	SIGE	0.2502	Confirmed LTF	0.2502

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	45.9778	Confirmed LTF	45.9778
CBM-S1	CBM-S1	0.7623	Confirmed LTF	0.7623
G-007	G-007	1.1624	Confirmed LTF	1.1624
MEC	MEC	2.2039	Confirmed LTF	2.2039
LAGN	LAGN	3.8028	Confirmed LTF	3.8028
AA2-074	AA2-074	2.5479	LTF	2.5479
CBM-W1	CBM-W1	15.3519	Confirmed LTF	15.3519

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174377751	314299	6HARROWG	DVP	314263	6TYLER1	DVP	1	DVP_P4-2: 562T563	breaker	541.0	164.23	164.77	DC	6.54

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.0164	Adder	3.55
314331	6POE	4.8056	50/50	4.8056
314435	6SAPONY	0.3169	50/50	0.3169
314539	3UNCAMP	1.8472	Adder	2.17
314541	3WATKINS	0.2148	Adder	0.25
314572	3EMPORIA	0.2022	Adder	0.24
315073	1STONECA	-1.6562	Adder	-1.95
315131	1EDGECEMA (Deactivation : 22/04/2019)	2.9950	Adder	3.52
315132	1EDGECEMB (Deactivation : 22/04/2019)	2.9950	Adder	3.52
316083	AB2-161 C	3.6022	50/50	3.6022
316084	AB2-161 E	5.8773	50/50	5.8773
316088	AB2-174 E	2.9238	Adder	3.44
316096	AB2-100 C1	0.5969	50/50	0.5969
316097	AB2-100 E1	1.8635	50/50	1.8635
316098	AB2-100 C2	0.5969	50/50	0.5969
316099	AB2-100 E2	1.8635	50/50	1.8635
316103	AB2-015 C	2.6660	Adder	3.14
316104	AB2-015 E	2.1861	Adder	2.57
316118	AC1-105 C	1.4709	Adder	1.73
316129	AC1-054 C	2.4696	Adder	2.91
316140	AB2-099 C (Suspended)	0.1806	Adder	0.21
316141	AB2-099 E (Suspended)	0.0774	Adder	0.09
900672	V4-068 E	0.0962	Adder	0.11
917332	Z2-043 E	0.3333	Adder	0.39
917342	Z2-044 E	0.1897	Adder	0.22
917512	Z2-088 E OP1	2.4377	Adder	2.87
918492	AA1-063AE OP	1.4543	Adder	1.71
918512	AA1-065 E OP	1.1457	Adder	1.35
918532	AA1-067 E	0.2097	Adder	0.25
919692	AA2-053 E OP	1.3787	Adder	1.62
919702	AA2-057 E OP	1.1362	Adder	1.34
920042	AA2-088 E OP	3.4540	Adder	4.06
920592	AA2-165 E	0.1562	Adder	0.18
922923	AB1-081 E OP	1.2371	Adder	1.46
923262	AB1-132 C OP (Suspended)	6.0026	Adder	7.06
923263	AB1-132 E OP (Suspended)	2.5725	Adder	3.03
923573	AB1-173 E OP	0.4704	Adder	0.55
923852	AB2-025 E	0.9025	50/50	0.9025

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923991	AB2-040 C O1	3.2852	Adder	3.86
923992	AB2-040 E O1	2.6879	Adder	3.16
924022	AB2-043 E O1	0.7846	Adder	0.92
924152	AB2-059 E OP	1.7525	Adder	2.06
924162	AB2-060 E OP	1.1761	Adder	1.38
924301	AB2-077 C O1 (Suspended)	0.5570	Adder	0.66
924302	AB2-077 E O1 (Suspended)	0.3713	Adder	0.44
924311	AB2-078 C O1 (Suspended)	0.5570	Adder	0.66
924312	AB2-078 E O1 (Suspended)	0.3713	Adder	0.44
924321	AB2-079 C O1 (Suspended)	0.5570	Adder	0.66
924322	AB2-079 E O1 (Suspended)	0.3713	Adder	0.44
925122	AB2-169 E	1.5324	Adder	1.8
925591	AC1-034 C	2.2035	Adder	2.59
925592	AC1-034 E	1.6623	Adder	1.96
925785	AC1-054 E	1.1377	Adder	1.34
926070	AC1-086 C	8.8395	Adder	10.4
926071	AC1-086 E	4.0232	Adder	4.73
926201	AC1-098 C	2.0490	Adder	2.41
926202	AC1-098 E	1.2207	Adder	1.44
926211	AC1-099 C	0.6866	Adder	0.81
926212	AC1-099 E	0.4033	Adder	0.47
926274	AC1-105 E	0.7227	Adder	0.85
927024	AC1-189 C	2.5800	Adder	3.04
927025	AC1-189 E	1.2852	Adder	1.51
927145	AC1-208 C	3.1230	Adder	3.67
927146	AC1-208 E	1.3811	Adder	1.62
932581	AC2-078 C O1	4.4189	50/50	4.4189
932582	AC2-078 E O1	7.2097	50/50	7.2097
932591	AC2-079 C O1	4.1509	50/50	4.1509
932592	AC2-079 E O1	6.7725	50/50	6.7725
932631	AC2-084 C	2.9209	Adder	3.44
932632	AC2-084 E	1.4386	Adder	1.69
933991	AD1-023 C	3.3267	Adder	3.91
933992	AD1-023 E	1.8111	Adder	2.13
934331	AD1-057 C O1	3.7015	Adder	4.35
934332	AD1-057 E O1	1.9746	Adder	2.32
934575	AD1-082 C	8.2092	50/50	8.2092
934576	AD1-082 E	4.6829	50/50	4.6829
934615	AD1-087 C	2.1462	Adder	2.52
934616	AD1-087 E	0.9184	Adder	1.08
935171	AD1-152 C O1	2.3574	Adder	2.77
935172	AD1-152 E O1	1.5716	Adder	1.85
936361	AD2-046 C O1	2.6648	Adder	3.14
936362	AD2-046 E O1	1.2254	Adder	1.44
936401	AD2-051 C O1	2.5352	Adder	2.98
936402	AD2-051 E O1	1.0886	Adder	1.28
936485	AD2-063 C	3.9436	Adder	4.64

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936486	AD2-063 E	2.6291	Adder	3.09
936661	AD2-085 C	1.6231	Adder	1.91
936662	AD2-085 E	2.6482	Adder	3.12
936761	AD2-097 C	-0.5997	Adder	-0.71
936762	AD2-097 E	-2.9985	Adder	-3.53
937481	AD2-202 C O1	0.6286	Adder	0.74
937482	AD2-202 E O1	0.3536	Adder	0.42
938222	AE1-035 E	0.3151	Adder	0.37
938494	AE1-068 C1	10.2514	Adder	12.06
938497	AE1-068 C2	10.2514	Adder	12.06
938498	AE1-068 E1	5.6669	Adder	6.67
938499	AE1-068 E2	5.6669	Adder	6.67
938504	AE1-069 C1	7.8127	Adder	9.19
938507	AE1-069 C2	8.4240	Adder	9.91
938508	AE1-069 E1	4.4444	Adder	5.23
938509	AE1-069 E2	4.7882	Adder	5.63
938634	AE1-085 C	9.8700	50/50	9.8700
938635	AE1-085 E	4.9350	50/50	4.9350
938771	AE1-103 C	1.0955	Adder	1.29
938772	AE1-103 E	1.5128	Adder	1.78
939181	AE1-148 C	2.6209	Adder	3.08
939182	AE1-148 E	1.7473	Adder	2.06
939195	AE1-149 C	12.9252	50/50	12.9252
939196	AE1-149 E	8.6168	50/50	8.6168
939414	AE1-173 C1	8.5009	Adder	10.0
939415	AE1-173 C2	7.2865	Adder	8.57
939416	AE1-173 C3	8.5009	Adder	10.0
939423	AE1-173 E1	5.6673	Adder	6.67
939424	AE1-173 E2	4.8576	Adder	5.71
939425	AE1-173 E3	5.6673	Adder	6.67
940061	AE2-000BC O1	10.9500	50/50	10.9500
940062	AE2-000BE O1	7.3000	50/50	7.3000
940471	AE2-031 C	11.1620	Adder	13.13
940472	AE2-031 E	7.4413	Adder	8.75
940481	AE2-033 C	12.5748	50/50	12.5748
940482	AE2-033 E	8.4774	50/50	8.4774
940541	AE2-040	2.2854	50/50	2.2854
940571	AE2-044 C	1.4432	Adder	1.7
940572	AE2-044 E	0.6185	Adder	0.73
940651	AE2-052	4.3084	50/50	4.3084
940661	AE2-053 O1	0.9707	Adder	1.14
941031	AE2-094 C	13.4468	Adder	15.82
941032	AE2-094 E	6.0225	Adder	7.09
941101	AE2-104 C O1	0.9308	Adder	1.1
941102	AE2-104 E O1	1.4799	Adder	1.74
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.1775	Adder	0.21
942161	AE2-228 C	-1.0818	Adder	-1.27
942341	AE2-247 C	0.7076	Adder	0.83
942342	AE2-247 E	0.9772	Adder	1.15
942451	AE2-258	0.6546	Adder	0.77
942471	AE2-260 C O1	9.6379	50/50	9.6379

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942472	AE2-260 E O1	13.6701	50/50	13.6701
942931	AE2-313 C	12.0649	Adder	14.19
942932	AE2-313 E	8.0433	Adder	9.46
943171	AE2-346 C	0.4335	Adder	0.51
943172	AE2-346 E	0.1858	Adder	0.22
943461	AF1-017 C	0.6403	Adder	0.75
943462	AF1-017 E	1.0446	Adder	1.23
943911	AF1-059	6.2447	Adder	7.35
944011	AF1-069 C	4.3936	Adder	5.17
944012	AF1-069 E	1.7068	Adder	2.01
944141	AF1-082	0.9278	Adder	1.09
945811	AF1-246 C O1	2.2484	Adder	2.65
945812	AF1-246 E O1	3.1049	Adder	3.65
946011	AF1-266	10.5261	50/50	10.5261
946261	AF1-291 C	-1.8432	Adder	-2.17
946281	AF1-292 C	0.7419	Adder	0.87
946282	AF1-292 E	0.5002	Adder	0.59
957481	AF2-042 C	16.0599	Adder	18.89
957482	AF2-042 E	10.7066	Adder	12.6
957521	AF2-046 C	5.3740	Adder	6.32
957522	AF2-046 E	2.7031	Adder	3.18
957861	AF2-080 C	2.3432	Adder	2.76
957862	AF2-080 E	1.0388	Adder	1.22
958161	AF2-110 C	0.3837	Adder	0.45
958162	AF2-110 E	0.6002	Adder	0.71
959511	AF2-242 C	2.0142	Adder	2.37
959512	AF2-242 E	1.5666	Adder	1.84
959651	AF2-256 C	-0.2705	Adder	-0.32
959751	AF2-266	2.4582	Adder	2.89
960081	AF2-299 C	1.2504	Adder	1.47
960082	AF2-299 E	0.8336	Adder	0.98
961091	AF2-400 C	0.1440	Adder	0.17
961092	AF2-400 E	0.2362	Adder	0.28
961671	AG1-007 C	0.2032	Adder	0.45
961672	AG1-007 E	0.1135	Adder	0.25
961681	AG1-008 C	2.8539	Adder	6.33
961682	AG1-008 E	1.4270	Adder	3.17
961851	AG1-027 C	2.5785	Adder	5.72
961852	AG1-027 E	1.4254	Adder	3.16
961931	AG1-036 C	0.2261	Adder	0.5
961932	AG1-036 E	0.1507	Adder	0.33
961941	AG1-037 C	0.0821	Adder	0.18
961942	AG1-037 E	0.0547	Adder	0.12
962271	AG1-075 C O2	13.1682	50/50	13.1682
962272	AG1-075 E O2	8.0253	50/50	8.0253
962331	AG1-082 C	0.3283	Adder	0.73
962332	AG1-082 E	0.2188	Adder	0.49
962341	AG1-083 C	0.3283	Adder	0.73
962342	AG1-083 E	0.2188	Adder	0.49
962351	AG1-084 C	0.2822	Adder	0.63
962352	AG1-084 E	0.1881	Adder	0.42
962361	AG1-085 C	0.2822	Adder	0.63

Bus #	Bus	Gendoliv MW Impact	Type	Full MW Impact
962362	AG1-085 E	0.1881	Adder	0.42
962441	AG1-093 C O2	2.2592	Adder	5.01
962442	AG1-093 E O2	0.6876	Adder	1.53
962491	AG1-098 C O2	1.7924	Adder	3.98
962492	AG1-098 E O2	1.1950	Adder	2.65
962561	AG1-105 C O2	1.4015	Adder	3.11
962562	AG1-105 E O2	0.9343	Adder	2.07
962571	AG1-106 C	1.3028	Adder	2.89
962572	AG1-106 E	0.5908	Adder	1.31
963041	AG1-153 C	0.9877	Adder	2.19
963042	AG1-153 E	1.4815	Adder	3.29
963111	AG1-160 C	1.0020	Adder	2.22
963112	AG1-160 E	1.5030	Adder	3.34
963291	AG1-178 C O2	10.5295	Adder	23.37
963301	AG1-179 C	1.2378	Adder	2.75
963311	AG1-180	0.6031	Adder	1.34
963351	AG1-184 O2	5.6727	Adder	12.59
964241	AG1-285 C O2	2.1658	Adder	4.81
964242	AG1-285 E O2	1.4439	Adder	3.21
964491	AG1-312 C O1	2.7943	Adder	6.2
964492	AG1-312 E O1	0.6986	Adder	1.55
964501	AG1-313 C O2	0.8531	Adder	1.89
964502	AG1-313 E O2	0.5687	Adder	1.26
964791	AG1-342 C	0.5827	Adder	1.29
964792	AG1-342 E	0.4579	Adder	1.02
964801	AG1-343 C	1.0340	Adder	2.3
964802	AG1-343 E	0.8125	Adder	1.8
964931	AG1-357 C O2	2.7927	Adder	6.2
964932	AG1-357 E O2	1.8618	Adder	4.13
965291	AG1-394 C	0.3563	Adder	0.79
965292	AG1-394 E	0.2375	Adder	0.53
965451	AG1-413 C O2	1.3601	Adder	3.02
965452	AG1-413 E O2	0.9067	Adder	2.01
965591	AG1-427 C	1.6752	Adder	3.72
965592	AG1-427 E	1.1192	Adder	2.48
965601	AG1-428 C O2	1.0334	Adder	2.29
965602	AG1-428 E O2	0.6877	Adder	1.53
965691	AG1-437 C O1	1.4056	Adder	3.12
965692	AG1-437 E O1	0.9370	Adder	2.08
965701	AG1-438 C O1	1.4056	Adder	3.12
965702	AG1-438 E O1	0.9370	Adder	2.08
965711	AG1-439 C O1	3.9072	Adder	8.67
965712	AG1-439 E O1	2.6048	Adder	5.78
965721	AG1-440 C	1.2263	Adder	2.72
965722	AG1-440 E	0.8175	Adder	1.81
965731	AG1-441 C	1.2263	Adder	2.72
965732	AG1-441 E	0.8175	Adder	1.81
965741	AG1-442 O1	0.8199	Adder	1.82
965751	AG1-443 O1	0.8199	Adder	1.82
965761	AG1-444 O1	2.0838	Adder	4.63
965771	AG1-445	0.7085	Adder	1.57
965781	AG1-446	0.7085	Adder	1.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965811	AG1-449	4.1479	Adder	9.21
966361	AG1-505 C	2.8759	Adder	6.38
966362	AG1-505 E	1.9172	Adder	4.26
966371	AG1-506 C	2.8759	Adder	6.38
966372	AG1-506 E	1.9172	Adder	4.26
966621	AG1-532 C	0.3579	Adder	0.79
966622	AG1-532 E	0.2386	Adder	0.53
966731	AG1-544 C	7.7085	50/50	7.7085
966732	AG1-544 E	4.1355	50/50	4.1355
966741	AG1-545 C	2.5480	50/50	2.5480
966742	AG1-545 E	1.3660	50/50	1.3660
966751	AG1-546 C	2.9153	Adder	6.47
966752	AG1-546 E	1.5643	Adder	3.47
966801	AG1-551 C	0.3386	Adder	0.75
966802	AG1-551 E	0.1451	Adder	0.32
966811	AG1-552 C	0.4246	Adder	0.94
966812	AG1-552 E	0.1820	Adder	0.4
WEC	WEC	0.2712	Confirmed LTF	0.2712
LGEE	LGEE	0.5586	Confirmed LTF	0.5586
CPL	CPL	2.9081	Confirmed LTF	2.9081
CBM-W2	CBM-W2	12.0512	Confirmed LTF	12.0512
NY	NY	0.4053	Confirmed LTF	0.4053
TVA	TVA	2.2834	Confirmed LTF	2.2834
O-066	O-066	5.6868	Confirmed LTF	5.6868
SIGE	SIGE	0.1887	Confirmed LTF	0.1887
CBM-S2	CBM-S2	34.5460	Confirmed LTF	34.5460
CBM-S1	CBM-S1	0.5685	Confirmed LTF	0.5685
G-007	G-007	0.8946	Confirmed LTF	0.8946
MEC	MEC	1.6351	Confirmed LTF	1.6351
LAGN	LAGN	2.8385	Confirmed LTF	2.8385
AA2-074	AA2-074	1.9206	LTF	1.9206
CBM-W1	CBM-W1	11.3282	Confirmed LTF	11.3282

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977106	314316	6LOCKS	DVP	314301	6HARR205	DVP	1	DVP_P4-2: 562T563	breaker	541.0	158.59	159.17	DC	6.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.1792	Adder	3.74
314314	3LOCKS	0.4088	50/50	0.4088
314331	6POE	0.6059	Adder	0.71
314435	6SAPONY	0.3502	50/50	0.3502
314572	3EMPORIA	0.2540	50/50	0.2540
315073	1STONECA	-2.0671	Adder	-2.43
315131	1EDGECEMA (Deactivation : 22/04/2019)	3.0946	Adder	3.64
315132	1EDGECEMB (Deactivation : 22/04/2019)	3.0946	Adder	3.64
316088	AB2-174 E	3.0969	Adder	3.64
316096	AB2-100 C1	0.6471	50/50	0.6471
316097	AB2-100 E1	2.0201	50/50	2.0201
316098	AB2-100 C2	0.6471	50/50	0.6471
316099	AB2-100 E2	2.0201	50/50	2.0201
316108	AB2-160 C	7.8779	50/50	7.8779
316109	AB2-160 E	12.8533	50/50	12.8533
316129	AC1-054 C	2.5521	Adder	3.0
316140	AB2-099 C (Suspended)	0.1717	Adder	0.2
316141	AB2-099 E (Suspended)	0.0736	Adder	0.09
900672	V4-068 E	0.0873	Adder	0.1
917332	Z2-043 E	0.3274	Adder	0.39
917342	Z2-044 E	0.1948	Adder	0.23
917512	Z2-088 E OP1	2.4739	Adder	2.91
918492	AA1-063AE OP	1.4131	Adder	1.66
919692	AA2-053 E OP	1.3986	Adder	1.65
919702	AA2-057 E OP	1.1622	Adder	1.37
920592	AA2-165 E	0.1597	Adder	0.19
922923	AB1-081 E OP	1.2762	Adder	1.5
923262	AB1-132 C OP (Suspended)	6.3060	Adder	7.42
923263	AB1-132 E OP (Suspended)	2.7026	Adder	3.18
923573	AB1-173 E OP	0.4958	Adder	0.58
923852	AB2-025 E	0.9974	50/50	0.9974
923991	AB2-040 C O1	3.4625	Adder	4.07
923992	AB2-040 E O1	2.8329	Adder	3.33
924022	AB2-043 E O1	0.8279	Adder	0.97
924152	AB2-059 E OP	1.8080	Adder	2.13
924301	AB2-077 C O1 (Suspended)	0.5875	Adder	0.69

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924302	AB2-077 E O1 (Suspended)	0.3917	Adder	0.46
924311	AB2-078 C O1 (Suspended)	0.5875	Adder	0.69
924312	AB2-078 E O1 (Suspended)	0.3917	Adder	0.46
924321	AB2-079 C O1 (Suspended)	0.5875	Adder	0.69
924322	AB2-079 E O1 (Suspended)	0.3917	Adder	0.46
925591	AC1-034 C	2.2733	Adder	2.67
925592	AC1-034 E	1.7149	Adder	2.02
925785	AC1-054 E	1.1757	Adder	1.38
926070	AC1-086 C	9.2864	Adder	10.93
926071	AC1-086 E	4.2266	Adder	4.97
926201	AC1-098 C	2.0646	Adder	2.43
926202	AC1-098 E	1.2300	Adder	1.45
926211	AC1-099 C	0.6919	Adder	0.81
926212	AC1-099 E	0.4063	Adder	0.48
927024	AC1-189 C	2.6022	Adder	3.06
927025	AC1-189 E	1.2962	Adder	1.52
927145	AC1-208 C	3.1800	Adder	3.74
927146	AC1-208 E	1.4063	Adder	1.65
932631	AC2-084 C	2.9432	Adder	3.46
932632	AC2-084 E	1.4496	Adder	1.71
934331	AD1-057 C O1	3.8589	Adder	4.54
934332	AD1-057 E O1	2.0585	Adder	2.42
934615	AD1-087 C	2.2833	Adder	2.69
934616	AD1-087 E	0.9771	Adder	1.15
935171	AD1-152 C O1	2.5080	Adder	2.95
935172	AD1-152 E O1	1.6720	Adder	1.97
936361	AD2-046 C O1	2.7873	Adder	3.28
936362	AD2-046 E O1	1.2818	Adder	1.51
936761	AD2-097 C	-0.6246	Adder	-0.73
936762	AD2-097 E	-3.1229	Adder	-3.67
937481	AD2-202 C O1	0.6688	Adder	0.79
937482	AD2-202 E O1	0.3762	Adder	0.44
938494	AE1-068_C1	10.9275	Adder	12.86
938497	AE1-068_C2	10.9275	Adder	12.86
938498	AE1-068_E1	6.0407	Adder	7.11
938499	AE1-068_E2	6.0407	Adder	7.11
938504	AE1-069_C1	8.3280	Adder	9.8
938507	AE1-069_C2	8.9795	Adder	10.56
938508	AE1-069_E1	4.7375	Adder	5.57
938509	AE1-069_E2	5.1040	Adder	6.0
939181	AE1-148 C	2.7425	Adder	3.23
939182	AE1-148 E	1.8283	Adder	2.15
939195	AE1-149 C	3.0748	Adder	3.62
939196	AE1-149 E	2.0499	Adder	2.41
939414	AE1-173_C1	8.6908	Adder	10.22
939415	AE1-173_C2	7.4493	Adder	8.76
939416	AE1-173_C3	8.6908	Adder	10.22
939423	AE1-173_E1	5.7939	Adder	6.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939424	AE1-173_E2	4.9662	Adder	5.84
939425	AE1-173_E3	5.7939	Adder	6.82
940431	AE2-027 C O1	11.6849	50/50	11.6849
940432	AE2-027 E O1	7.7899	50/50	7.7899
940471	AE2-031 C	11.9030	Adder	14.0
940472	AE2-031 E	7.9353	Adder	9.34
940481	AE2-033 C	13.8689	50/50	13.8689
940482	AE2-033 E	9.3498	50/50	9.3498
940541	AE2-040	2.5257	50/50	2.5257
940571	AE2-044 C	1.4889	Adder	1.75
940572	AE2-044 E	0.6381	Adder	0.75
940651	AE2-052	1.0249	Adder	1.21
940661	AE2-053 O1	1.0157	Adder	1.19
941031	AE2-094 C	14.3397	Adder	16.87
941032	AE2-094 E	6.4224	Adder	7.56
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.1715	Adder	0.2
942161	AE2-228 C	-2.0705	Adder	-2.44
942371	AE2-250 C O1	13.9936	50/50	13.9936
942372	AE2-250 E O1	7.3855	50/50	7.3855
942451	AE2-258	0.6907	Adder	0.81
942471	AE2-260 C O1	10.4773	50/50	10.4773
942472	AE2-260 E O1	14.8607	50/50	14.8607
942931	AE2-313 C	12.8656	Adder	15.14
942932	AE2-313 E	8.5771	Adder	10.09
943171	AE2-346 C	0.4122	Adder	0.48
943172	AE2-346 E	0.1767	Adder	0.21
943911	AF1-059	6.6545	Adder	7.83
944011	AF1-069 C	4.6853	Adder	5.51
944012	AF1-069 E	1.8201	Adder	2.14
944141	AF1-082	0.9572	Adder	1.13
945811	AF1-246 C O1	2.3940	Adder	2.82
945812	AF1-246 E O1	3.3061	Adder	3.89
946011	AF1-266	11.6093	50/50	11.6093
946261	AF1-291 C	-1.2641	Adder	-1.49
946281	AF1-292 C	0.9362	50/50	0.9362
946282	AF1-292 E	0.6311	50/50	0.6311
957481	AF2-042 C	17.1003	Adder	20.12
957482	AF2-042 E	11.4002	Adder	13.41
957521	AF2-046 C	4.9159	Adder	5.78
957522	AF2-046 E	2.4727	Adder	2.91
957861	AF2-080 C	2.3634	Adder	2.78
957862	AF2-080 E	1.0477	Adder	1.23
958141	AF2-108	4.4863	50/50	4.4863
959651	AF2-256 C	-0.5176	Adder	-0.61
959681	AF2-259 C	6.7295	50/50	6.7295
959682	AF2-259 E	4.4863	50/50	4.4863
959751	AF2-266	2.6155	Adder	3.08
960081	AF2-299 C	1.5779	50/50	1.5779
960082	AF2-299 E	1.0519	50/50	1.0519
961671	AG1-007 C	0.2072	Adder	0.46
961672	AG1-007 E	0.1157	Adder	0.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961681	AG1-008 C	2.6106	Adder	5.79
961682	AG1-008 E	1.3053	Adder	2.9
961931	AG1-036 C	0.2110	Adder	0.47
961932	AG1-036 E	0.1407	Adder	0.31
961941	AG1-037 C	0.0780	Adder	0.17
961942	AG1-037 E	0.0520	Adder	0.12
962271	AG1-075 C O2	14.5234	50/50	14.5234
962272	AG1-075 E O2	8.8511	50/50	8.8511
962331	AG1-082 C	0.3121	Adder	0.69
962332	AG1-082 E	0.2081	Adder	0.46
962341	AG1-083 C	0.3121	Adder	0.69
962342	AG1-083 E	0.2081	Adder	0.46
962351	AG1-084 C	0.2727	Adder	0.61
962352	AG1-084 E	0.1818	Adder	0.4
962361	AG1-085 C	0.2727	Adder	0.61
962362	AG1-085 E	0.1818	Adder	0.4
962441	AG1-093 C O2	2.3989	Adder	5.32
962442	AG1-093 E O2	0.7301	Adder	1.62
962571	AG1-106 C	1.3687	Adder	3.04
962572	AG1-106 E	0.6207	Adder	1.38
963041	AG1-153 C	1.0525	Adder	2.34
963042	AG1-153 E	1.5788	Adder	3.5
963111	AG1-160 C	1.0680	Adder	2.37
963112	AG1-160 E	1.6019	Adder	3.56
963291	AG1-178 C O2	11.0887	Adder	24.61
963301	AG1-179 C	1.3223	Adder	2.94
963311	AG1-180	0.6443	Adder	1.43
963351	AG1-184 O2	5.9740	Adder	13.26
964241	AG1-285 C O2	2.3067	Adder	5.12
964242	AG1-285 E O2	1.5378	Adder	3.41
964501	AG1-313 C O2	0.8554	Adder	1.9
964502	AG1-313 E O2	0.5703	Adder	1.27
964801	AG1-343 C	0.9166	Adder	2.03
964802	AG1-343 E	0.7202	Adder	1.6
965291	AG1-394 C	0.3144	Adder	0.7
965292	AG1-394 E	0.2096	Adder	0.47
965451	AG1-413 C O2	1.4484	Adder	3.22
965452	AG1-413 E O2	0.9656	Adder	2.14
965601	AG1-428 C O2	1.1039	Adder	2.45
965602	AG1-428 E O2	0.7346	Adder	1.63
965711	AG1-439 C O1	3.9653	Adder	8.8
965712	AG1-439 E O1	2.6435	Adder	5.87
965721	AG1-440 C	1.2753	Adder	2.83
965722	AG1-440 E	0.8502	Adder	1.89
965731	AG1-441 C	1.2753	Adder	2.83
965732	AG1-441 E	0.8502	Adder	1.89
965761	AG1-444 O1	2.1148	Adder	4.69
965771	AG1-445	0.7369	Adder	1.64
965781	AG1-446	0.7369	Adder	1.64
965811	AG1-449	4.4233	Adder	9.82
966361	AG1-505 C	3.0648	Adder	6.8
966362	AG1-505 E	2.0432	Adder	4.54

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966371	AG1-506 C	3.0648	Adder	6.8
966372	AG1-506 E	2.0432	Adder	4.54
966621	AG1-532 C	0.8520	50/50	0.8520
966622	AG1-532 E	0.5680	50/50	0.5680
966751	AG1-546 C	3.0090	Adder	6.68
966752	AG1-546 E	1.6145	Adder	3.58
966811	AG1-552 C	0.4343	Adder	0.96
966812	AG1-552 E	0.1861	Adder	0.41
WEC	WEC	0.2876	Confirmed LTF	0.2876
LGEE	LGEE	0.5912	Confirmed LTF	0.5912
CPL	CPL	3.0467	Confirmed LTF	3.0467
CBM-W2	CBM-W2	12.7142	Confirmed LTF	12.7142
NY	NY	0.4186	Confirmed LTF	0.4186
TVA	TVA	2.4052	Confirmed LTF	2.4052
O-066	O-066	5.8888	Confirmed LTF	5.8888
SIGE	SIGE	0.1976	Confirmed LTF	0.1976
CBM-S2	CBM-S2	36.2790	Confirmed LTF	36.2790
CBM-S1	CBM-S1	0.5993	Confirmed LTF	0.5993
G-007	G-007	0.9261	Confirmed LTF	0.9261
MEC	MEC	1.7288	Confirmed LTF	1.7288
LAGN	LAGN	2.9908	Confirmed LTF	2.9908
AA2-074	AA2-074	2.0124	LTF	2.0124
CBM-W1	CBM-W1	12.0151	Confirmed LTF	12.0151

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174377749	314331	6POE	DVP	314299	6HARROWG	DVP	1	DVP_P4-2: 562T563	breaker	541.0	164.27	164.81	DC	6.54

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.0164	Adder	3.55
314331	6POE	4.8056	50/50	4.8056
314435	6SAPONY	0.3169	50/50	0.3169
314539	3UNCAMP	1.8472	Adder	2.17
314541	3WATKINS	0.2148	Adder	0.25
314572	3EMPORIA	0.2022	Adder	0.24
315073	1STONECA	-1.6562	Adder	-1.95
315131	1EDGECEMA (Deactivation : 22/04/2019)	2.9950	Adder	3.52
315132	1EDGECEMB (Deactivation : 22/04/2019)	2.9950	Adder	3.52
316083	AB2-161 C	3.6022	50/50	3.6022
316084	AB2-161 E	5.8773	50/50	5.8773
316088	AB2-174 E	2.9238	Adder	3.44
316096	AB2-100 C1	0.5969	50/50	0.5969
316097	AB2-100 E1	1.8635	50/50	1.8635
316098	AB2-100 C2	0.5969	50/50	0.5969
316099	AB2-100 E2	1.8635	50/50	1.8635
316103	AB2-015 C	2.6660	Adder	3.14
316104	AB2-015 E	2.1861	Adder	2.57
316118	AC1-105 C	1.4709	Adder	1.73
316129	AC1-054 C	2.4696	Adder	2.91
316140	AB2-099 C (Suspended)	0.1806	Adder	0.21
316141	AB2-099 E (Suspended)	0.0774	Adder	0.09
900672	V4-068 E	0.0962	Adder	0.11
917332	Z2-043 E	0.3333	Adder	0.39
917342	Z2-044 E	0.1897	Adder	0.22
917512	Z2-088 E OP1	2.4377	Adder	2.87
918492	AA1-063AE OP	1.4543	Adder	1.71
918512	AA1-065 E OP	1.1457	Adder	1.35
918532	AA1-067 E	0.2097	Adder	0.25
919692	AA2-053 E OP	1.3787	Adder	1.62
919702	AA2-057 E OP	1.1362	Adder	1.34
920042	AA2-088 E OP	3.4540	Adder	4.06
920592	AA2-165 E	0.1562	Adder	0.18
922923	AB1-081 E OP	1.2371	Adder	1.46
923262	AB1-132 C OP (Suspended)	6.0026	Adder	7.06
923263	AB1-132 E OP (Suspended)	2.5725	Adder	3.03
923573	AB1-173 E OP	0.4704	Adder	0.55
923852	AB2-025 E	0.9025	50/50	0.9025

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923991	AB2-040 C O1	3.2852	Adder	3.86
923992	AB2-040 E O1	2.6879	Adder	3.16
924022	AB2-043 E O1	0.7846	Adder	0.92
924152	AB2-059 E OP	1.7525	Adder	2.06
924162	AB2-060 E OP	1.1761	Adder	1.38
924301	AB2-077 C O1 (Suspended)	0.5570	Adder	0.66
924302	AB2-077 E O1 (Suspended)	0.3713	Adder	0.44
924311	AB2-078 C O1 (Suspended)	0.5570	Adder	0.66
924312	AB2-078 E O1 (Suspended)	0.3713	Adder	0.44
924321	AB2-079 C O1 (Suspended)	0.5570	Adder	0.66
924322	AB2-079 E O1 (Suspended)	0.3713	Adder	0.44
925122	AB2-169 E	1.5324	Adder	1.8
925591	AC1-034 C	2.2035	Adder	2.59
925592	AC1-034 E	1.6623	Adder	1.96
925785	AC1-054 E	1.1377	Adder	1.34
926070	AC1-086 C	8.8395	Adder	10.4
926071	AC1-086 E	4.0232	Adder	4.73
926201	AC1-098 C	2.0490	Adder	2.41
926202	AC1-098 E	1.2207	Adder	1.44
926211	AC1-099 C	0.6866	Adder	0.81
926212	AC1-099 E	0.4033	Adder	0.47
926274	AC1-105 E	0.7227	Adder	0.85
927024	AC1-189 C	2.5800	Adder	3.04
927025	AC1-189 E	1.2852	Adder	1.51
927145	AC1-208 C	3.1230	Adder	3.67
927146	AC1-208 E	1.3811	Adder	1.62
932581	AC2-078 C O1	4.4189	50/50	4.4189
932582	AC2-078 E O1	7.2097	50/50	7.2097
932591	AC2-079 C O1	4.1509	50/50	4.1509
932592	AC2-079 E O1	6.7725	50/50	6.7725
932631	AC2-084 C	2.9209	Adder	3.44
932632	AC2-084 E	1.4386	Adder	1.69
933991	AD1-023 C	3.3267	Adder	3.91
933992	AD1-023 E	1.8111	Adder	2.13
934331	AD1-057 C O1	3.7015	Adder	4.35
934332	AD1-057 E O1	1.9746	Adder	2.32
934575	AD1-082 C	8.2092	50/50	8.2092
934576	AD1-082 E	4.6829	50/50	4.6829
934615	AD1-087 C	2.1462	Adder	2.52
934616	AD1-087 E	0.9184	Adder	1.08
935171	AD1-152 C O1	2.3574	Adder	2.77
935172	AD1-152 E O1	1.5716	Adder	1.85
936361	AD2-046 C O1	2.6648	Adder	3.14
936362	AD2-046 E O1	1.2254	Adder	1.44
936401	AD2-051 C O1	2.5352	Adder	2.98
936402	AD2-051 E O1	1.0886	Adder	1.28
936485	AD2-063 C	3.9436	Adder	4.64

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936486	AD2-063 E	2.6291	Adder	3.09
936661	AD2-085 C	1.6231	Adder	1.91
936662	AD2-085 E	2.6482	Adder	3.12
936761	AD2-097 C	-0.5997	Adder	-0.71
936762	AD2-097 E	-2.9985	Adder	-3.53
937481	AD2-202 C O1	0.6286	Adder	0.74
937482	AD2-202 E O1	0.3536	Adder	0.42
938222	AE1-035 E	0.3151	Adder	0.37
938494	AE1-068 C1	10.2514	Adder	12.06
938497	AE1-068 C2	10.2514	Adder	12.06
938498	AE1-068 E1	5.6669	Adder	6.67
938499	AE1-068 E2	5.6669	Adder	6.67
938504	AE1-069 C1	7.8127	Adder	9.19
938507	AE1-069 C2	8.4240	Adder	9.91
938508	AE1-069 E1	4.4444	Adder	5.23
938509	AE1-069 E2	4.7882	Adder	5.63
938634	AE1-085 C	9.8700	50/50	9.8700
938635	AE1-085 E	4.9350	50/50	4.9350
938771	AE1-103 C	1.0955	Adder	1.29
938772	AE1-103 E	1.5128	Adder	1.78
939181	AE1-148 C	2.6209	Adder	3.08
939182	AE1-148 E	1.7473	Adder	2.06
939195	AE1-149 C	12.9252	50/50	12.9252
939196	AE1-149 E	8.6168	50/50	8.6168
939414	AE1-173 C1	8.5009	Adder	10.0
939415	AE1-173 C2	7.2865	Adder	8.57
939416	AE1-173 C3	8.5009	Adder	10.0
939423	AE1-173 E1	5.6673	Adder	6.67
939424	AE1-173 E2	4.8576	Adder	5.71
939425	AE1-173 E3	5.6673	Adder	6.67
940061	AE2-000BC O1	10.9500	50/50	10.9500
940062	AE2-000BE O1	7.3000	50/50	7.3000
940471	AE2-031 C	11.1620	Adder	13.13
940472	AE2-031 E	7.4413	Adder	8.75
940481	AE2-033 C	12.5748	50/50	12.5748
940482	AE2-033 E	8.4774	50/50	8.4774
940541	AE2-040	2.2854	50/50	2.2854
940571	AE2-044 C	1.4432	Adder	1.7
940572	AE2-044 E	0.6185	Adder	0.73
940651	AE2-052	4.3084	50/50	4.3084
940661	AE2-053 O1	0.9707	Adder	1.14
941031	AE2-094 C	13.4468	Adder	15.82
941032	AE2-094 E	6.0225	Adder	7.09
941101	AE2-104 C O1	0.9308	Adder	1.1
941102	AE2-104 E O1	1.4799	Adder	1.74
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.1775	Adder	0.21
942161	AE2-228 C	-1.0818	Adder	-1.27
942341	AE2-247 C	0.7076	Adder	0.83
942342	AE2-247 E	0.9772	Adder	1.15
942451	AE2-258	0.6546	Adder	0.77
942471	AE2-260 C O1	9.6379	50/50	9.6379

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942472	AE2-260 E O1	13.6701	50/50	13.6701
942931	AE2-313 C	12.0649	Adder	14.19
942932	AE2-313 E	8.0433	Adder	9.46
943171	AE2-346 C	0.4335	Adder	0.51
943172	AE2-346 E	0.1858	Adder	0.22
943461	AF1-017 C	0.6403	Adder	0.75
943462	AF1-017 E	1.0446	Adder	1.23
943911	AF1-059	6.2447	Adder	7.35
944011	AF1-069 C	4.3936	Adder	5.17
944012	AF1-069 E	1.7068	Adder	2.01
944141	AF1-082	0.9278	Adder	1.09
945811	AF1-246 C O1	2.2484	Adder	2.65
945812	AF1-246 E O1	3.1049	Adder	3.65
946011	AF1-266	10.5261	50/50	10.5261
946261	AF1-291 C	-1.8432	Adder	-2.17
946281	AF1-292 C	0.7419	Adder	0.87
946282	AF1-292 E	0.5002	Adder	0.59
957481	AF2-042 C	16.0599	Adder	18.89
957482	AF2-042 E	10.7066	Adder	12.6
957521	AF2-046 C	5.3740	Adder	6.32
957522	AF2-046 E	2.7031	Adder	3.18
957861	AF2-080 C	2.3432	Adder	2.76
957862	AF2-080 E	1.0388	Adder	1.22
958161	AF2-110 C	0.3837	Adder	0.45
958162	AF2-110 E	0.6002	Adder	0.71
959511	AF2-242 C	2.0142	Adder	2.37
959512	AF2-242 E	1.5666	Adder	1.84
959651	AF2-256 C	-0.2705	Adder	-0.32
959751	AF2-266	2.4582	Adder	2.89
960081	AF2-299 C	1.2504	Adder	1.47
960082	AF2-299 E	0.8336	Adder	0.98
961091	AF2-400 C	0.1440	Adder	0.17
961092	AF2-400 E	0.2362	Adder	0.28
961671	AG1-007 C	0.2032	Adder	0.45
961672	AG1-007 E	0.1135	Adder	0.25
961681	AG1-008 C	2.8539	Adder	6.33
961682	AG1-008 E	1.4270	Adder	3.17
961851	AG1-027 C	2.5785	Adder	5.72
961852	AG1-027 E	1.4254	Adder	3.16
961931	AG1-036 C	0.2261	Adder	0.5
961932	AG1-036 E	0.1507	Adder	0.33
961941	AG1-037 C	0.0821	Adder	0.18
961942	AG1-037 E	0.0547	Adder	0.12
962271	AG1-075 C O2	13.1682	50/50	13.1682
962272	AG1-075 E O2	8.0253	50/50	8.0253
962331	AG1-082 C	0.3283	Adder	0.73
962332	AG1-082 E	0.2188	Adder	0.49
962341	AG1-083 C	0.3283	Adder	0.73
962342	AG1-083 E	0.2188	Adder	0.49
962351	AG1-084 C	0.2822	Adder	0.63
962352	AG1-084 E	0.1881	Adder	0.42
962361	AG1-085 C	0.2822	Adder	0.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962362	AG1-085 E	0.1881	Adder	0.42
962441	AG1-093 C O2	2.2592	Adder	5.01
962442	AG1-093 E O2	0.6876	Adder	1.53
962491	AG1-098 C O2	1.7924	Adder	3.98
962492	AG1-098 E O2	1.1950	Adder	2.65
962561	AG1-105 C O2	1.4015	Adder	3.11
962562	AG1-105 E O2	0.9343	Adder	2.07
962571	AG1-106 C	1.3028	Adder	2.89
962572	AG1-106 E	0.5908	Adder	1.31
963041	AG1-153 C	0.9877	Adder	2.19
963042	AG1-153 E	1.4815	Adder	3.29
963111	AG1-160 C	1.0020	Adder	2.22
963112	AG1-160 E	1.5030	Adder	3.34
963291	AG1-178 C O2	10.5295	Adder	23.37
963301	AG1-179 C	1.2378	Adder	2.75
963311	AG1-180	0.6031	Adder	1.34
963351	AG1-184 O2	5.6727	Adder	12.59
964241	AG1-285 C O2	2.1658	Adder	4.81
964242	AG1-285 E O2	1.4439	Adder	3.21
964491	AG1-312 C O1	2.7943	Adder	6.2
964492	AG1-312 E O1	0.6986	Adder	1.55
964501	AG1-313 C O2	0.8531	Adder	1.89
964502	AG1-313 E O2	0.5687	Adder	1.26
964791	AG1-342 C	0.5827	Adder	1.29
964792	AG1-342 E	0.4579	Adder	1.02
964801	AG1-343 C	1.0340	Adder	2.3
964802	AG1-343 E	0.8125	Adder	1.8
964931	AG1-357 C O2	2.7927	Adder	6.2
964932	AG1-357 E O2	1.8618	Adder	4.13
965291	AG1-394 C	0.3563	Adder	0.79
965292	AG1-394 E	0.2375	Adder	0.53
965451	AG1-413 C O2	1.3601	Adder	3.02
965452	AG1-413 E O2	0.9067	Adder	2.01
965591	AG1-427 C	1.6752	Adder	3.72
965592	AG1-427 E	1.1192	Adder	2.48
965601	AG1-428 C O2	1.0334	Adder	2.29
965602	AG1-428 E O2	0.6877	Adder	1.53
965691	AG1-437 C O1	1.4056	Adder	3.12
965692	AG1-437 E O1	0.9370	Adder	2.08
965701	AG1-438 C O1	1.4056	Adder	3.12
965702	AG1-438 E O1	0.9370	Adder	2.08
965711	AG1-439 C O1	3.9072	Adder	8.67
965712	AG1-439 E O1	2.6048	Adder	5.78
965721	AG1-440 C	1.2263	Adder	2.72
965722	AG1-440 E	0.8175	Adder	1.81
965731	AG1-441 C	1.2263	Adder	2.72
965732	AG1-441 E	0.8175	Adder	1.81
965741	AG1-442 O1	0.8199	Adder	1.82
965751	AG1-443 O1	0.8199	Adder	1.82
965761	AG1-444 O1	2.0838	Adder	4.63
965771	AG1-445	0.7085	Adder	1.57
965781	AG1-446	0.7085	Adder	1.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965811	AG1-449	4.1479	Adder	9.21
966361	AG1-505 C	2.8759	Adder	6.38
966362	AG1-505 E	1.9172	Adder	4.26
966371	AG1-506 C	2.8759	Adder	6.38
966372	AG1-506 E	1.9172	Adder	4.26
966621	AG1-532 C	0.3579	Adder	0.79
966622	AG1-532 E	0.2386	Adder	0.53
966731	AG1-544 C	7.7085	50/50	7.7085
966732	AG1-544 E	4.1355	50/50	4.1355
966741	AG1-545 C	2.5480	50/50	2.5480
966742	AG1-545 E	1.3660	50/50	1.3660
966751	AG1-546 C	2.9153	Adder	6.47
966752	AG1-546 E	1.5643	Adder	3.47
966801	AG1-551 C	0.3386	Adder	0.75
966802	AG1-551 E	0.1451	Adder	0.32
966811	AG1-552 C	0.4246	Adder	0.94
966812	AG1-552 E	0.1820	Adder	0.4
WEC	WEC	0.2712	Confirmed LTF	0.2712
LGEE	LGEE	0.5586	Confirmed LTF	0.5586
CPL	CPL	2.9081	Confirmed LTF	2.9081
CBM-W2	CBM-W2	12.0512	Confirmed LTF	12.0512
NY	NY	0.4053	Confirmed LTF	0.4053
TVA	TVA	2.2834	Confirmed LTF	2.2834
O-066	O-066	5.6868	Confirmed LTF	5.6868
SIGE	SIGE	0.1887	Confirmed LTF	0.1887
CBM-S2	CBM-S2	34.5460	Confirmed LTF	34.5460
CBM-S1	CBM-S1	0.5685	Confirmed LTF	0.5685
G-007	G-007	0.8946	Confirmed LTF	0.8946
MEC	MEC	1.6351	Confirmed LTF	1.6351
LAGN	LAGN	2.8385	Confirmed LTF	2.8385
AA2-074	AA2-074	1.9206	LTF	1.9206
CBM-W1	CBM-W1	11.3282	Confirmed LTF	11.3282

13.5.13 Index 13

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977070	314677	6BUCKING	DVP	314747	6BREMO	DVP	1	DVP_P4-2: 556T591	breaker	699.0	177.06	181.41	DC	30.47

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6837	50/50	0.6837
313853	3PONTONDP	1.5977	50/50	1.5977
314429	3JTRSVLE	1.0083	50/50	1.0083
314677	6BUCKING	1.4767	50/50	1.4767
314713	3PAMPLIN	4.1587	50/50	4.1587
315153	1CLOVER1	20.9801	50/50	20.9801
315154	1CLOVER2	20.7710	50/50	20.7710
315266	1PLYWOOD A	1.3910	50/50	1.3910
316118	AC1-105 C	6.9342	50/50	6.9342
316131	AB2-060 C	2.0233	50/50	2.0233
924022	AB2-043 E O1	3.8748	50/50	3.8748
924032	AB2-045 E	4.3680	50/50	4.3680
924162	AB2-060 E OP	6.0349	50/50	6.0349
924301	AB2-077 C O1 (Suspended)	2.7008	50/50	2.7008
924302	AB2-077 E O1 (Suspended)	1.8006	50/50	1.8006
924311	AB2-078 C O1 (Suspended)	2.7008	50/50	2.7008
924312	AB2-078 E O1 (Suspended)	1.8006	50/50	1.8006
924321	AB2-079 C O1 (Suspended)	2.7008	50/50	2.7008
924322	AB2-079 E O1 (Suspended)	1.8006	50/50	1.8006
925611	AC1-036 C	0.4355	50/50	0.4355
925612	AC1-036 E	1.6530	50/50	1.6530
925997	AC1-075 E	2.4211	Adder	2.85
926024	AC1-080 E	0.8033	Adder	0.95
926274	AC1-105 E	3.4068	50/50	3.4068
927261	AC1-222 C	4.1213	50/50	4.1213
927262	AC1-222 E	3.9233	50/50	3.9233
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.4548	50/50	1.4548
932512	AC2-071 E (Withdrawn : 01/22/2021)	4.6453	50/50	4.6453
934311	AD1-055 C	2.8615	50/50	2.8615
934312	AD1-055 E	0.7379	50/50	0.7379
934615	AD1-087 C	13.1235	50/50	13.1235
934616	AD1-087 E	5.6158	50/50	5.6158
934625	AD1-088 C	29.0791	50/50	29.0791
934626	AD1-088 E	7.6159	50/50	7.6159

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
935171	AD1-152 C O1	14.4149	50/50	14.4149
935172	AD1-152 E O1	9.6099	50/50	9.6099
935221	AD1-157 C	0.6068	50/50	0.6068
935222	AD1-157 E	2.5639	50/50	2.5639
936265	AD2-033 C	23.6597	50/50	23.6597
936266	AD2-033 E	15.7732	50/50	15.7732
936361	AD2-046 C O1	9.3566	50/50	9.3566
936362	AD2-046 E O1	4.3026	50/50	4.3026
936485	AD2-063 C	23.8140	50/50	23.8140
936486	AD2-063 E	15.8760	50/50	15.8760
937481	AD2-202 C O1	3.8440	50/50	3.8440
937482	AD2-202 E O1	2.1622	50/50	2.1622
938371	AE1-056 C	16.5800	50/50	16.5800
938372	AE1-056 E	9.0592	50/50	9.0592
939181	AE1-148 C	9.3474	50/50	9.3474
939182	AE1-148 E	6.2316	50/50	6.2316
940661	AE2-053 O1	3.4620	50/50	3.4620
941791	AE2-182 C	4.7243	50/50	4.7243
941792	AE2-182 E	2.1993	50/50	2.1993
942451	AE2-258	3.2328	50/50	3.2328
942461	AE2-259 C O1	30.1896	50/50	30.1896
942462	AE2-259 E O1	20.1264	50/50	20.1264
943901	AF1-058 C	2.3234	50/50	2.3234
943902	AF1-058 E	1.5490	50/50	1.5490
943911	AF1-059	13.2340	Adder	15.57
945811	AF1-246 C O1	12.6500	50/50	12.6500
945812	AF1-246 E O1	17.4690	50/50	17.4690
946293	AF1-293 BAT	11.1823	Merchant Transmission	11.1823
946301	AF1-294 C	10.1855	50/50	10.1855
946302	AF1-294 E	6.7903	50/50	6.7903
957481	AF2-042 C	90.3570	50/50	90.3570
957482	AF2-042 E	60.2380	50/50	60.2380
958211	AF2-115 C	5.9915	50/50	5.9915
958212	AF2-115 E	3.9943	50/50	3.9943
958801	AF2-171 C	35.8092	50/50	35.8092
958802	AF2-171 E	23.8728	50/50	23.8728
959311	AF2-222 C	33.2170	50/50	33.2170
959312	AF2-222 E	22.2554	50/50	22.2554
959751	AF2-266	15.0600	50/50	15.0600
960061	AF2-297 C	9.2938	50/50	9.2938
960062	AF2-297 E	6.1958	50/50	6.1958
961063	AF2-397 BAT	7.8364	Merchant Transmission	7.8364
961791	AG1-021 C	4.7932	50/50	4.7932
961792	AG1-021 E	3.1954	50/50	3.1954
961891	AG1-030 C	33.4863	50/50	33.4863
961892	AG1-030 E	22.3242	50/50	22.3242
962041	AG1-048 C	29.9573	50/50	29.9573
962042	AG1-048 E	19.9715	50/50	19.9715
962441	AG1-093 C O2	23.3634	50/50	23.3634
962442	AG1-093 E O2	7.1106	50/50	7.1106
962491	AG1-098 C O2	18.5460	50/50	18.5460
962492	AG1-098 E O2	12.3640	50/50	12.3640

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962561	AG1-105 C O2	12.7050	50/50	12.7050
962562	AG1-105 E O2	8.4700	50/50	8.4700
963171	AG1-166 C	4.7932	50/50	4.7932
963172	AG1-166 E	3.1954	50/50	3.1954
963181	AG1-167 C	4.7932	50/50	4.7932
963182	AG1-167 E	3.1954	50/50	3.1954
963191	AG1-168 C	4.7932	50/50	4.7932
963192	AG1-168 E	3.1954	50/50	3.1954
963201	AG1-169 C	4.7932	50/50	4.7932
963202	AG1-169 E	3.1954	50/50	3.1954
963211	AG1-170 C	4.7932	50/50	4.7932
963212	AG1-170 E	3.1954	50/50	3.1954
963271	AG1-176 C O2	46.3462	50/50	46.3462
963272	AG1-176 E O2	30.8975	50/50	30.8975
963301	AG1-179 C	1.9529	Adder	4.33
963311	AG1-180	0.9515	Adder	2.11
963321	AG1-181 C O2	31.6159	50/50	31.6159
963361	AG1-185 O2	15.2966	50/50	15.2966
963641	AG1-215 C	2.2368	50/50	2.2368
963642	AG1-215 E	3.3552	50/50	3.3552
964111	AG1-272 C	4.9495	50/50	4.9495
964112	AG1-272 E	1.4701	50/50	1.4701
964121	AG1-273 C	4.9495	50/50	4.9495
964122	AG1-273 E	1.4701	50/50	1.4701
964131	AG1-274 C	4.9495	50/50	4.9495
964132	AG1-274 E	1.4701	50/50	1.4701
964241	AG1-285 C O2	22.5892	50/50	22.5892
964242	AG1-285 E O2	15.0595	50/50	15.0595
964261	AG1-287 C	1.7426	50/50	1.7426
964262	AG1-287 E	1.1617	50/50	1.1617
964471	AG1-310 C	2.3371	50/50	2.3371
964472	AG1-310 E	1.1511	50/50	1.1511
964791	AG1-342 C	5.2527	50/50	5.2527
964792	AG1-342 E	4.1271	50/50	4.1271
964821	AG1-345 C	1.9128	50/50	1.9128
964822	AG1-345 E	1.2752	50/50	1.2752
964841	AG1-347 C	23.7070	50/50	23.7070
964842	AG1-347 E	18.6270	50/50	18.6270
964931	AG1-357 C O2	31.5924	50/50	31.5924
964932	AG1-357 E O2	21.0616	50/50	21.0616
965191	AG1-384 C	4.9495	50/50	4.9495
965192	AG1-384 E	1.4701	50/50	1.4701
965281	AG1-393 C	4.7932	50/50	4.7932
965282	AG1-393 E	3.1954	50/50	3.1954
965451	AG1-413 C O2	6.8021	50/50	6.8021
965452	AG1-413 E O2	4.5347	50/50	4.5347
965591	AG1-427 C	18.2059	50/50	18.2059
965592	AG1-427 E	12.1629	50/50	12.1629
965601	AG1-428 C O2	1.6304	Adder	3.62
965602	AG1-428 E O2	1.0850	Adder	2.41
965641	AG1-432 C O2	60.3792	50/50	60.3792
965642	AG1-432 E O2	40.2528	50/50	40.2528

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965721	AG1-440 C	2.9125	Adder	6.47
965722	AG1-440 E	1.9417	Adder	4.31
965731	AG1-441 C	2.9125	Adder	6.47
965732	AG1-441 E	1.9417	Adder	4.31
965771	AG1-445	1.6828	Adder	3.74
965781	AG1-446	1.6828	Adder	3.74
965831	AG1-451	10.0632	50/50	10.0632
966361	AG1-505 C	27.1053	50/50	27.1053
966362	AG1-505 E	18.0702	50/50	18.0702
966371	AG1-506 C	27.1053	50/50	27.1053
966372	AG1-506 E	18.0702	50/50	18.0702
966792	AG1-550 BAT	2.7931	Merchant Transmission	2.7931
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	7.8611	50/50	7.8611
966862	AG1-557 E O2 (Withdrawn : 12/14/2020)	5.2407	50/50	5.2407
WEC	WEC	0.3018	Confirmed LTF	0.3018
LGEE	LGEE	0.6214	Confirmed LTF	0.6214
CPL	CPL	3.7073	Confirmed LTF	3.7073
CBM-W2	CBM-W2	13.8074	Confirmed LTF	13.8074
NY	NY	0.4131	Confirmed LTF	0.4131
TVA	TVA	2.6418	Confirmed LTF	2.6418
O-066	O-066	5.7070	Confirmed LTF	5.7070
SIGE	SIGE	0.2010	Confirmed LTF	0.2010
CBM-S2	CBM-S2	42.5848	Confirmed LTF	42.5848
CBM-S1	CBM-S1	0.6551	Confirmed LTF	0.6551
G-007	G-007	0.8967	Confirmed LTF	0.8967
MEC	MEC	1.8432	Confirmed LTF	1.8432
LAGN	LAGN	3.2813	Confirmed LTF	3.2813
AA2-074	AA2-074	2.4484	LTF	2.4484
CBM-W1	CBM-W1	12.5619	Confirmed LTF	12.5619

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977168	314686	6CLOVER	DVP	934620	AD1-088 TAP	DVP	1	DVP_P4-2: 511T556	breaker	699.0	115.73	120.23	DC	31.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	-0.4636	Adder	-0.55
315153	1CLOVER1	22.6895	50/50	22.6895
315154	1CLOVER2	22.4633	50/50	22.4633
315266	1PLYWOOD A	0.8779	50/50	0.8779
316118	AC1-105 C	4.0048	50/50	4.0048
316123	AC1-075 C	0.6069	50/50	0.6069
925997	AC1-075 E	2.1793	50/50	2.1793
926023	AC1-080 C	0.2028	50/50	0.2028
926024	AC1-080 E	0.7231	50/50	0.7231
926274	AC1-105 E	1.9676	50/50	1.9676
927251	AC1-221 C	1.5101	50/50	1.5101
927252	AC1-221 E	1.5101	50/50	1.5101
927261	AC1-222 C	3.1332	50/50	3.1332
927262	AC1-222 E	2.9827	50/50	2.9827
932761	AC2-100 C	3.4752	50/50	3.4752
932762	AC2-100 E	1.6963	50/50	1.6963
934311	AD1-055 C	2.1754	50/50	2.1754
934312	AD1-055 E	0.5610	50/50	0.5610
934341	AD1-058 C	3.7855	50/50	3.7855
934342	AD1-058 E	0.9619	50/50	0.9619
934615	AD1-087 C	14.1820	50/50	14.1820
934616	AD1-087 E	6.0687	50/50	6.0687
934991	AD1-131 C	1.2412	50/50	1.2412
934992	AD1-131 E	0.8274	50/50	0.8274
935171	AD1-152 C O1	15.5774	50/50	15.5774
935172	AD1-152 E O1	10.3850	50/50	10.3850
937481	AD2-202 C O1	4.1540	50/50	4.1540
937482	AD2-202 E O1	2.3366	50/50	2.3366
942751	AE2-291 C	4.4025	Adder	5.18
942752	AE2-291 E	2.9350	Adder	3.45
942761	AE2-292 C O1	5.4815	Adder	6.45
942762	AE2-292 E O1	3.6543	Adder	4.3
943901	AF1-058 C	1.7642	50/50	1.7642
943902	AF1-058 E	1.1762	50/50	1.1762
945811	AF1-246 C O1	13.6807	50/50	13.6807
945812	AF1-246 E O1	18.8923	50/50	18.8923
946293	AF1-293 BAT	7.7876	Merchant Transmission	7.7876
957481	AF2-042 C	97.7190	50/50	97.7190
957482	AF2-042 E	65.1460	50/50	65.1460
958503	AF2-144 BAT	0.6533	Merchant Transmission	0.6533
959751	AF2-266	16.2870	50/50	16.2870

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960061	AF2-297 C	7.0570	50/50	7.0570
960062	AF2-297 E	4.7046	50/50	4.7046
961063	AF2-397 BAT	5.4682	50/50	5.4682
962441	AG1-093 C O2	24.0672	50/50	24.0672
962442	AG1-093 E O2	7.3248	50/50	7.3248
962561	AG1-105 C O2	1.9170	Adder	4.26
962562	AG1-105 E O2	1.2780	Adder	2.84
963362	AG1-185 BAT	3.2622	Merchant Transmission	3.2622
963643	AG1-215 BAT	1.9088	50/50	1.9088
964113	AG1-272 BAT	0.7934	Merchant Transmission	0.7934
964123	AG1-273 BAT	0.7934	Merchant Transmission	0.7934
964133	AG1-274 BAT	0.7934	Merchant Transmission	0.7934
964241	AG1-285 C O2	24.4297	50/50	24.4297
964242	AG1-285 E O2	16.2865	50/50	16.2865
964261	AG1-287 C	1.3232	50/50	1.3232
964262	AG1-287 E	0.8821	50/50	0.8821
964471	AG1-310 C	1.7778	50/50	1.7778
964472	AG1-310 E	0.8756	50/50	0.8756
964791	AG1-342 C	0.9627	Adder	2.14
964792	AG1-342 E	0.7564	Adder	1.68
964843	AG1-347 BAT	10.1706	50/50	10.1706
965193	AG1-384 BAT	0.3400	Merchant Transmission	0.3400
965582	AG1-426 BAT	0.8211	Merchant Transmission	0.8211
965832	AG1-451 BAT	4.3542	50/50	4.3542
966361	AG1-505 C	29.3139	50/50	29.3139
966362	AG1-505 E	19.5426	50/50	19.5426
966371	AG1-506 C	29.3139	50/50	29.3139
966372	AG1-506 E	19.5426	50/50	19.5426
966691	AG1-539 C	1.2200	Adder	2.71
966692	AG1-539 E	1.6394	Adder	3.64
966792	AG1-550 BAT	3.6662	50/50	3.6662
WEC	WEC	0.2533	Confirmed LTF	0.2533
LGEE	LGEE	0.5221	Confirmed LTF	0.5221
CPL	CPL	2.8672	Confirmed LTF	2.8672
CBM-W2	CBM-W2	11.2358	Confirmed LTF	11.2358
NY	NY	0.3207	Confirmed LTF	0.3207
TVA	TVA	2.1308	Confirmed LTF	2.1308
O-066	O-066	4.4754	Confirmed LTF	4.4754
SIGE	SIGE	0.1632	Confirmed LTF	0.1632
CBM-S2	CBM-S2	33.3871	Confirmed LTF	33.3871
CBM-S1	CBM-S1	0.5309	Confirmed LTF	0.5309
G-007	G-007	0.7035	Confirmed LTF	0.7035
MEC	MEC	1.5254	Confirmed LTF	1.5254
LAGN	LAGN	2.6425	Confirmed LTF	2.6425
AA2-074	AA2-074	1.8936	LTF	1.8936
CBM-W1	CBM-W1	10.5711	Confirmed LTF	10.5711

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977069	314692	6FARMVIL	DVP	966860	AG1-557 TAP	DVP	1	DVP_P4-2: 556T591	breaker	684.0	180.01	184.46	DC	30.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6841	50/50	0.6841
313853	3PONTONDP	1.5983	50/50	1.5983
314429	3JTRSVLE	1.0086	50/50	1.0086
314713	3PAMPLIN	4.1600	50/50	4.1600
315153	1CLOVER1	20.9906	50/50	20.9906
315154	1CLOVER2	20.7814	50/50	20.7814
315266	1PLYWOOD A	1.3921	50/50	1.3921
316118	AC1-105 C	6.9390	50/50	6.9390
316129	AC1-054 C	4.4267	Adder	5.21
316131	AB2-060 C	2.0245	50/50	2.0245
924022	AB2-043 E O1	3.8772	50/50	3.8772
924162	AB2-060 E OP	6.0385	50/50	6.0385
924301	AB2-077 C O1 (Suspended)	2.7025	50/50	2.7025
924302	AB2-077 E O1 (Suspended)	1.8017	50/50	1.8017
924311	AB2-078 C O1 (Suspended)	2.7025	50/50	2.7025
924312	AB2-078 E O1 (Suspended)	1.8017	50/50	1.8017
924321	AB2-079 C O1 (Suspended)	2.7025	50/50	2.7025
924322	AB2-079 E O1 (Suspended)	1.8017	50/50	1.8017
925611	AC1-036 C	0.4357	50/50	0.4357
925612	AC1-036 E	1.6538	50/50	1.6538
925785	AC1-054 E	2.0392	Adder	2.4
925997	AC1-075 E	2.4237	Adder	2.85
926024	AC1-080 E	0.8042	Adder	0.95
926274	AC1-105 E	3.4092	50/50	3.4092
927251	AC1-221 C	1.4351	Adder	1.69
927252	AC1-221 E	1.4351	Adder	1.69
927261	AC1-222 C	4.1245	50/50	4.1245
927262	AC1-222 E	3.9264	50/50	3.9264
932761	AC2-100 C	3.3027	Adder	3.89
932762	AC2-100 E	1.6120	Adder	1.9
934311	AD1-055 C	2.8637	50/50	2.8637
934312	AD1-055 E	0.7385	50/50	0.7385
934341	AD1-058 C	3.5976	Adder	4.23
934342	AD1-058 E	0.9141	Adder	1.08
934615	AD1-087 C	13.1301	50/50	13.1301
934616	AD1-087 E	5.6186	50/50	5.6186

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934625	AD1-088 C	29.0891	50/50	29.0891
934626	AD1-088 E	7.6186	50/50	7.6186
934991	AD1-131 C	1.1795	Adder	1.39
934992	AD1-131 E	0.7864	Adder	0.93
935171	AD1-152 C O1	14.4221	50/50	14.4221
935172	AD1-152 E O1	9.6147	50/50	9.6147
935221	AD1-157 C	0.6070	50/50	0.6070
935222	AD1-157 E	2.5648	50/50	2.5648
936265	AD2-033 C	23.6707	50/50	23.6707
936266	AD2-033 E	15.7804	50/50	15.7804
936361	AD2-046 C O1	9.3642	50/50	9.3642
936362	AD2-046 E O1	4.3062	50/50	4.3062
936485	AD2-063 C	23.8266	50/50	23.8266
936486	AD2-063 E	15.8844	50/50	15.8844
937481	AD2-202 C O1	3.8459	50/50	3.8459
937482	AD2-202 E O1	2.1633	50/50	2.1633
938371	AE1-056 C	16.5854	50/50	16.5854
938372	AE1-056 E	9.0622	50/50	9.0622
939181	AE1-148 C	9.3550	50/50	9.3550
939182	AE1-148 E	6.2366	50/50	6.2366
940661	AE2-053 O1	3.4648	50/50	3.4648
941791	AE2-182 C	4.7260	50/50	4.7260
941792	AE2-182 E	2.2000	50/50	2.2000
942451	AE2-258	3.2348	50/50	3.2348
942461	AE2-259 C O1	30.1980	50/50	30.1980
942462	AE2-259 E O1	20.1320	50/50	20.1320
943901	AF1-058 C	2.3251	50/50	2.3251
943902	AF1-058 E	1.5501	50/50	1.5501
943911	AF1-059	13.2458	Adder	15.58
945811	AF1-246 C O1	12.6559	50/50	12.6559
945812	AF1-246 E O1	17.4771	50/50	17.4771
946293	AF1-293 BAT	11.1710	Merchant Transmission	11.1710
946301	AF1-294 C	10.1890	50/50	10.1890
946302	AF1-294 E	6.7927	50/50	6.7927
957481	AF2-042 C	90.3990	50/50	90.3990
957482	AF2-042 E	60.2660	50/50	60.2660
958211	AF2-115 C	5.9936	50/50	5.9936
958212	AF2-115 E	3.9957	50/50	3.9957
958801	AF2-171 C	35.8218	50/50	35.8218
958802	AF2-171 E	23.8812	50/50	23.8812
959311	AF2-222 C	33.2310	50/50	33.2310
959312	AF2-222 E	22.2648	50/50	22.2648
959751	AF2-266	15.0675	50/50	15.0675
960061	AF2-297 C	9.3005	50/50	9.3005
960062	AF2-297 E	6.2003	50/50	6.2003
961063	AF2-397 BAT	7.8291	Merchant Transmission	7.8291
961791	AG1-021 C	4.7948	50/50	4.7948
961792	AG1-021 E	3.1966	50/50	3.1966
961891	AG1-030 C	33.4989	50/50	33.4989
961892	AG1-030 E	22.3326	50/50	22.3326
962041	AG1-048 C	29.9677	50/50	29.9677
962042	AG1-048 E	19.9785	50/50	19.9785

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962441	AG1-093 C O2	23.3763	50/50	23.3763
962442	AG1-093 E O2	7.1145	50/50	7.1145
962491	AG1-098 C O2	18.5565	50/50	18.5565
962492	AG1-098 E O2	12.3710	50/50	12.3710
962561	AG1-105 C O2	12.7134	50/50	12.7134
962562	AG1-105 E O2	8.4756	50/50	8.4756
963171	AG1-166 C	4.7948	50/50	4.7948
963172	AG1-166 E	3.1966	50/50	3.1966
963181	AG1-167 C	4.7948	50/50	4.7948
963182	AG1-167 E	3.1966	50/50	3.1966
963191	AG1-168 C	4.7948	50/50	4.7948
963192	AG1-168 E	3.1966	50/50	3.1966
963201	AG1-169 C	4.7948	50/50	4.7948
963202	AG1-169 E	3.1966	50/50	3.1966
963211	AG1-170 C	4.7948	50/50	4.7948
963212	AG1-170 E	3.1966	50/50	3.1966
963271	AG1-176 C O2	46.3597	50/50	46.3597
963272	AG1-176 E O2	30.9064	50/50	30.9064
963301	AG1-179 C	1.9551	Adder	4.34
963311	AG1-180	0.9526	Adder	2.11
963321	AG1-181 C O2	31.6301	50/50	31.6301
963361	AG1-185 O2	15.3034	50/50	15.3034
963641	AG1-215 C	2.2376	50/50	2.2376
963642	AG1-215 E	3.3564	50/50	3.3564
964111	AG1-272 C	4.9517	50/50	4.9517
964112	AG1-272 E	1.4707	50/50	1.4707
964121	AG1-273 C	4.9517	50/50	4.9517
964122	AG1-273 E	1.4707	50/50	1.4707
964131	AG1-274 C	4.9517	50/50	4.9517
964132	AG1-274 E	1.4707	50/50	1.4707
964241	AG1-285 C O2	22.5998	50/50	22.5998
964242	AG1-285 E O2	15.0665	50/50	15.0665
964261	AG1-287 C	1.7438	50/50	1.7438
964262	AG1-287 E	1.1626	50/50	1.1626
964471	AG1-310 C	2.3390	50/50	2.3390
964472	AG1-310 E	1.1520	50/50	1.1520
964791	AG1-342 C	5.2562	50/50	5.2562
964792	AG1-342 E	4.1299	50/50	4.1299
964821	AG1-345 C	1.9134	50/50	1.9134
964822	AG1-345 E	1.2756	50/50	1.2756
964841	AG1-347 C	23.7149	50/50	23.7149
964842	AG1-347 E	18.6331	50/50	18.6331
964931	AG1-357 C O2	31.6092	50/50	31.6092
964932	AG1-357 E O2	21.0728	50/50	21.0728
965191	AG1-384 C	4.9517	50/50	4.9517
965192	AG1-384 E	1.4707	50/50	1.4707
965281	AG1-393 C	4.7948	50/50	4.7948
965282	AG1-393 E	3.1966	50/50	3.1966
965451	AG1-413 C O2	6.8079	50/50	6.8079
965452	AG1-413 E O2	4.5386	50/50	4.5386
965582	AG1-426 BAT	1.1885	Merchant Transmission	1.1885
965591	AG1-427 C	18.2158	50/50	18.2158

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965592	AG1-427 E	12.1695	50/50	12.1695
965601	AG1-428 C O2	1.6321	Adder	3.62
965602	AG1-428 E O2	1.0862	Adder	2.41
965641	AG1-432 C O2	60.3960	50/50	60.3960
965642	AG1-432 E O2	40.2640	50/50	40.2640
965721	AG1-440 C	2.9154	Adder	6.47
965722	AG1-440 E	1.9436	Adder	4.31
965731	AG1-441 C	2.9154	Adder	6.47
965732	AG1-441 E	1.9436	Adder	4.31
965771	AG1-445	1.6844	Adder	3.74
965781	AG1-446	1.6844	Adder	3.74
965831	AG1-451	10.0660	50/50	10.0660
966361	AG1-505 C	27.1179	50/50	27.1179
966362	AG1-505 E	18.0786	50/50	18.0786
966371	AG1-506 C	27.1179	50/50	27.1179
966372	AG1-506 E	18.0786	50/50	18.0786
966751	AG1-546 C	4.9009	Adder	10.88
966752	AG1-546 E	2.6297	Adder	5.84
966792	AG1-550 BAT	2.7905	Merchant Transmission	2.7905
WEC	WEC	0.3062	Confirmed LTF	0.3062
LGEE	LGEE	0.6302	Confirmed LTF	0.6302
CPL	CPL	3.7169	Confirmed LTF	3.7169
CBM-W2	CBM-W2	13.9328	Confirmed LTF	13.9328
NY	NY	0.4053	Confirmed LTF	0.4053
TVA	TVA	2.6614	Confirmed LTF	2.6614
O-066	O-066	5.6128	Confirmed LTF	5.6128
SIGE	SIGE	0.2010	Confirmed LTF	0.2010
CBM-S2	CBM-S2	42.7309	Confirmed LTF	42.7309
CBM-S1	CBM-S1	0.6604	Confirmed LTF	0.6604
G-007	G-007	0.8820	Confirmed LTF	0.8820
MEC	MEC	1.8655	Confirmed LTF	1.8655
LAGN	LAGN	3.3058	Confirmed LTF	3.3058
AA2-074	AA2-074	2.4547	LTF	2.4547
CBM-W1	CBM-W1	12.7582	Confirmed LTF	12.7582

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
175800823	314697	6SEEDGE HILL	DVP	927250	AC1-221 TAP	DVP	1	DVP_P1-2: LN 556-B-A	single	674.92	143.51	151.08	DC	51.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
247284	05LEESVG	0.4591	80/20	0.4591
313527	AB2-043 C	0.6777	80/20	0.6777
314333	6POWHATN	0.1206	80/20	0.1206
314429	3JTRSVLE	0.6020	80/20	0.6020
314677	6BUCKING	0.3988	80/20	0.3988
314704	3LAWRENC	0.1701	80/20	0.1701
315153	1CLOVER1	35.6962	80/20	35.6962
315154	1CLOVER2	35.3404	80/20	35.3404
315156	1HALLBR1	1.0288	80/20	1.0288
315158	1KERR 1	0.3313	80/20	0.3313
315159	1KERR 2	0.9276	80/20	0.9276
315160	1KERR 3	0.9276	80/20	0.9276
315161	1KERR 4	0.9276	80/20	0.9276
315162	1KERR 5	0.9276	80/20	0.9276
315163	1KERR 6	0.9276	80/20	0.9276
315164	1KERR 7	0.9276	80/20	0.9276
315191	1BEARGRDN G1	3.3144	80/20	3.3144
315192	1BEARGRDN G2	3.3144	80/20	3.3144
315193	1BEARGRDN S1	4.2862	80/20	4.2862
315266	1PLYWOOD A	3.0479	80/20	3.0479
316118	AC1-105 C	14.6953	80/20	14.6953
316123	AC1-075 C	1.8835	80/20	1.8835
316129	AC1-054 C	4.0299	80/20	4.0299
316131	AB2-060 C	1.9554	80/20	1.9554
924301	AB2-077 C O1 (Suspended)	2.7590	80/20	2.7590
924311	AB2-078 C O1 (Suspended)	2.7590	80/20	2.7590
924321	AB2-079 C O1 (Suspended)	2.7590	80/20	2.7590
925611	AC1-036 C	0.3165	80/20	0.3165
925661	AC1-042 C	1.5979	80/20	1.5979
926023	AC1-080 C	0.6295	80/20	0.6295
926451	AC1-116 C	0.0446	80/20	0.0446
926645	AC1-145 C	0.3001	80/20	0.3001
927251	AC1-221 C	-2.4502	Adder	-2.88
927261	AC1-222 C	10.1049	80/20	10.1049
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.3929	80/20	0.3929
933501	AC2-165 C	3.6987	80/20	3.6987
934311	AD1-055 C	7.0160	80/20	7.0160
934341	AD1-058 C	-6.1424	Adder	-7.23

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934615	AD1-087 C	22.4303	80/20	22.4303
934625	AD1-088 C	29.6895	80/20	29.6895
935171	AD1-152 C O1	24.6374	80/20	24.6374
935221	AD1-157 C	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1049	80/20	0.1049
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8235	80/20	4.8235
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7138	80/20	14.7138
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5650	80/20	0.5650
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5207	80/20	0.5207
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1214	80/20	7.1214
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O2	51.1088	80/20	51.1088
962491	AG1-098 C O2	17.1435	80/20	17.1435
962561	AG1-105 C O2	21.0366	80/20	21.0366
963171	AG1-166 C	2.8618	80/20	2.8618
963181	AG1-167 C	2.8618	80/20	2.8618
963191	AG1-168 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	2.8618	80/20	2.8618
963211	AG1-170 C	2.8618	80/20	2.8618
963271	AG1-176 C O2	28.3569	80/20	28.3569
963301	AG1-179 C	3.8207	80/20	3.8207
963311	AG1-180	1.8616	80/20	1.8616
963321	AG1-181 C O2	23.5297	80/20	23.5297
963361	AG1-185 O2	11.3843	80/20	11.3843
963601	AG1-209 C	0.2803	80/20	0.2803
963641	AG1-215 C	1.3355	80/20	1.3355
964111	AG1-272 C	3.5975	80/20	3.5975
964121	AG1-273 C	3.5975	80/20	3.5975
964131	AG1-274 C	3.5975	80/20	3.5975
964141	AG1-275 C	1.2014	80/20	1.2014
964151	AG1-276 C	1.2014	80/20	1.2014
964231	AG1-284 C O2	3.9984	80/20	3.9984
964251	AG1-286 C	0.4497	80/20	0.4497
964261	AG1-287 C	4.2981	80/20	4.2981
964471	AG1-310 C	5.7147	80/20	5.7147
964791	AG1-342 C	9.4188	80/20	9.4188
964821	AG1-345 C	1.1444	80/20	1.1444
964841	AG1-347 C	22.4661	80/20	22.4661
964931	AG1-357 C O2	27.5544	80/20	27.5544
965191	AG1-384 C	3.5975	80/20	3.5975
965281	AG1-393 C	2.8618	80/20	2.8618
965451	AG1-413 C O2	6.3542	80/20	6.3542
965581	AG1-426	1.5862	80/20	1.5862
965591	AG1-427 C	16.2855	80/20	16.2855
965601	AG1-428 C O2	3.1896	80/20	3.1896
965641	AG1-432 C O2	29.4276	80/20	29.4276
965721	AG1-440 C	5.4864	80/20	5.4864
965731	AG1-441 C	5.4864	80/20	5.4864
965771	AG1-445	3.1699	80/20	3.1699
965781	AG1-446	3.1699	80/20	3.1699
965831	AG1-451	4.9046	80/20	4.9046
966691	AG1-539 C	8.1754	80/20	8.1754
966751	AG1-546 C	8.2011	80/20	8.2011
966761	AG1-547 C	3.2579	80/20	3.2579
966791	AG1-550 O2	3.3320	80/20	3.3320
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	2.5247	80/20	2.5247
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	1.4443	Confirmed LTF	1.4443
PRAIRIE	PRAIRIE	4.6726	Confirmed LTF	4.6726
AC1-131	AC1-131	5.2830	LTF	5.2830
CHEOAH	CHEOAH	1.4865	Confirmed LTF	1.4865
CBM-N	CBM-N	0.2328	Confirmed LTF	0.2328
COTTONWOOD	COTTONWOOD	5.2395	Confirmed LTF	5.2395
HAMLET	HAMLET	3.2011	Confirmed LTF	3.2011
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912
BLUEG	BLUEG	2.4078	Confirmed LTF	2.4078
TRIMBLE	TRIMBLE	0.7618	Confirmed LTF	0.7618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CATAWBA	CATAWBA	1.6965	Confirmed LTF	1.6965

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169331327	314747	6BREMO	DVP	313867	6BREMODIST	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	130.41	131.74	DC	8.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1784	80/20	2.1784
313527	AB2-043 C	0.4243	80/20	0.4243
314429	3JTRSVLE	0.6669	80/20	0.6669
314572	3EMPORIA	0.1382	80/20	0.1382
314677	6BUCKING	1.0571	80/20	1.0571
314704	3LAWRENC	0.1410	80/20	0.1410
315126	1ROARAP2	0.4085	80/20	0.4085
315128	1ROARAP4	0.3898	80/20	0.3898
315153	1CLOVER1	7.5116	80/20	7.5116
315154	1CLOVER2	7.4368	80/20	7.4368
315158	1KERR 1	0.2345	80/20	0.2345
315159	1KERR 2	0.6567	80/20	0.6567
315160	1KERR 3	0.6567	80/20	0.6567
315161	1KERR 4	0.6567	80/20	0.6567
315162	1KERR 5	0.6567	80/20	0.6567
315163	1KERR 6	0.6567	80/20	0.6567
315164	1KERR 7	0.6567	80/20	0.6567
315191	1BEARGRDN G1	18.4998	80/20	18.4998
315192	1BEARGRDN G2	18.4998	80/20	18.4998
315193	1BEARGRDN S1	23.9239	80/20	23.9239
315266	1PLYWOOD A	0.6737	80/20	0.6737
316087	AB2-174 C	0.3606	80/20	0.3606
316118	AC1-105 C	3.4200	80/20	3.4200
316123	AC1-075 C	0.3763	80/20	0.3763
316129	AC1-054 C	3.4710	80/20	3.4710
316131	AB2-060 C	1.2609	80/20	1.2609
923991	AB2-040 C O1	2.3725	80/20	2.3725
924301	AB2-077 C O1 (Suspended)	1.6661	80/20	1.6661
924311	AB2-078 C O1 (Suspended)	1.6661	80/20	1.6661
924321	AB2-079 C O1 (Suspended)	1.6661	80/20	1.6661
925611	AC1-036 C	0.2822	80/20	0.2822
926023	AC1-080 C	0.1258	80/20	0.1258
927251	AC1-221 C	0.7947	80/20	0.7947
927261	AC1-222 C	1.8844	80/20	1.8844
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.0414	80/20	1.0414
932761	AC2-100 C	1.8288	80/20	1.8288

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0258	80/20	11.0258
938821	AE1-108 C O1	11.0123	80/20	11.0123
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7366	80/20	6.7366
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9627	80/20	3.9627
958801	AF2-171 C	23.6772	80/20	23.6772
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1702	80/20	3.1702
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0122	80/20	22.0122
962041	AG1-048 C	19.8135	80/20	19.8135
962441	AG1-093 C O2	8.8246	80/20	8.8246
962491	AG1-098 C O2	11.6385	80/20	11.6385
962561	AG1-105 C O2	6.9312	80/20	6.9312
963171	AG1-166 C	3.1702	80/20	3.1702
963181	AG1-167 C	3.1702	80/20	3.1702
963191	AG1-168 C	3.1702	80/20	3.1702
963201	AG1-169 C	3.1702	80/20	3.1702
963211	AG1-170 C	3.1702	80/20	3.1702
963271	AG1-176 C O2	29.3068	80/20	29.3068
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O2	20.4293	80/20	20.4293
963361	AG1-185 O2	9.8842	80/20	9.8842
963641	AG1-215 C	1.4794	80/20	1.4794
964111	AG1-272 C	3.2072	80/20	3.2072
964121	AG1-273 C	3.2072	80/20	3.2072
964131	AG1-274 C	3.2072	80/20	3.2072
964231	AG1-284 C O2	6.3853	80/20	6.3853
964241	AG1-285 C O2	6.2010	80/20	6.2010
964261	AG1-287 C	0.7911	80/20	0.7911
964471	AG1-310 C	1.0721	80/20	1.0721
964791	AG1-342 C	2.7841	80/20	2.7841
964821	AG1-345 C	1.2648	80/20	1.2648
964841	AG1-347 C	12.9864	80/20	12.9864
964931	AG1-357 C O2	19.9968	80/20	19.9968
965191	AG1-384 C	3.2072	80/20	3.2072
965281	AG1-393 C	3.1702	80/20	3.1702
965451	AG1-413 C O2	4.4581	80/20	4.4581
965581	AG1-426	2.3992	80/20	2.3992
965591	AG1-427 C	11.4819	80/20	11.4819
965601	AG1-428 C O2	2.4880	80/20	2.4880
965641	AG1-432 C O2	40.6200	80/20	40.6200
965721	AG1-440 C	4.1121	80/20	4.1121
965731	AG1-441 C	4.1121	80/20	4.1121
965771	AG1-445	2.3759	80/20	2.3759
965781	AG1-446	2.3759	80/20	2.3759
965831	AG1-451	6.7700	80/20	6.7700
966361	AG1-505 C	4.9734	80/20	4.9734
966371	AG1-506 C	4.9734	80/20	4.9734
966621	AG1-532 C	0.4522	80/20	0.4522
966691	AG1-539 C	1.7146	80/20	1.7146
966751	AG1-546 C	7.3410	80/20	7.3410
966791	AG1-550 O2	5.3211	80/20	5.3211
966811	AG1-552 C	0.6485	80/20	0.6485
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	5.5327	80/20	5.5327
WEC	WEC	0.0699	Confirmed LTF	0.0699
LGEE	LGEE	0.1483	Confirmed LTF	0.1483
CPL	CPL	2.3396	Confirmed LTF	2.3396
CBM-W2	CBM-W2	5.8061	Confirmed LTF	5.8061
NY	NY	0.4076	Confirmed LTF	0.4076
TVA	TVA	1.2558	Confirmed LTF	1.2558
SIGE	SIGE	0.1120	Confirmed LTF	0.1120
CBM-S2	CBM-S2	25.9121	Confirmed LTF	25.9121
CBM-S1	CBM-S1	0.2953	Confirmed LTF	0.2953
MEC	MEC	0.5863	Confirmed LTF	0.5863
LAGN	LAGN	1.5645	Confirmed LTF	1.5645
AA2-074	AA2-074	1.5426	LTF	1.5426
CBM-W1	CBM-W1	2.5236	Confirmed LTF	2.5236

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169331317	314765	6MTEAGLE	DVP	314749	6CHARLVL	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	130.36	131.59	DC	8.13

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3898	80/20	0.3898
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1286	80/20	0.1286
315153	1CLOVER1	6.8555	80/20	6.8555
315154	1CLOVER2	6.7871	80/20	6.7871
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6056	80/20	0.6056
315160	1KERR 3	0.6056	80/20	0.6056
315161	1KERR 4	0.6056	80/20	0.6056
315162	1KERR 5	0.6056	80/20	0.6056
315163	1KERR 6	0.6056	80/20	0.6056
315164	1KERR 7	0.6056	80/20	0.6056
315191	1BEARGRDN G1	16.8015	80/20	16.8015
315192	1BEARGRDN G2	16.8015	80/20	16.8015
315193	1BEARGRDN S1	21.7276	80/20	21.7276
315266	1PLYWOOD A	0.6337	80/20	0.6337
316118	AC1-105 C	3.2095	80/20	3.2095
316123	AC1-075 C	0.3995	80/20	0.3995
316129	AC1-054 C	3.1893	80/20	3.1893
316131	AB2-060 C	1.1579	80/20	1.1579
924301	AB2-077 C O1 (Suspended)	1.5318	80/20	1.5318
924311	AB2-078 C O1 (Suspended)	1.5318	80/20	1.5318
924321	AB2-079 C O1 (Suspended)	1.5318	80/20	1.5318
925611	AC1-036 C	0.2579	80/20	0.2579
926023	AC1-080 C	0.1335	80/20	0.1335
926451	AC1-116 C	0.5713	80/20	0.5713
927251	AC1-221 C	0.7553	80/20	0.7553
927261	AC1-222 C	1.8201	80/20	1.8201
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9462	80/20	0.9462
932761	AC2-100 C	1.7381	80/20	1.7381
933501	AC2-165 C	31.7798	80/20	31.7798
934311	AD1-055 C	1.2637	80/20	1.2637
934341	AD1-058 C	1.8933	80/20	1.8933
934615	AD1-087 C	4.2927	80/20	4.2927

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934625	AD1-088 C	14.0094	80/20	14.0094
934991	AD1-131 C	0.6208	80/20	0.6208
935171	AD1-152 C O1	4.7150	80/20	4.7150
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9363	80/20	13.9363
936361	AD2-046 C O1	5.3660	80/20	5.3660
936485	AD2-063 C	13.8249	80/20	13.8249
937481	AD2-202 C O1	1.2573	80/20	1.2573
938371	AE1-056 C	10.0469	80/20	10.0469
938821	AE1-108 C O1	34.7022	80/20	34.7022
939181	AE1-148 C	5.3595	80/20	5.3595
940661	AE2-053 O1	1.9850	80/20	1.9850
941011	AE2-092 C	28.7092	80/20	28.7092
941791	AE2-182 C	2.2760	80/20	2.2760
942451	AE2-258	1.8434	80/20	1.8434
942461	AE2-259 C O1	18.4818	80/20	18.4818
942751	AE2-291 C	3.6916	80/20	3.6916
942761	AE2-292 C O1	4.5964	80/20	4.5964
943901	AF1-058 C	0.9986	80/20	0.9986
943911	AF1-059	9.4111	80/20	9.4111
945811	AF1-246 C O1	3.3281	80/20	3.3281
946281	AF1-292 C	0.4501	80/20	0.4501
946291	AF1-293 C O1	46.3226	80/20	46.3226
946301	AF1-294 C	6.1424	80/20	6.1424
946591	AF1-323 C	11.1045	80/20	11.1045
957481	AF2-042 C	23.7720	80/20	23.7720
958131	AF2-107 C	5.0062	80/20	5.0062
958211	AF2-115 C	3.6132	80/20	3.6132
958801	AF2-171 C	21.5892	80/20	21.5892
959311	AF2-222 C	19.7350	80/20	19.7350
959751	AF2-266	4.9210	80/20	4.9210
960061	AF2-297 C	3.9946	80/20	3.9946
960081	AF2-299 C	0.7586	80/20	0.7586
960111	AF2-302 C	4.0380	80/20	4.0380
961061	AF2-397 C	49.3795	80/20	49.3795
961791	AG1-021 C	2.8906	80/20	2.8906
961801	AG1-022 C	4.0380	80/20	4.0380
961891	AG1-030 C	20.0853	80/20	20.0853
962041	AG1-048 C	18.0660	80/20	18.0660
962441	AG1-093 C O2	8.1264	80/20	8.1264
962491	AG1-098 C O2	10.6792	80/20	10.6792
962561	AG1-105 C O2	6.4410	80/20	6.4410
962741	AG1-123 C O2	3.0874	80/20	3.0874
962751	AG1-124 C O2	4.3356	80/20	4.3356
963171	AG1-166 C	2.8906	80/20	2.8906
963181	AG1-167 C	2.8906	80/20	2.8906
963191	AG1-168 C	2.8906	80/20	2.8906
963201	AG1-169 C	2.8906	80/20	2.8906
963211	AG1-170 C	2.8906	80/20	2.8906
963271	AG1-176 C O2	26.6490	80/20	26.6490
963301	AG1-179 C	2.7231	80/20	2.7231
963311	AG1-180	1.3268	80/20	1.3268

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O2	18.6784	80/20	18.6784
963361	AG1-185 O2	9.0371	80/20	9.0371
963641	AG1-215 C	1.3489	80/20	1.3489
964111	AG1-272 C	2.9313	80/20	2.9313
964121	AG1-273 C	2.9313	80/20	2.9313
964131	AG1-274 C	2.9313	80/20	2.9313
964231	AG1-284 C O2	20.2364	80/20	20.2364
964241	AG1-285 C O2	5.6295	80/20	5.6295
964261	AG1-287 C	0.7490	80/20	0.7490
964471	AG1-310 C	1.0445	80/20	1.0445
964791	AG1-342 C	2.5943	80/20	2.5943
964821	AG1-345 C	1.1533	80/20	1.1533
964841	AG1-347 C	11.8171	80/20	11.8171
964931	AG1-357 C O2	18.3276	80/20	18.3276
965191	AG1-384 C	2.9313	80/20	2.9313
965281	AG1-393 C	2.8906	80/20	2.8906
965451	AG1-413 C O2	4.0837	80/20	4.0837
965581	AG1-426	7.5604	80/20	7.5604
965591	AG1-427 C	10.5285	80/20	10.5285
965601	AG1-428 C O2	2.2733	80/20	2.2733
965641	AG1-432 C O2	36.9636	80/20	36.9636
965721	AG1-440 C	3.7881	80/20	3.7881
965731	AG1-441 C	3.7881	80/20	3.7881
965771	AG1-445	2.1887	80/20	2.1887
965781	AG1-446	2.1887	80/20	2.1887
965831	AG1-451	6.1606	80/20	6.1606
966251	AG1-494 C	1.8190	80/20	1.8190
966621	AG1-532 C	0.4096	80/20	0.4096
966691	AG1-539 C	1.9302	80/20	1.9302
966751	AG1-546 C	6.7407	80/20	6.7407
966791	AG1-550 O2	16.8637	80/20	16.8637
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	5.0276	80/20	5.0276
WEC	WEC	0.1332	Confirmed LTF	0.1332
LGEE	LGEE	0.2859	Confirmed LTF	0.2859
CPL	CPL	2.2666	Confirmed LTF	2.2666
CBM-W2	CBM-W2	7.4995	Confirmed LTF	7.4995
NY	NY	0.4413	Confirmed LTF	0.4413
TVA	TVA	1.5190	Confirmed LTF	1.5190
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.1835	Confirmed LTF	26.1835
CBM-S1	CBM-S1	0.3690	Confirmed LTF	0.3690
MEC	MEC	0.9010	Confirmed LTF	0.9010
LAGN	LAGN	1.8743	Confirmed LTF	1.8743
AA2-074	AA2-074	1.4958	LTF	1.4958
CBM-W1	CBM-W1	5.2575	Confirmed LTF	5.2575

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173793500	314902	8CARSON	DVP	314282	6CARSON	DVP	1	DVP_P4-2: 562T563	breaker	1039.7	173.6	175.06	DC	15.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	-4.0459	Adder	-4.76
315073	1STONECA	-3.6129	Adder	-4.25
315102	1BRUNSWICKG1	8.9192	50/50	8.9192
315103	1BRUNSWICKG2	8.9192	50/50	8.9192
315104	1BRUNSWICKG3	8.9192	50/50	8.9192
315105	1BRUNSWICKS1	18.5296	50/50	18.5296
315153	1CLOVER1	10.2303	50/50	10.2303
315154	1CLOVER2	10.1283	50/50	10.1283
315241	1Z1-086 GT1	11.5861	50/50	11.5861
315242	1Z1-086 GT2	11.5861	50/50	11.5861
315243	1Z1-086 GT3	11.5861	50/50	11.5861
315244	1Z1-086 ST	20.1410	50/50	20.1410
316132	AB2-190 C	-6.9306	Adder	-8.15
923991	AB2-040 C O1	-4.4065	Adder	-5.18
927251	AC1-221 C	1.0082	Adder	1.19
927252	AC1-221 E	1.0082	Adder	1.19
927261	AC1-222 C	1.4920	Adder	1.76
927262	AC1-222 E	1.4203	Adder	1.67
932581	AC2-078 C O1	-3.3783	Adder	-3.97
932761	AC2-100 C	2.3202	Adder	2.73
932762	AC2-100 E	1.1325	Adder	1.33
934311	AD1-055 C	1.0359	Adder	1.22
934312	AD1-055 E	0.2671	Adder	0.31
934341	AD1-058 C	2.5274	Adder	2.97
934342	AD1-058 E	0.6422	Adder	0.76
934615	AD1-087 C	6.4007	50/50	6.4007
934616	AD1-087 E	2.7390	50/50	2.7390
934625	AD1-088 C	7.8904	50/50	7.8904
934626	AD1-088 E	2.0665	50/50	2.0665
934991	AD1-131 C	0.8286	Adder	0.97
934992	AD1-131 E	0.5524	Adder	0.65
935171	AD1-152 C O1	7.0306	50/50	7.0306
935172	AD1-152 E O1	4.6870	50/50	4.6870
936761	AD2-097 C	-0.9237	Adder	-1.09
936762	AD2-097 E	-4.6184	Adder	-5.43
937481	AD2-202 C O1	1.8748	50/50	1.8748
937482	AD2-202 E O1	1.0546	50/50	1.0546
938494	AE1-068_C1	34.9451	50/50	34.9451
938497	AE1-068_C2	34.9451	50/50	34.9451
938498	AE1-068_E1	19.3175	50/50	19.3175
938499	AE1-068_E2	19.3175	50/50	19.3175

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938504	AE1-069_C1	26.6320	50/50	26.6320
938507	AE1-069_C2	28.7157	50/50	28.7157
938508	AE1-069_E1	15.1501	50/50	15.1501
938509	AE1-069_E2	16.3222	50/50	16.3222
939414	AE1-173_C1	27.3622	50/50	27.3622
939415	AE1-173_C2	23.4533	50/50	23.4533
939416	AE1-173_C3	27.3622	50/50	27.3622
939423	AE1-173_E1	18.2414	50/50	18.2414
939424	AE1-173_E2	15.6355	50/50	15.6355
939425	AE1-173_E3	18.2414	50/50	18.2414
940063	AE2-000B BAT	16.0180	50/50	16.0180
940471	AE2-031 C	38.3252	50/50	38.3252
940472	AE2-031 E	25.5502	50/50	25.5502
940542	AE2-040 BAT	5.2575	50/50	5.2575
940652	AE2-052 BAT	4.0268	50/50	4.0268
941031	AE2-094 C	46.3589	50/50	46.3589
941032	AE2-094 E	20.7631	50/50	20.7631
941791	AE2-182 C	1.2819	50/50	1.2819
941792	AE2-182 E	0.5968	50/50	0.5968
942151	AE2-227 C	-0.8075	Adder	-0.95
942161	AE2-228 C	-1.9053	Adder	-2.24
942931	AE2-313 C	41.3896	50/50	41.3896
942932	AE2-313 E	27.5931	50/50	27.5931
943901	AF1-058 C	0.8269	Adder	0.97
943902	AF1-058 E	0.5513	Adder	0.65
944011	AF1-069 C	15.1472	50/50	15.1472
944012	AF1-069 E	5.8844	50/50	5.8844
945811	AF1-246 C O1	7.0606	50/50	7.0606
945812	AF1-246 E O1	9.7504	50/50	9.7504
946012	AF1-266 BAT	23.7528	50/50	23.7528
946261	AF1-291 C	-1.8850	Adder	-2.22
957481	AF2-042 C	50.4330	50/50	50.4330
957482	AF2-042 E	33.6220	50/50	33.6220
958142	AF2-108 BAT	1.9766	50/50	1.9766
959641	AF2-255 C	-0.2019	Adder	-0.24
959651	AF2-256 C	-0.4763	Adder	-0.56
959751	AF2-266	7.3435	50/50	7.3435
960061	AF2-297 C	3.3077	Adder	3.89
960062	AF2-297 E	2.2051	Adder	2.59
962193	AG1-064 BAT	0.7931	Merchant Transmission	0.7931
962203	AG1-065 BAT	0.7931	Merchant Transmission	0.7931
962441	AG1-093 C O2	11.5874	50/50	11.5874
962442	AG1-093 E O2	3.5266	50/50	3.5266
963041	AG1-153 C	6.2583	50/50	6.2583
963042	AG1-153 E	9.3874	50/50	9.3874
963111	AG1-160 C	6.4044	50/50	6.4044
963112	AG1-160 E	9.6066	50/50	9.6066
963271	AG1-176 C O2	2.9499	Adder	6.55
963272	AG1-176 E O2	1.9666	Adder	4.37
963291	AG1-178 C O2	68.1497	50/50	68.1497
963312	AG1-180 BAT	1.4723	Merchant Transmission	1.4723
963351	AG1-184 O2	36.7153	50/50	36.7153

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964241	AG1-285 C O2	12.9555	50/50	12.9555
964242	AG1-285 E O2	8.6370	50/50	8.6370
964261	AG1-287 C	0.3287	Adder	0.73
964262	AG1-287 E	0.2191	Adder	0.49
964471	AG1-310 C	0.4518	Adder	1.0
964472	AG1-310 E	0.2225	Adder	0.49
964841	AG1-347 C	5.8800	50/50	5.8800
964842	AG1-347 E	4.6200	50/50	4.6200
965811	AG1-449	26.8717	50/50	26.8717
966361	AG1-505 C	18.0837	50/50	18.0837
966362	AG1-505 E	12.0558	50/50	12.0558
966371	AG1-506 C	18.0837	50/50	18.0837
966372	AG1-506 E	12.0558	50/50	12.0558
966733	AG1-544 BAT	2.6822	50/50	2.6822
966743	AG1-545 BAT	0.8834	50/50	0.8834
WEC	WEC	0.4536	Confirmed LTF	0.4536
LGEE	LGEE	0.9337	Confirmed LTF	0.9337
CPL	CPL	4.4240	Confirmed LTF	4.4240
CBM-W2	CBM-W2	20.0704	Confirmed LTF	20.0704
NY	NY	0.6686	Confirmed LTF	0.6686
TVA	TVA	3.7982	Confirmed LTF	3.7982
O-066	O-066	9.3951	Confirmed LTF	9.3951
SIG	SIG	0.3135	Confirmed LTF	0.3135
CBM-S2	CBM-S2	55.7600	Confirmed LTF	55.7600
CBM-S1	CBM-S1	0.9462	Confirmed LTF	0.9462
G-007	G-007	1.4773	Confirmed LTF	1.4773
MEC	MEC	2.7283	Confirmed LTF	2.7283
LAGN	LAGN	4.7197	Confirmed LTF	4.7197
AA2-074	AA2-074	2.9227	LTF	2.9227
CBM-W1	CBM-W1	18.9550	Confirmed LTF	18.9550

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173303311	927250	AC1-221 TAP	DVP	304070	6PERSON230 T	CPL	1	DVP_P1-2: LN 556-B-B	single	718.0	146.85	153.97	DC	51.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
247284	05LEESVG	0.4591	80/20	0.4591
313527	AB2-043 C	0.6777	80/20	0.6777
314333	6POWHATN	0.1206	80/20	0.1206
314429	3JTRSVLE	0.6020	80/20	0.6020
314677	6BUCKING	0.3988	80/20	0.3988
314704	3LAWRENC	0.1701	80/20	0.1701
315153	1CLOVER1	35.6962	80/20	35.6962
315154	1CLOVER2	35.3404	80/20	35.3404
315156	1HALLBR1	1.0288	80/20	1.0288
315158	1KERR 1	0.3313	80/20	0.3313
315159	1KERR 2	0.9276	80/20	0.9276
315160	1KERR 3	0.9276	80/20	0.9276
315161	1KERR 4	0.9276	80/20	0.9276
315162	1KERR 5	0.9276	80/20	0.9276
315163	1KERR 6	0.9276	80/20	0.9276
315164	1KERR 7	0.9276	80/20	0.9276
315191	1BEARGRDN G1	3.3144	80/20	3.3144
315192	1BEARGRDN G2	3.3144	80/20	3.3144
315193	1BEARGRDN S1	4.2862	80/20	4.2862
315266	1PLYWOOD A	3.0479	80/20	3.0479
316118	AC1-105 C	14.6953	80/20	14.6953
316123	AC1-075 C	1.8835	80/20	1.8835
316129	AC1-054 C	4.0299	80/20	4.0299
316131	AB2-060 C	1.9554	80/20	1.9554
924301	AB2-077 C O1 (Suspended)	2.7590	80/20	2.7590
924311	AB2-078 C O1 (Suspended)	2.7590	80/20	2.7590
924321	AB2-079 C O1 (Suspended)	2.7590	80/20	2.7590
925611	AC1-036 C	0.3165	80/20	0.3165
925661	AC1-042 C	1.5979	80/20	1.5979
926023	AC1-080 C	0.6295	80/20	0.6295
926451	AC1-116 C	0.0446	80/20	0.0446
926645	AC1-145 C	0.3001	80/20	0.3001
927251	AC1-221 C	11.7174	80/20	11.7174
927261	AC1-222 C	10.1049	80/20	10.1049
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.3929	80/20	0.3929
932761	AC2-100 C	26.9660	80/20	26.9660
933501	AC2-165 C	3.6987	80/20	3.6987
934311	AD1-055 C	7.0160	80/20	7.0160

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934341	AD1-058 C	29.3737	80/20	29.3737
934615	AD1-087 C	22.4303	80/20	22.4303
934625	AD1-088 C	29.6895	80/20	29.6895
934991	AD1-131 C	9.6307	80/20	9.6307
935171	AD1-152 C O1	24.6374	80/20	24.6374
935221	AD1-157 C	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1049	80/20	0.1049
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8235	80/20	4.8235
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7138	80/20	14.7138
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5650	80/20	0.5650
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5207	80/20	0.5207
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1214	80/20	7.1214
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O2	51.1088	80/20	51.1088
962491	AG1-098 C O2	17.1435	80/20	17.1435
962561	AG1-105 C O2	21.0366	80/20	21.0366
963171	AG1-166 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963181	AG1-167 C	2.8618	80/20	2.8618
963191	AG1-168 C	2.8618	80/20	2.8618
963201	AG1-169 C	2.8618	80/20	2.8618
963211	AG1-170 C	2.8618	80/20	2.8618
963271	AG1-176 C O2	28.3569	80/20	28.3569
963301	AG1-179 C	3.8207	80/20	3.8207
963311	AG1-180	1.8616	80/20	1.8616
963321	AG1-181 C O2	23.5297	80/20	23.5297
963361	AG1-185 O2	11.3843	80/20	11.3843
963601	AG1-209 C	0.2803	80/20	0.2803
963641	AG1-215 C	1.3355	80/20	1.3355
964111	AG1-272 C	3.5975	80/20	3.5975
964121	AG1-273 C	3.5975	80/20	3.5975
964131	AG1-274 C	3.5975	80/20	3.5975
964141	AG1-275 C	1.2014	80/20	1.2014
964151	AG1-276 C	1.2014	80/20	1.2014
964231	AG1-284 C O2	3.9984	80/20	3.9984
964241	AG1-285 C O2	38.4360	80/20	38.4360
964251	AG1-286 C	0.4497	80/20	0.4497
964261	AG1-287 C	4.2981	80/20	4.2981
964471	AG1-310 C	5.7147	80/20	5.7147
964791	AG1-342 C	9.4188	80/20	9.4188
964821	AG1-345 C	1.1444	80/20	1.1444
964841	AG1-347 C	22.4661	80/20	22.4661
964931	AG1-357 C O2	27.5544	80/20	27.5544
965191	AG1-384 C	3.5975	80/20	3.5975
965281	AG1-393 C	2.8618	80/20	2.8618
965451	AG1-413 C O2	6.3542	80/20	6.3542
965581	AG1-426	1.5862	80/20	1.5862
965591	AG1-427 C	16.2855	80/20	16.2855
965601	AG1-428 C O2	3.1896	80/20	3.1896
965641	AG1-432 C O2	29.4276	80/20	29.4276
965721	AG1-440 C	5.4864	80/20	5.4864
965731	AG1-441 C	5.4864	80/20	5.4864
965771	AG1-445	3.1699	80/20	3.1699
965781	AG1-446	3.1699	80/20	3.1699
965831	AG1-451	4.9046	80/20	4.9046
966691	AG1-539 C	8.1754	80/20	8.1754
966751	AG1-546 C	8.2011	80/20	8.2011
966761	AG1-547 C	3.2579	80/20	3.2579
966791	AG1-550 O2	3.3320	80/20	3.3320
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	2.5247	80/20	2.5247
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	1.4443	Confirmed LTF	1.4443
PRAIRIE	PRAIRIE	4.6726	Confirmed LTF	4.6726
AC1-131	AC1-131	5.2830	LTF	5.2830
CHEOAH	CHEOAH	1.4865	Confirmed LTF	1.4865
CBM-N	CBM-N	0.2328	Confirmed LTF	0.2328
COTTONWOOD	COTTONWOOD	5.2395	Confirmed LTF	5.2395
HAMLET	HAMLET	3.2011	Confirmed LTF	3.2011

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912
BLUEG	BLUEG	2.4078	Confirmed LTF	2.4078
TRIMBLE	TRIMBLE	0.7618	Confirmed LTF	0.7618
CATAWBA	CATAWBA	1.6965	Confirmed LTF	1.6965

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977155	934620	AD1-088 TAP	DVP	964840	AG1-347 TAP	DVP	1	DVP_P4-2: 511T556	breaker	699.0	122.8	127.29	DC	31.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	-0.4636	Adder	-0.55
315153	1CLOVER1	22.6895	50/50	22.6895
315154	1CLOVER2	22.4633	50/50	22.4633
315266	1PLYWOOD A	0.8779	50/50	0.8779
316118	AC1-105 C	4.0048	50/50	4.0048
316123	AC1-075 C	0.6069	50/50	0.6069
925997	AC1-075 E	2.1793	50/50	2.1793
926023	AC1-080 C	0.2028	50/50	0.2028
926024	AC1-080 E	0.7231	50/50	0.7231
926274	AC1-105 E	1.9676	50/50	1.9676
927251	AC1-221 C	1.5101	50/50	1.5101
927252	AC1-221 E	1.5101	50/50	1.5101
927261	AC1-222 C	3.1332	50/50	3.1332
927262	AC1-222 E	2.9827	50/50	2.9827
932761	AC2-100 C	3.4752	50/50	3.4752
932762	AC2-100 E	1.6963	50/50	1.6963
934311	AD1-055 C	2.1754	50/50	2.1754
934312	AD1-055 E	0.5610	50/50	0.5610
934341	AD1-058 C	3.7855	50/50	3.7855
934342	AD1-058 E	0.9619	50/50	0.9619
934615	AD1-087 C	14.1820	50/50	14.1820
934616	AD1-087 E	6.0687	50/50	6.0687
934625	AD1-088 C	33.5344	50/50	33.5344
934626	AD1-088 E	8.7828	50/50	8.7828
934991	AD1-131 C	1.2412	50/50	1.2412
934992	AD1-131 E	0.8274	50/50	0.8274
935171	AD1-152 C O1	15.5774	50/50	15.5774
935172	AD1-152 E O1	10.3850	50/50	10.3850
937481	AD2-202 C O1	4.1540	50/50	4.1540
937482	AD2-202 E O1	2.3366	50/50	2.3366
941791	AE2-182 C	5.4482	50/50	5.4482
941792	AE2-182 E	2.5362	50/50	2.5362
942751	AE2-291 C	4.4025	Adder	5.18
942752	AE2-291 E	2.9350	Adder	3.45
942761	AE2-292 C O1	5.4815	Adder	6.45
942762	AE2-292 E O1	3.6543	Adder	4.3
943901	AF1-058 C	1.7642	50/50	1.7642
943902	AF1-058 E	1.1762	50/50	1.1762
945811	AF1-246 C O1	13.6807	50/50	13.6807
945812	AF1-246 E O1	18.8923	50/50	18.8923
946293	AF1-293 BAT	7.7876	Merchant Transmission	7.7876

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	97.7190	50/50	97.7190
957482	AF2-042 E	65.1460	50/50	65.1460
958503	AF2-144 BAT	0.6533	Merchant Transmission	0.6533
959751	AF2-266	16.2870	50/50	16.2870
960061	AF2-297 C	7.0570	50/50	7.0570
960062	AF2-297 E	4.7046	50/50	4.7046
961063	AF2-397 BAT	5.4682	50/50	5.4682
962441	AG1-093 C O2	24.0672	50/50	24.0672
962442	AG1-093 E O2	7.3248	50/50	7.3248
962561	AG1-105 C O2	1.9170	Adder	4.26
962562	AG1-105 E O2	1.2780	Adder	2.84
963362	AG1-185 BAT	3.2622	Merchant Transmission	3.2622
963643	AG1-215 BAT	1.9088	50/50	1.9088
964113	AG1-272 BAT	0.7934	Merchant Transmission	0.7934
964123	AG1-273 BAT	0.7934	Merchant Transmission	0.7934
964133	AG1-274 BAT	0.7934	Merchant Transmission	0.7934
964241	AG1-285 C O2	24.4297	50/50	24.4297
964242	AG1-285 E O2	16.2865	50/50	16.2865
964261	AG1-287 C	1.3232	50/50	1.3232
964262	AG1-287 E	0.8821	50/50	0.8821
964471	AG1-310 C	1.7778	50/50	1.7778
964472	AG1-310 E	0.8756	50/50	0.8756
964791	AG1-342 C	0.9627	Adder	2.14
964792	AG1-342 E	0.7564	Adder	1.68
964843	AG1-347 BAT	10.1706	50/50	10.1706
965193	AG1-384 BAT	0.3400	Merchant Transmission	0.3400
965582	AG1-426 BAT	0.8211	Merchant Transmission	0.8211
965832	AG1-451 BAT	4.3542	50/50	4.3542
966361	AG1-505 C	29.3139	50/50	29.3139
966362	AG1-505 E	19.5426	50/50	19.5426
966371	AG1-506 C	29.3139	50/50	29.3139
966372	AG1-506 E	19.5426	50/50	19.5426
966691	AG1-539 C	1.2200	Adder	2.71
966692	AG1-539 E	1.6394	Adder	3.64
966792	AG1-550 BAT	3.6662	50/50	3.6662
WEC	WEC	0.2533	Confirmed LTF	0.2533
LGEE	LGEE	0.5221	Confirmed LTF	0.5221
CPL	CPL	2.8672	Confirmed LTF	2.8672
CBM-W2	CBM-W2	11.2358	Confirmed LTF	11.2358
NY	NY	0.3207	Confirmed LTF	0.3207
TVA	TVA	2.1308	Confirmed LTF	2.1308
O-066	O-066	4.4754	Confirmed LTF	4.4754
SIGE	SIGE	0.1632	Confirmed LTF	0.1632
CBM-S2	CBM-S2	33.3871	Confirmed LTF	33.3871
CBM-S1	CBM-S1	0.5309	Confirmed LTF	0.5309
G-007	G-007	0.7035	Confirmed LTF	0.7035
MEC	MEC	1.5254	Confirmed LTF	1.5254
LAGN	LAGN	2.6425	Confirmed LTF	2.6425
AA2-074	AA2-074	1.8936	LTF	1.8936
CBM-W1	CBM-W1	10.5711	Confirmed LTF	10.5711

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174377817	942750	AE2-291 TAP	DVP	314694	3GRIT	DVP	1	DVP_P4-2: 511T556	breaker	350.0	109.64	110.99	DC	10.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.2132	Adder	0.25
314713	3PAMPLIN	0.4970	Adder	0.58
315266	1PLYWOOD A	1.0286	50/50	1.0286
316118	AC1-105 C	4.9180	50/50	4.9180
316123	AC1-075 C	2.6602	50/50	2.6602
924022	AB2-043 E O1	1.1292	Adder	1.33
924162	AB2-060 E OP	1.6982	Adder	2.0
924301	AB2-077 C O1 (Suspended)	0.8161	Adder	0.96
924302	AB2-077 E O1 (Suspended)	0.5441	Adder	0.64
924311	AB2-078 C O1 (Suspended)	0.8161	Adder	0.96
924312	AB2-078 E O1 (Suspended)	0.5441	Adder	0.64
924321	AB2-079 C O1 (Suspended)	0.8161	Adder	0.96
924322	AB2-079 E O1 (Suspended)	0.5441	Adder	0.64
925612	AC1-036 E	0.3066	Adder	0.36
925661	AC1-042 C	-2.7373	Adder	-3.22
925997	AC1-075 E	9.5532	50/50	9.5532
926023	AC1-080 C	0.8890	50/50	0.8890
926024	AC1-080 E	3.1697	50/50	3.1697
926274	AC1-105 E	2.4162	50/50	2.4162
927261	AC1-222 C	5.0538	50/50	5.0538
927262	AC1-222 E	4.8110	50/50	4.8110
934311	AD1-055 C	3.5090	50/50	3.5090
934312	AD1-055 E	0.9048	50/50	0.9048
934615	AD1-087 C	3.0206	Adder	3.55
934616	AD1-087 E	1.2926	Adder	1.52
934625	AD1-088 C	4.1166	Adder	4.84
934626	AD1-088 E	1.0782	Adder	1.27
935171	AD1-152 C O1	3.3179	Adder	3.9
935172	AD1-152 E O1	2.2119	Adder	2.6
935222	AD1-157 E	0.3064	Adder	0.36
936265	AD2-033 C	4.7544	Adder	5.59
936266	AD2-033 E	3.1696	Adder	3.73
936361	AD2-046 C O1	3.0375	Adder	3.57
936362	AD2-046 E O1	1.3968	Adder	1.64
936485	AD2-063 C	5.7605	Adder	6.78
936486	AD2-063 E	3.8403	Adder	4.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
937481	AD2-202 C O1	0.8848	Adder	1.04
937482	AD2-202 E O1	0.4977	Adder	0.59
938371	AE1-056 C	1.9814	Adder	2.33
938372	AE1-056 E	1.0826	Adder	1.27
939181	AE1-148 C	3.0184	Adder	3.55
939182	AE1-148 E	2.0123	Adder	2.37
939943	AE1-230 BAT	1.6142	50/50	1.6142
940661	AE2-053 O1	1.1179	Adder	1.32
941791	AE2-182 C	0.6688	Adder	0.79
941792	AE2-182 E	0.3113	Adder	0.37
942451	AE2-258	0.9421	Adder	1.11
942751	AE2-291 C	32.7726	50/50	32.7726
942752	AE2-291 E	21.8484	50/50	21.8484
942761	AE2-292 C O1	40.8051	50/50	40.8051
942762	AE2-292 E O1	27.2034	50/50	27.2034
943901	AF1-058 C	1.9100	50/50	1.9100
943902	AF1-058 E	1.2734	50/50	1.2734
945811	AF1-246 C O1	2.8992	Adder	3.41
945812	AF1-246 E O1	4.0037	Adder	4.71
946301	AF1-294 C	1.3590	Adder	1.6
946302	AF1-294 E	0.9060	Adder	1.07
957481	AF2-042 C	20.7086	Adder	24.36
957482	AF2-042 E	13.8057	Adder	16.24
958211	AF2-115 C	0.7994	Adder	0.94
958212	AF2-115 E	0.5330	Adder	0.63
958801	AF2-171 C	4.8065	Adder	5.65
958802	AF2-171 E	3.2043	Adder	3.77
959311	AF2-222 C	5.8633	Adder	6.9
959312	AF2-222 E	3.9284	Adder	4.62
959751	AF2-266	3.4514	Adder	4.06
960061	AF2-297 C	7.6402	50/50	7.6402
960062	AF2-297 E	5.0934	50/50	5.0934
961122	AF2-403 BAT	4.0356	50/50	4.0356
961131	AF2-404 BAT	4.0356	50/50	4.0356
961791	AG1-021 C	0.3390	Adder	0.75
961792	AG1-021 E	0.2260	Adder	0.5
961891	AG1-030 C	2.6464	Adder	5.87
961892	AG1-030 E	1.7642	Adder	3.92
962041	AG1-048 C	2.1185	Adder	4.7
962042	AG1-048 E	1.4123	Adder	3.13
962441	AG1-093 C O2	3.6124	Adder	8.02
962442	AG1-093 E O2	1.0994	Adder	2.44
962491	AG1-098 C O2	2.6003	Adder	5.77
962492	AG1-098 E O2	1.7335	Adder	3.85
962561	AG1-105 C O2	7.0980	50/50	7.0980
962562	AG1-105 E O2	4.7320	50/50	4.7320
963171	AG1-166 C	0.3390	Adder	0.75
963172	AG1-166 E	0.2260	Adder	0.5
963181	AG1-167 C	0.3390	Adder	0.75
963182	AG1-167 E	0.2260	Adder	0.5
963191	AG1-168 C	0.3390	Adder	0.75
963192	AG1-168 E	0.2260	Adder	0.5

Bus #	Bus	Gendoliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	0.3390	Adder	0.75
963202	AG1-169 E	0.2260	Adder	0.5
963211	AG1-170 C	0.3390	Adder	0.75
963212	AG1-170 E	0.2260	Adder	0.5
963321	AG1-181 C O2	3.2243	Adder	7.16
963361	AG1-185 O2	1.5600	Adder	3.46
963603	AG1-209 BAT	1.4125	50/50	1.4125
963641	AG1-215 C	0.1582	Adder	0.35
963642	AG1-215 E	0.2373	Adder	0.53
964111	AG1-272 C	0.4865	Adder	1.08
964112	AG1-272 E	0.1445	Adder	0.32
964121	AG1-273 C	0.4865	Adder	1.08
964122	AG1-273 E	0.1445	Adder	0.32
964131	AG1-274 C	0.4865	Adder	1.08
964132	AG1-274 E	0.1445	Adder	0.32
964241	AG1-285 C O2	2.7439	Adder	6.09
964242	AG1-285 E O2	1.8293	Adder	4.06
964261	AG1-287 C	1.4325	50/50	1.4325
964262	AG1-287 E	0.9550	50/50	0.9550
964471	AG1-310 C	3.2931	50/50	3.2931
964472	AG1-310 E	1.6219	50/50	1.6219
964533	AG1-316 BAT	1.4338	Merchant Transmission	1.4338
964791	AG1-342 C	3.1689	50/50	3.1689
964792	AG1-342 E	2.4899	50/50	2.4899
964821	AG1-345 C	0.1358	Adder	0.3
964822	AG1-345 E	0.0905	Adder	0.2
964841	AG1-347 C	1.6603	Adder	3.69
964842	AG1-347 E	1.3045	Adder	2.9
964931	AG1-357 C O2	4.0794	Adder	9.06
964932	AG1-357 E O2	2.7196	Adder	6.04
965191	AG1-384 C	0.4865	Adder	1.08
965192	AG1-384 E	0.1445	Adder	0.32
965281	AG1-393 C	0.3390	Adder	0.75
965282	AG1-393 E	0.2260	Adder	0.5
965591	AG1-427 C	2.4375	Adder	5.41
965592	AG1-427 E	1.6284	Adder	3.61
966361	AG1-505 C	3.2931	Adder	7.31
966362	AG1-505 E	2.1954	Adder	4.87
966371	AG1-506 C	3.2931	Adder	7.31
966372	AG1-506 E	2.1954	Adder	4.87
966691	AG1-539 C	17.1360	50/50	17.1360
966692	AG1-539 E	23.0265	50/50	23.0265
966763	AG1-547 BAT	2.4214	50/50	2.4214
CPLE	CPLE	1.2456	Confirmed LTF	1.2456
G-007A	G-007A	0.2278	Confirmed LTF	0.2278
VFT	VFT	0.5998	Confirmed LTF	0.5998
PRAIRIE	PRAIRIE	0.4701	Confirmed LTF	0.4701
CBM-S2	CBM-S2	11.0351	Confirmed LTF	11.0351
CBM-N	CBM-N	0.1080	Confirmed LTF	0.1080
GIBSON	GIBSON	0.1611	Confirmed LTF	0.1611
BLUEG	BLUEG	0.5711	Confirmed LTF	0.5711
TRIMBLE	TRIMBLE	0.1859	Confirmed LTF	0.1859

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	0.0472	Confirmed LTF	0.0472

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174996495	961060	AF2-397 TAP	DVP	314765	6MTEAGLE	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	133.89	135.11	DC	8.13

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3899	80/20	0.3899
314429	3JTRSVLE	0.6081	80/20	0.6081
314572	3EMPORIA	0.1253	80/20	0.1253
314677	6BUCKING	0.9605	80/20	0.9605
314704	3LAWRENC	0.1287	80/20	0.1287
315153	1CLOVER1	6.8569	80/20	6.8569
315154	1CLOVER2	6.7885	80/20	6.7885
315158	1KERR 1	0.2163	80/20	0.2163
315159	1KERR 2	0.6058	80/20	0.6058
315160	1KERR 3	0.6058	80/20	0.6058
315161	1KERR 4	0.6058	80/20	0.6058
315162	1KERR 5	0.6058	80/20	0.6058
315163	1KERR 6	0.6058	80/20	0.6058
315164	1KERR 7	0.6058	80/20	0.6058
315191	1BEARGRDN G1	16.8024	80/20	16.8024
315192	1BEARGRDN G2	16.8024	80/20	16.8024
315193	1BEARGRDN S1	21.7287	80/20	21.7287
315266	1PLYWOOD A	0.6338	80/20	0.6338
316118	AC1-105 C	3.2102	80/20	3.2102
316123	AC1-075 C	0.3997	80/20	0.3997
316129	AC1-054 C	3.1902	80/20	3.1902
316131	AB2-060 C	1.1581	80/20	1.1581
924301	AB2-077 C O1 (Suspended)	1.5320	80/20	1.5320
924311	AB2-078 C O1 (Suspended)	1.5320	80/20	1.5320
924321	AB2-079 C O1 (Suspended)	1.5320	80/20	1.5320
925611	AC1-036 C	0.2580	80/20	0.2580
926023	AC1-080 C	0.1336	80/20	0.1336
927251	AC1-221 C	0.7557	80/20	0.7557
927261	AC1-222 C	1.8205	80/20	1.8205
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.9463	80/20	0.9463
932761	AC2-100 C	1.7391	80/20	1.7391
933501	AC2-165 C	31.7815	80/20	31.7815
934311	AD1-055 C	1.2640	80/20	1.2640
934341	AD1-058 C	1.8944	80/20	1.8944
934615	AD1-087 C	4.2935	80/20	4.2935
934625	AD1-088 C	14.0115	80/20	14.0115

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C	0.3677	80/20	0.3677
936265	AD2-033 C	13.9378	80/20	13.9378
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8267	80/20	13.8267
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0476	80/20	10.0476
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2764	80/20	2.2764
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4830	80/20	18.4830
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9990	80/20	0.9990
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1429	80/20	6.1429
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6135	80/20	3.6135
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7370	80/20	19.7370
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9960	80/20	3.9960
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961061	AF2-397 C	49.3810	80/20	49.3810
961791	AG1-021 C	2.8908	80/20	2.8908
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0675	80/20	18.0675
962441	AG1-093 C O2	8.1291	80/20	8.1291
962491	AG1-098 C O2	10.6807	80/20	10.6807
962561	AG1-105 C O2	6.4428	80/20	6.4428
962741	AG1-123 C O2	3.0883	80/20	3.0883
962751	AG1-124 C O2	4.3368	80/20	4.3368
963171	AG1-166 C	2.8908	80/20	2.8908
963181	AG1-167 C	2.8908	80/20	2.8908
963191	AG1-168 C	2.8908	80/20	2.8908
963201	AG1-169 C	2.8908	80/20	2.8908
963211	AG1-170 C	2.8908	80/20	2.8908
963271	AG1-176 C O2	26.6508	80/20	26.6508
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O2	18.6814	80/20	18.6814

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963361	AG1-185 O2	9.0386	80/20	9.0386
963641	AG1-215 C	1.3490	80/20	1.3490
964111	AG1-272 C	2.9318	80/20	2.9318
964121	AG1-273 C	2.9318	80/20	2.9318
964131	AG1-274 C	2.9318	80/20	2.9318
964231	AG1-284 C O2	20.2377	80/20	20.2377
964241	AG1-285 C O2	5.6317	80/20	5.6317
964261	AG1-287 C	0.7493	80/20	0.7493
964471	AG1-310 C	1.0449	80/20	1.0449
964791	AG1-342 C	2.5948	80/20	2.5948
964821	AG1-345 C	1.1534	80/20	1.1534
964841	AG1-347 C	11.8188	80/20	11.8188
964931	AG1-357 C O2	18.3312	80/20	18.3312
965191	AG1-384 C	2.9318	80/20	2.9318
965281	AG1-393 C	2.8908	80/20	2.8908
965451	AG1-413 C O2	4.0845	80/20	4.0845
965581	AG1-426	7.5610	80/20	7.5610
965591	AG1-427 C	10.5299	80/20	10.5299
965601	AG1-428 C O2	2.2741	80/20	2.2741
965641	AG1-432 C O2	36.9660	80/20	36.9660
965721	AG1-440 C	3.7895	80/20	3.7895
965731	AG1-441 C	3.7895	80/20	3.7895
965771	AG1-445	2.1895	80/20	2.1895
965781	AG1-446	2.1895	80/20	2.1895
965831	AG1-451	6.1610	80/20	6.1610
966251	AG1-494 C	1.8194	80/20	1.8194
966621	AG1-532 C	0.4099	80/20	0.4099
966691	AG1-539 C	1.9309	80/20	1.9309
966751	AG1-546 C	6.7436	80/20	6.7436
966791	AG1-550 O2	16.8647	80/20	16.8647
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	5.0279	80/20	5.0279
WEC	WEC	0.1342	Confirmed LTF	0.1342
LGEE	LGEE	0.2878	Confirmed LTF	0.2878
CPL	CPL	2.2686	Confirmed LTF	2.2686
CBM-W2	CBM-W2	7.5264	Confirmed LTF	7.5264
NY	NY	0.4396	Confirmed LTF	0.4396
TVA	TVA	1.5232	Confirmed LTF	1.5232
SIGE	SIGE	0.1431	Confirmed LTF	0.1431
CBM-S2	CBM-S2	26.2148	Confirmed LTF	26.2148
CBM-S1	CBM-S1	0.3701	Confirmed LTF	0.3701
MEC	MEC	0.9057	Confirmed LTF	0.9057
LAGN	LAGN	1.8795	Confirmed LTF	1.8795
AA2-074	AA2-074	1.4972	LTF	1.4972
CBM-W1	CBM-W1	5.2996	Confirmed LTF	5.2996

13.5.24 Index 24

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174996540	962440	AG1-093 TAP	DVP	314697	6SEEDGE HILL	DVP	1	DVP_P1-2: LN 556-B-A	single	814.98	123.2	131.49	DC	67.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314333	6POWHATN	0.1312	80/20	0.1312
314429	3JTRSVLE	0.3330	80/20	0.3330
314677	6BUCKING	0.4426	80/20	0.4426
315153	1CLOVER1	46.6801	80/20	46.6801
315154	1CLOVER2	46.2149	80/20	46.2149
315191	1BEARGRDN G1	3.6167	80/20	3.6167
315192	1BEARGRDN G2	3.6167	80/20	3.6167
315193	1BEARGRDN S1	4.6771	80/20	4.6771
925611	AC1-036 C	0.0956	80/20	0.0956
926451	AC1-116 C	0.0478	80/20	0.0478
927251	AC1-221 C	-1.3299	Adder	-1.56
927261	AC1-222 C	-2.7426	Adder	-3.23
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.4360	80/20	0.4360
933501	AC2-165 C	4.0288	80/20	4.0288
934311	AD1-055 C	-1.9043	Adder	-2.24
934341	AD1-058 C	-3.3337	Adder	-3.92
934615	AD1-087 C	29.3389	80/20	29.3389
934625	AD1-088 C	37.5614	80/20	37.5614
935171	AD1-152 C O1	32.2258	80/20	32.2258
935221	AD1-157 C	0.2184	80/20	0.2184
936265	AD2-033 C	4.4156	80/20	4.4156
937481	AD2-202 C O1	8.5935	80/20	8.5935
938371	AE1-056 C	5.9682	80/20	5.9682
938561	AE1-075 C	0.1141	80/20	0.1141
938821	AE1-108 C O1	6.6821	80/20	6.6821
941011	AE2-092 C	6.6414	80/20	6.6414
941791	AE2-182 C	6.1024	80/20	6.1024
942461	AE2-259 C O1	12.7944	80/20	12.7944
943901	AF1-058 C	-1.5410	Adder	-1.81
945811	AF1-246 C O1	28.1471	80/20	28.1471
946291	AF1-293 C O1	9.9695	80/20	9.9695
946301	AF1-294 C	3.3642	80/20	3.3642
946591	AF1-323 C	2.0430	80/20	2.0430
957481	AF2-042 C	201.0510	80/20	201.0510
958211	AF2-115 C	1.9790	80/20	1.9790
958501	AF2-144 C	0.6149	80/20	0.6149
958801	AF2-171 C	11.7675	80/20	11.7675
959311	AF2-222 C	7.9260	80/20	7.9260
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5666	80/20	0.5666
959751	AF2-266	33.5080	80/20	33.5080

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960111	AF2-302 C	0.7429	80/20	0.7429
961061	AF2-397 C	7.7267	80/20	7.7267
961791	AG1-021 C	1.5832	80/20	1.5832
961801	AG1-022 C	0.7429	80/20	0.7429
961891	AG1-030 C	9.9441	80/20	9.9441
962041	AG1-048 C	9.8947	80/20	9.8947
962441	AG1-093 C O2	67.5620	80/20	67.5620
963171	AG1-166 C	1.5832	80/20	1.5832
963181	AG1-167 C	1.5832	80/20	1.5832
963191	AG1-168 C	1.5832	80/20	1.5832
963201	AG1-169 C	1.5832	80/20	1.5832
963211	AG1-170 C	1.5832	80/20	1.5832
963271	AG1-176 C O2	33.8564	80/20	33.8564
963321	AG1-181 C O2	6.4738	80/20	6.4738
963361	AG1-185 O2	3.1322	80/20	3.1322
963641	AG1-215 C	0.7388	80/20	0.7388
964111	AG1-272 C	1.0868	80/20	1.0868
964121	AG1-273 C	1.0868	80/20	1.0868
964131	AG1-274 C	1.0868	80/20	1.0868
964231	AG1-284 C O2	4.1996	80/20	4.1996
964821	AG1-345 C	0.6298	80/20	0.6298
964841	AG1-347 C	28.2380	80/20	28.2380
965191	AG1-384 C	1.0868	80/20	1.0868
965281	AG1-393 C	1.5832	80/20	1.5832
965581	AG1-426	1.4558	80/20	1.4558
965641	AG1-432 C O2	25.5888	80/20	25.5888
965831	AG1-451	4.2648	80/20	4.2648
966791	AG1-550 O2	3.4997	80/20	3.4997
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	2.8094	80/20	2.8094
G-007A	G-007A	0.4507	Confirmed LTF	0.4507
VFT	VFT	1.1868	Confirmed LTF	1.1868
CALDERWOOD	CALDERWOOD	1.0959	Confirmed LTF	1.0959
PRAIRIE	PRAIRIE	3.8848	Confirmed LTF	3.8848
CHEOAH	CHEOAH	1.1221	Confirmed LTF	1.1221
CBM-N	CBM-N	0.2136	Confirmed LTF	0.2136
COTTONWOOD	COTTONWOOD	4.0551	Confirmed LTF	4.0551
HAMLET	HAMLET	2.1350	Confirmed LTF	2.1350
GIBSON	GIBSON	0.7000	Confirmed LTF	0.7000
BLUEG	BLUEG	2.1735	Confirmed LTF	2.1735
TRIMBLE	TRIMBLE	0.6906	Confirmed LTF	0.6906
CATAWBA	CATAWBA	1.1613	Confirmed LTF	1.1613

13.5.25 Index 25

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977144	964840	AG1-347 TAP	DVP	314268	6BRIERY	DVP	1	DVP_P4-2: 511T556	breaker	699.0	122.8	127.29	DC	31.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	-0.4636	Adder	-0.55
315153	1CLOVER1	22.6895	50/50	22.6895
315154	1CLOVER2	22.4633	50/50	22.4633
315266	1PLYWOOD A	0.8779	50/50	0.8779
316118	AC1-105 C	4.0048	50/50	4.0048
316123	AC1-075 C	0.6069	50/50	0.6069
925997	AC1-075 E	2.1793	50/50	2.1793
926023	AC1-080 C	0.2028	50/50	0.2028
926024	AC1-080 E	0.7231	50/50	0.7231
926274	AC1-105 E	1.9676	50/50	1.9676
927251	AC1-221 C	1.5101	50/50	1.5101
927252	AC1-221 E	1.5101	50/50	1.5101
927261	AC1-222 C	3.1332	50/50	3.1332
927262	AC1-222 E	2.9827	50/50	2.9827
932761	AC2-100 C	3.4752	50/50	3.4752
932762	AC2-100 E	1.6963	50/50	1.6963
934311	AD1-055 C	2.1754	50/50	2.1754
934312	AD1-055 E	0.5610	50/50	0.5610
934341	AD1-058 C	3.7855	50/50	3.7855
934342	AD1-058 E	0.9619	50/50	0.9619
934615	AD1-087 C	14.1820	50/50	14.1820
934616	AD1-087 E	6.0687	50/50	6.0687
934625	AD1-088 C	33.5344	50/50	33.5344
934626	AD1-088 E	8.7828	50/50	8.7828
934991	AD1-131 C	1.2412	50/50	1.2412
934992	AD1-131 E	0.8274	50/50	0.8274
935171	AD1-152 C O1	15.5774	50/50	15.5774
935172	AD1-152 E O1	10.3850	50/50	10.3850
937481	AD2-202 C O1	4.1540	50/50	4.1540
937482	AD2-202 E O1	2.3366	50/50	2.3366
941791	AE2-182 C	5.4482	50/50	5.4482
941792	AE2-182 E	2.5362	50/50	2.5362
942751	AE2-291 C	4.4025	Adder	5.18
942752	AE2-291 E	2.9350	Adder	3.45
942761	AE2-292 C O1	5.4815	Adder	6.45
942762	AE2-292 E O1	3.6543	Adder	4.3
943901	AF1-058 C	1.7642	50/50	1.7642
943902	AF1-058 E	1.1762	50/50	1.1762
945811	AF1-246 C O1	13.6807	50/50	13.6807
945812	AF1-246 E O1	18.8923	50/50	18.8923
946293	AF1-293 BAT	7.7876	Merchant Transmission	7.7876

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	97.7190	50/50	97.7190
957482	AF2-042 E	65.1460	50/50	65.1460
958503	AF2-144 BAT	0.6533	Merchant Transmission	0.6533
959751	AF2-266	16.2870	50/50	16.2870
960061	AF2-297 C	7.0570	50/50	7.0570
960062	AF2-297 E	4.7046	50/50	4.7046
961063	AF2-397 BAT	5.4682	50/50	5.4682
962441	AG1-093 C O2	24.0672	50/50	24.0672
962442	AG1-093 E O2	7.3248	50/50	7.3248
962561	AG1-105 C O2	1.9170	Adder	4.26
962562	AG1-105 E O2	1.2780	Adder	2.84
963362	AG1-185 BAT	3.2622	Merchant Transmission	3.2622
963643	AG1-215 BAT	1.9088	50/50	1.9088
964113	AG1-272 BAT	0.7934	Merchant Transmission	0.7934
964123	AG1-273 BAT	0.7934	Merchant Transmission	0.7934
964133	AG1-274 BAT	0.7934	Merchant Transmission	0.7934
964241	AG1-285 C O2	24.4297	50/50	24.4297
964242	AG1-285 E O2	16.2865	50/50	16.2865
964261	AG1-287 C	1.3232	50/50	1.3232
964262	AG1-287 E	0.8821	50/50	0.8821
964471	AG1-310 C	1.7778	50/50	1.7778
964472	AG1-310 E	0.8756	50/50	0.8756
964791	AG1-342 C	0.9627	Adder	2.14
964792	AG1-342 E	0.7564	Adder	1.68
964841	AG1-347 C	27.5223	50/50	27.5223
964842	AG1-347 E	21.6247	50/50	21.6247
965193	AG1-384 BAT	0.3400	Merchant Transmission	0.3400
965582	AG1-426 BAT	0.8211	Merchant Transmission	0.8211
965832	AG1-451 BAT	4.3542	50/50	4.3542
966361	AG1-505 C	29.3139	50/50	29.3139
966362	AG1-505 E	19.5426	50/50	19.5426
966371	AG1-506 C	29.3139	50/50	29.3139
966372	AG1-506 E	19.5426	50/50	19.5426
966691	AG1-539 C	1.2200	Adder	2.71
966692	AG1-539 E	1.6394	Adder	3.64
966792	AG1-550 BAT	3.6662	50/50	3.6662
WEC	WEC	0.2533	Confirmed LTF	0.2533
LGEE	LGEE	0.5221	Confirmed LTF	0.5221
CPL	CPL	2.8672	Confirmed LTF	2.8672
CBM-W2	CBM-W2	11.2358	Confirmed LTF	11.2358
NY	NY	0.3207	Confirmed LTF	0.3207
TVA	TVA	2.1308	Confirmed LTF	2.1308
O-066	O-066	4.4754	Confirmed LTF	4.4754
SIGE	SIGE	0.1632	Confirmed LTF	0.1632
CBM-S2	CBM-S2	33.3871	Confirmed LTF	33.3871
CBM-S1	CBM-S1	0.5309	Confirmed LTF	0.5309
G-007	G-007	0.7035	Confirmed LTF	0.7035
MEC	MEC	1.5254	Confirmed LTF	1.5254
LAGN	LAGN	2.6425	Confirmed LTF	2.6425
AA2-074	AA2-074	1.8936	LTF	1.8936
CBM-W1	CBM-W1	10.5711	Confirmed LTF	10.5711

13.5.26 Index 26

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173977068	966860	AG1-557 TAP	DVP	314677	6BUCKING	DVP	1	DVP_P4-2: 511T556	breaker	684.0	179.99	184.44	DC	30.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6841	50/50	0.6841
313853	3PONTONDP	1.5983	50/50	1.5983
314429	3JTRSVLE	1.0086	50/50	1.0086
314713	3PAMPLIN	4.1600	50/50	4.1600
315153	1CLOVER1	20.9906	50/50	20.9906
315154	1CLOVER2	20.7814	50/50	20.7814
315266	1PLYWOOD A	1.3921	50/50	1.3921
316118	AC1-105 C	6.9390	50/50	6.9390
316129	AC1-054 C	4.4267	Adder	5.21
316131	AB2-060 C	2.0245	50/50	2.0245
924022	AB2-043 E O1	3.8772	50/50	3.8772
924162	AB2-060 E OP	6.0385	50/50	6.0385
924301	AB2-077 C O1 (Suspended)	2.7025	50/50	2.7025
924302	AB2-077 E O1 (Suspended)	1.8017	50/50	1.8017
924311	AB2-078 C O1 (Suspended)	2.7025	50/50	2.7025
924312	AB2-078 E O1 (Suspended)	1.8017	50/50	1.8017
924321	AB2-079 C O1 (Suspended)	2.7025	50/50	2.7025
924322	AB2-079 E O1 (Suspended)	1.8017	50/50	1.8017
925611	AC1-036 C	0.4357	50/50	0.4357
925612	AC1-036 E	1.6538	50/50	1.6538
925785	AC1-054 E	2.0392	Adder	2.4
925997	AC1-075 E	2.4237	Adder	2.85
926024	AC1-080 E	0.8042	Adder	0.95
926274	AC1-105 E	3.4092	50/50	3.4092
927251	AC1-221 C	1.4351	Adder	1.69
927252	AC1-221 E	1.4351	Adder	1.69
927261	AC1-222 C	4.1245	50/50	4.1245
927262	AC1-222 E	3.9264	50/50	3.9264
932761	AC2-100 C	3.3027	Adder	3.89
932762	AC2-100 E	1.6120	Adder	1.9
934311	AD1-055 C	2.8637	50/50	2.8637
934312	AD1-055 E	0.7385	50/50	0.7385
934341	AD1-058 C	3.5976	Adder	4.23
934342	AD1-058 E	0.9141	Adder	1.08
934615	AD1-087 C	13.1301	50/50	13.1301
934616	AD1-087 E	5.6186	50/50	5.6186

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934625	AD1-088 C	29.0891	50/50	29.0891
934626	AD1-088 E	7.6186	50/50	7.6186
934991	AD1-131 C	1.1795	Adder	1.39
934992	AD1-131 E	0.7864	Adder	0.93
935171	AD1-152 C O1	14.4221	50/50	14.4221
935172	AD1-152 E O1	9.6147	50/50	9.6147
935221	AD1-157 C	0.6070	50/50	0.6070
935222	AD1-157 E	2.5648	50/50	2.5648
936265	AD2-033 C	23.6707	50/50	23.6707
936266	AD2-033 E	15.7804	50/50	15.7804
936361	AD2-046 C O1	9.3642	50/50	9.3642
936362	AD2-046 E O1	4.3062	50/50	4.3062
936485	AD2-063 C	23.8266	50/50	23.8266
936486	AD2-063 E	15.8844	50/50	15.8844
937481	AD2-202 C O1	3.8459	50/50	3.8459
937482	AD2-202 E O1	2.1633	50/50	2.1633
938371	AE1-056 C	16.5854	50/50	16.5854
938372	AE1-056 E	9.0622	50/50	9.0622
939181	AE1-148 C	9.3550	50/50	9.3550
939182	AE1-148 E	6.2366	50/50	6.2366
940661	AE2-053 O1	3.4648	50/50	3.4648
941791	AE2-182 C	4.7260	50/50	4.7260
941792	AE2-182 E	2.2000	50/50	2.2000
942451	AE2-258	3.2348	50/50	3.2348
942461	AE2-259 C O1	30.1980	50/50	30.1980
942462	AE2-259 E O1	20.1320	50/50	20.1320
943901	AF1-058 C	2.3251	50/50	2.3251
943902	AF1-058 E	1.5501	50/50	1.5501
943911	AF1-059	13.2458	Adder	15.58
945811	AF1-246 C O1	12.6559	50/50	12.6559
945812	AF1-246 E O1	17.4771	50/50	17.4771
946293	AF1-293 BAT	11.1710	Merchant Transmission	11.1710
946301	AF1-294 C	10.1890	50/50	10.1890
946302	AF1-294 E	6.7927	50/50	6.7927
957481	AF2-042 C	90.3990	50/50	90.3990
957482	AF2-042 E	60.2660	50/50	60.2660
958211	AF2-115 C	5.9936	50/50	5.9936
958212	AF2-115 E	3.9957	50/50	3.9957
958801	AF2-171 C	35.8218	50/50	35.8218
958802	AF2-171 E	23.8812	50/50	23.8812
959311	AF2-222 C	33.2310	50/50	33.2310
959312	AF2-222 E	22.2648	50/50	22.2648
959751	AF2-266	15.0675	50/50	15.0675
960061	AF2-297 C	9.3005	50/50	9.3005
960062	AF2-297 E	6.2003	50/50	6.2003
961063	AF2-397 BAT	7.8291	Merchant Transmission	7.8291
961791	AG1-021 C	4.7948	50/50	4.7948
961792	AG1-021 E	3.1966	50/50	3.1966
961891	AG1-030 C	33.4989	50/50	33.4989
961892	AG1-030 E	22.3326	50/50	22.3326
962041	AG1-048 C	29.9677	50/50	29.9677
962042	AG1-048 E	19.9785	50/50	19.9785

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962441	AG1-093 C O2	23.3763	50/50	23.3763
962442	AG1-093 E O2	7.1145	50/50	7.1145
962491	AG1-098 C O2	18.5565	50/50	18.5565
962492	AG1-098 E O2	12.3710	50/50	12.3710
962561	AG1-105 C O2	12.7134	50/50	12.7134
962562	AG1-105 E O2	8.4756	50/50	8.4756
963171	AG1-166 C	4.7948	50/50	4.7948
963172	AG1-166 E	3.1966	50/50	3.1966
963181	AG1-167 C	4.7948	50/50	4.7948
963182	AG1-167 E	3.1966	50/50	3.1966
963191	AG1-168 C	4.7948	50/50	4.7948
963192	AG1-168 E	3.1966	50/50	3.1966
963201	AG1-169 C	4.7948	50/50	4.7948
963202	AG1-169 E	3.1966	50/50	3.1966
963211	AG1-170 C	4.7948	50/50	4.7948
963212	AG1-170 E	3.1966	50/50	3.1966
963271	AG1-176 C O2	46.3597	50/50	46.3597
963272	AG1-176 E O2	30.9064	50/50	30.9064
963301	AG1-179 C	1.9551	Adder	4.34
963311	AG1-180	0.9526	Adder	2.11
963321	AG1-181 C O2	31.6301	50/50	31.6301
963361	AG1-185 O2	15.3034	50/50	15.3034
963641	AG1-215 C	2.2376	50/50	2.2376
963642	AG1-215 E	3.3564	50/50	3.3564
964111	AG1-272 C	4.9517	50/50	4.9517
964112	AG1-272 E	1.4707	50/50	1.4707
964121	AG1-273 C	4.9517	50/50	4.9517
964122	AG1-273 E	1.4707	50/50	1.4707
964131	AG1-274 C	4.9517	50/50	4.9517
964132	AG1-274 E	1.4707	50/50	1.4707
964241	AG1-285 C O2	22.5998	50/50	22.5998
964242	AG1-285 E O2	15.0665	50/50	15.0665
964261	AG1-287 C	1.7438	50/50	1.7438
964262	AG1-287 E	1.1626	50/50	1.1626
964471	AG1-310 C	2.3390	50/50	2.3390
964472	AG1-310 E	1.1520	50/50	1.1520
964791	AG1-342 C	5.2562	50/50	5.2562
964792	AG1-342 E	4.1299	50/50	4.1299
964821	AG1-345 C	1.9134	50/50	1.9134
964822	AG1-345 E	1.2756	50/50	1.2756
964841	AG1-347 C	23.7149	50/50	23.7149
964842	AG1-347 E	18.6331	50/50	18.6331
964931	AG1-357 C O2	31.6092	50/50	31.6092
964932	AG1-357 E O2	21.0728	50/50	21.0728
965191	AG1-384 C	4.9517	50/50	4.9517
965192	AG1-384 E	1.4707	50/50	1.4707
965281	AG1-393 C	4.7948	50/50	4.7948
965282	AG1-393 E	3.1966	50/50	3.1966
965451	AG1-413 C O2	6.8079	50/50	6.8079
965452	AG1-413 E O2	4.5386	50/50	4.5386
965591	AG1-427 C	18.2158	50/50	18.2158
965592	AG1-427 E	12.1695	50/50	12.1695

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965601	AG1-428 C O2	1.6321	Adder	3.62
965602	AG1-428 E O2	1.0862	Adder	2.41
965641	AG1-432 C O2	60.3960	50/50	60.3960
965642	AG1-432 E O2	40.2640	50/50	40.2640
965721	AG1-440 C	2.9154	Adder	6.47
965722	AG1-440 E	1.9436	Adder	4.31
965731	AG1-441 C	2.9154	Adder	6.47
965732	AG1-441 E	1.9436	Adder	4.31
965771	AG1-445	1.6844	Adder	3.74
965781	AG1-446	1.6844	Adder	3.74
965831	AG1-451	10.0660	50/50	10.0660
966361	AG1-505 C	27.1179	50/50	27.1179
966362	AG1-505 E	18.0786	50/50	18.0786
966371	AG1-506 C	27.1179	50/50	27.1179
966372	AG1-506 E	18.0786	50/50	18.0786
966792	AG1-550 BAT	2.7905	Merchant Transmission	2.7905
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	7.8628	50/50	7.8628
966862	AG1-557 E O2 (Withdrawn : 12/14/2020)	5.2418	50/50	5.2418
WEC	WEC	0.3062	Confirmed LTF	0.3062
LGEE	LGEE	0.6302	Confirmed LTF	0.6302
CPL	CPL	3.7169	Confirmed LTF	3.7169
CBM-W2	CBM-W2	13.9328	Confirmed LTF	13.9328
NY	NY	0.4053	Confirmed LTF	0.4053
TVA	TVA	2.6614	Confirmed LTF	2.6614
O-066	O-066	5.6128	Confirmed LTF	5.6128
SIGE	SIGE	0.2010	Confirmed LTF	0.2010
CBM-S2	CBM-S2	42.7309	Confirmed LTF	42.7309
CBM-S1	CBM-S1	0.6604	Confirmed LTF	0.6604
G-007	G-007	0.8820	Confirmed LTF	0.8820
MEC	MEC	1.8655	Confirmed LTF	1.8655
LAGN	LAGN	3.3058	Confirmed LTF	3.3058
AA2-074	AA2-074	2.4547	LTF	2.4547
CBM-W1	CBM-W1	12.7582	Confirmed LTF	12.7582

13.6 Contingency Descriptions - Secondary POI

Contingency Name	Contingency Definition
DVP_P1-2: LN 563	CONTINGENCY 'DVP_P1-2: LN 563' OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 END
DVP_P7-1: LN 181-2027	CONTINGENCY 'DVP_P7-1: LN 181-2027' /* . OPEN BRANCH FROM BUS 314321 TO BUS 314447 CKT 1 /* 3LITTLECREEK 115.00 - 3BURTN67 115.00 OPEN BRANCH FROM BUS 314321 TO BUS 314488 CKT 1 /* 3LITTLECREEK 115.00 - 3OAKWOOD 115.00 OPEN BUS 314321 /* ISLAND: 3LITTLECREEK 115.00 OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 933500 CKT 1 /* 6CARTERV 230.00 - AC2- 165 TAP 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314322 CKT 1 /* 6JUDES F 230.00 - 6MDLTHAN 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314333 CKT 1 /* 6JUDES F 230.00 - 6POWHATN 230.00 OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 /* 6POWHATN 230.00 - AC2-165 TAP 230.00 OPEN BUS 313868 /* ISLAND: 6CARTERV 230.00 OPEN BUS 314310 /* ISLAND: 6JUDES F 230.00 OPEN BUS 314333 /* ISLAND: 6POWHATN 230.00 OPEN BUS 923862 /* ISLAND: AB2-026 E 230.00 OPEN BUS 938561 /* ISLAND: AE1-075 C 230.00 OPEN BUS 938562 /* ISLAND: AE1-075 E 230.00 OPEN BUS 933500 /* ISLAND: AC2-165 TAP 230.00 OPEN BUS 933501 /* ISLAND: AC2-165 C 230.00 OPEN BUS 933502 /* ISLAND: AC2-165 E 230.00 END
DVP_P1-2: LN 556-B-C	CONTINGENCY 'DVP_P1-2: LN 556-B-C' OPEN BRANCH FROM BUS 966360 TO BUS 314936 CKT 1 /* AG1-505 TAP 500.00 - 8RAWLINGS 500.00 END
DVP_P1-2: LN 556-B-B	CONTINGENCY 'DVP_P1-2: LN 556-B-B' OPEN BRANCH FROM BUS 964240 TO BUS 966360 CKT 1 /* AG1-285 TAP 500.00 - AG1-505 TAP 500.00 END
DVP_P1-2: LN 556-B-A	CONTINGENCY 'DVP_P1-2: LN 556-B-A' OPEN BRANCH FROM BUS 945810 TO BUS 964240 CKT 1 /* AF1-246 TAP 500.00 - AG1-285 TAP 500.00 END

Contingency Name	Contingency Definition
DVP_P4-2: 556T591	CONTINGENCY 'DVP_P4-2: 556T591' /* RAWLINGS 500 KV OPEN BRANCH FROM BUS 966360 TO BUS 314936 CKT 1 /* AG1-505 TAP 500.00 - 8RAWLINGS 500.00 OPEN BRANCH FROM BUS 314935 TO BUS 314936 CKT 1 /* 8HERITAGE 500.00 - 8RAWLINGS 500.00 END
DVP_P4-2: 511T556	CONTINGENCY 'DVP_P4-2: 511T556' /* RAWLINGS 500 KV OPEN BRANCH FROM BUS 942930 TO BUS 314936 CKT 1 /* AE2-313 TAP 500.00 - 8RAWLINGS 500.00 OPEN BRANCH FROM BUS 966360 TO BUS 314936 CKT 1 /* AG1-505 TAP 500.00 - 8RAWLINGS 500.00 END
DVP_P4-2: 562T563	CONTINGENCY 'DVP_P4-2: 562T563' /* CARSON 500 KV OPEN BRANCH FROM BUS 314902 TO BUS 940640 CKT 1 /* 8CARSON 500.00 - AE2- 051 TAP 500.00 OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 END
AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1	CONTINGENCY 'AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1' / 1492 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
DVP_P1-2: LN 511-A	CONTINGENCY 'DVP_P1-2: LN 511-A' OPEN BRANCH FROM BUS 314902 TO BUS 940470 CKT 1 /* 8CARSON 500.00 - AE2- 031 TAP 500.00 END
DVP_P1-2: LN 585-A	CONTINGENCY 'DVP_P1-2: LN 585-A' OPEN BRANCH FROM BUS 314902 TO BUS 941030 CKT 1 /* 8CARSON 500.00 - AE2- 094 TAP 500.00 END
Base Case	

Contingency Name	Contingency Definition
DVP_P4-2: 202712	CONTINGENCY 'DVP_P4-2: 202712' / 723 OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 / 313868 6CARTERV 230 314747 6BREMO 230 1 OPEN BRANCH FROM BUS 313868 TO BUS 933500 CKT 1 / 313868 6CARTERV 230 933500 AC2-165 TAP 230 1 OPEN BRANCH FROM BUS 314310 TO BUS 314322 CKT 1 / 314310 6JUDES F 230 314322 6MDLTHAN 230 1 OPEN BRANCH FROM BUS 314310 TO BUS 314333 CKT 1 / 314310 6JUDES F 230 314333 6POWHATN 230 1 OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 / 314333 6POWHATN 230 933500 AC2-165 TAP 230 1 OPEN BRANCH FROM BUS 314333 TO BUS 923862 CKT 1 / 314333 6POWHATN 230 923862 AB2-026 E 230 1 OPEN BRANCH FROM BUS 314333 TO BUS 938561 CKT 1 / 314333 6POWHATN 230 938561 AE1-075 C 230 1 OPEN BRANCH FROM BUS 314333 TO BUS 958501 CKT 1 / 314333 6POWHATN 230 958501 AF2-144 C 230 1 OPEN BRANCH FROM BUS 314333 TO BUS 959531 CKT 1 / 314333 6POWHATN 230 959531 AF2-244 C 230 1 OPEN BRANCH FROM BUS 938561 TO BUS 938562 CKT 1 / 938561 AE1-075 C 230 938562 AE1-075 E 230 1 OPEN BRANCH FROM BUS 933500 TO BUS 933501 CKT 1 / 933500 AC2-165 TAP 230 933501 AC2-165 C 230 1 OPEN BRANCH FROM BUS 933501 TO BUS 933502 CKT 1 / 933501 AC2-165 C 230 933502 AC2-165 E 230 1 END
314333 6POWHATN 230 933500 AC2-165 TAP 230 1	CONTINGENCY '314333 6POWHATN 230 933500 AC2-165 TAP 230 1' OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 END

14 Affected Systems

14.1 TVA

TVA Impacts to be determined during later study phases (as applicable).

14.2 Duke Energy Progress

Duke Energy Progress Impacts to be determined during later study phases (as applicable).

15 Attachment 1: One Line Diagram