



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-105
CLOVER-SEDGE HILL 230 KV
60 MW Capacity / 100 MW Energy**

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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 generating facility located in Halifax County, Virginia. The installed facilities will have a total capability of 100 MW with 60 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is December 01, 2024. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-105
Project Name	CLOVER-SEDGE HILL 230 KV
State	Virginia
County	Halifax
Transmission Owner	Dominion
MFO	100
MWE	100
MWC	60
Fuel	Solar
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 Point of Interconnection

AG1-105 will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 230 kV three breaker ring bus located on the line between the Clover substation and Sedge Hill substation.

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.

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

4.2 Secondary Point of Interconnection

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

The secondary POI for AG1-105 is a new tap on the Chase City-Mt Laurel 115 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 AG1-105 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 10,400,000
Total System Network Upgrade Costs	\$ 613,115,000 ¹
Total Costs	\$ 623,515,000

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/or 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

AG1-105 will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 230 kV three breaker ring bus located on the line between the Clover substation and Sedge Hill substation.

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.

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

Description	Total Cost
Attachment Facilities	\$ 2,100,000
230 kV Three Breaker Ring-Bus Substation	\$ 6,500,000
Re-arrange line and tie-in new substation	\$ 1,800,000
Total Physical Interconnection Costs	\$ 10,400,000

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.

This schedule will be more clearly identified in future study phases.

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 report.

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-105 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.

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 AG1-105 was evaluated as a 100.0 MW (Capacity 60.0 MW) injection tapping the Sedge Hill to Clover 230 kV line in the Dominion area. Project AG1-105 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-105 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	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
163523772	314940	8ROGER SRD	500.0	DVP	938490	AE1-068_POI	500.0	DVP	1	DVP_P1-2: LN 511-C	single	4070.19995117	99.67	100.1	DC	23.06

11.2 Multiple Facility Contingency

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

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
163523470	314902	8CARSON	500.0	DVP	939410	AE1-173_POI	500.0	DVP	1	DVP_P4-2: 562T563	breaker	3144.0	99.99	100.63	DC	21.81

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	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
168099481	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTILOC H 500 1	single	402.0	118.98	120.08	DC	4.46
168099482	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	single	402.0	118.98	120.08	DC	4.46
168099483	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	single	275.0	108.19	109.52	DC	3.72
168345454	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	127.17	130.3	DC	17.88
168345455	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	127.2	130.33	DC	17.88
168345449	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	127.22	130.35	DC	17.88
168345450	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	127.24	130.37	DC	17.88

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
1691166 60	31467 7	6BUCKIN G	230. 0	DVP	31474 7	6BREMO	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	171.02	173.97	DC	16.83
1691166 61	31467 7	6BUCKIN G	230. 0	DVP	31474 7	6BREMO	230. 0	DVP	1	DVP_P1-2: LN 556-B	singl e	571.5200195 31	171.04	173.98	DC	16.83
1691167 76	31468 6	6CLOVER	230. 0	DVP	96249 0	AG1-098 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-D	singl e	571.5200195 31	116.36	119.48	DC	17.88
1691167 77	31468 6	6CLOVER	230. 0	DVP	96249 0	AG1-098 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	116.37	119.5	DC	17.88
1691166 39	31469 2	6FARMV IL	230. 0	DVP	31467 7	6BUCKING	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	559.2999877 93	171.47	174.48	DC	16.84
1691166 40	31469 2	6FARMV IL	230. 0	DVP	31467 7	6BUCKING	230. 0	DVP	1	DVP_P1-2: LN 556-B	singl e	559.2999877 93	171.51	174.52	DC	16.84
1691166 66	31469 7	6SEDGE HILL	230. 0	DVP	92725 0	AC1-221 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-D	singl e	674.9199829 1	154.32	159.04	DC	31.84
1691166 67	31469 7	6SEDGE HILL	230. 0	DVP	92725 0	AC1-221 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	674.9199829 1	154.35	159.07	DC	31.84
1693359 09	31474 7	6BREMO	230. 0	DVP	31474 4	3BREMO	115. 0	DVP	1	DVP_P1-2: LN 2193	singl e	269.7799987 79	123.2	124.35	DC	3.11
1635235 30	92725 0	AC1-221 TAP	230. 0	DVP	30407 0	6PERSON2 30 T	230. 0	CPL	1	DVP_P1-2: LN 556-D	singl e	718.0	157.03	161.47	DC	31.84
1635235 31	92725 0	AC1-221 TAP	230. 0	DVP	30407 0	6PERSON2 30 T	230. 0	CPL	1	DVP_P1-2: LN 556-C	singl e	718.0	157.06	161.49	DC	31.84
1695671 06	93462 0	AD1-088 TAP	230. 0	DVP	96327 0	AG1-176 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-D	singl e	571.5200195 31	128.29	131.42	DC	17.88
1695671 07	93462 0	AD1-088 TAP	230. 0	DVP	96327 0	AG1-176 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	128.31	131.43	DC	17.88
1695671 20	96249 0	AG1-098 TAP	230. 0	DVP	93462 0	AD1-088 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-D	singl e	571.5200195 31	121.54	124.67	DC	17.88
1695671 21	96249 0	AG1-098 TAP	230. 0	DVP	93462 0	AD1-088 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	121.56	124.69	DC	17.88
1691167 10	96256 0	AG1-105 TAP	230. 0	DVP	31469 7	6SEDGE HILL	230. 0	DVP	1	DVP_P1-2: LN 556-D	singl e	814.9799804 69	128.55	133.69	DC	41.84
1691167 11	96256 0	AG1-105 TAP	230. 0	DVP	31469 7	6SEDGE HILL	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	814.9799804 69	128.59	133.72	DC	41.84
1698713 23	96327 0	AG1-176 TAP	230. 0	DVP	96484 0	AG1-347 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	128.29	131.42	DC	17.88
1698713 24	96327 0	AG1-176 TAP	230. 0	DVP	96484 0	AG1-347 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-B	singl e	571.5200195 31	128.32	131.45	DC	17.88
1686468 77	96484 0	AG1-347 TAP	230. 0	DVP	31426 8	6BRIERY	230. 0	DVP	1	DVP_P1-2: LN 556-C	singl e	571.5200195 31	128.29	131.42	DC	17.88
1686468 78	96484 0	AG1-347 TAP	230. 0	DVP	31426 8	6BRIERY	230. 0	DVP	1	DVP_P1-2: LN 556-B	singl e	571.5200195 31	128.32	131.45	DC	17.88

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	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOAD NG %	POST PROJE CT LOAD NG %	AC DC	MW IMPA CT
168099478	242631	05EDAN 1	138.0	AEP	242620	05DANVL 2	138.0	AEP	1	AEP_P1-3_#1377_05J.FERR 765_1	operati on	402.0	145.83	146.66	DC	7.43
168099479	242631	05EDAN 1	138.0	AEP	242620	05DANVL 2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	operati on	402.0	145.83	146.66	DC	7.43
168099480	242631	05EDAN 1	138.0	AEP	242620	05DANVL 2	138.0	AEP	1	Base Case	operati on	275.0	128.15	129.16	DC	6.21
168345435	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	155.18	155.82	DC	9.42
168345439	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	Base Case	operati on	661.760009766	103.34	103.91	DC	8.28
168345452	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	571.520019531	157.49	162.7	DC	29.8
168345457	313867	6BREMOD IST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	153.12	153.82	DC	10.28
168345461	313867	6BREMOD IST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	Base Case	operati on	661.760009766	103.8	104.41	DC	9.03
168345447	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	571.520019531	157.54	162.76	DC	29.8
168646910	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P1-2: LN 563	operati on	559.299987793	171.34	171.82	DC	5.94
168646920	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P1-2: LN 563	operati on	559.299987793	167.53	168.01	DC	5.94
169116658	314677	6BUCKIN G	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	571.520019531	226.62	231.52	DC	28.05
169116662	314677	6BUCKIN G	230.0	DVP	314747	6BREMO	230.0	DVP	1	Base Case	operati on	571.520019531	132.8	135.0	DC	12.59
169116774	314686	6CLOVER	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operati on	571.520019531	141.08	146.29	DC	29.8
169116637	314692	6FARMVIL	230.0	DVP	314677	6BUCKIN G	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	559.299987793	229.23	234.24	DC	28.07
169116641	314692	6FARMVIL	230.0	DVP	314677	6BUCKIN G	230.0	DVP	1	Base Case	operati on	559.299987793	130.95	133.21	DC	12.61
169116664	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operati on	674.91998291	204.22	212.05	DC	53.07
169116668	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	Base Case	operati on	509.480010986	96.9	101.92	DC	25.57

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 PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
169116859	314714	3PERTH	115.0	DVP	942750	AE2-291 TAP	115.0	DVP	1	DVP_P1-2: LN 556-D	operati on	285.760009766	99.65	100.97	DC	8.36
169335890	314747	6BREMO	230.0	DVP	313867	6BREMOD IST	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	155.28	155.98	DC	10.28
169335894	314747	6BREMO	230.0	DVP	313867	6BREMOD IST	230.0	DVP	1	Base Case	operati on	661.760009766	105.96	106.58	DC	9.03
169335884	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	Base Case	operati on	661.760009766	105.16	105.72	DC	8.27
168646900	314902	8CARSON	500.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 563	operati on	903.903991699	169.93	171.05	DC	10.04
163523791	314935	8HERITAGE	500.0	DVP	314940	8ROGERS RD	500.0	DVP	1	DVP_P1-2: LN 511-A	operati on	3256.15991211	101.26	102.4	DC	39.28
163523699	314936	8RAWLINGS	500.0	DVP	942930	AE2-313 TAP	500.0	DVP	1	DVP_P1-2: LN 585-A	operati on	4070.19995117	126.44	127.49	DC	42.73
163523525	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON 230 T	230.0	CPL E	1	DVP_P1-2: LN 556-D	operati on	718.0	209.33	216.69	DC	53.07
163523535	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON 230 T	230.0	CPL E	1	Base Case	operati on	542.0	109.87	114.59	DC	25.57
169567104	934620	AD1-088 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operati on	571.520019531	158.5	163.72	DC	29.8
163523638	940470	AE2-031 TAP	500.0	DVP	314902	8CARSON	500.0	DVP	1	DVP_P1-2: LN 585-A	operati on	4070.19995117	133.86	134.91	DC	42.73
163523672	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	130.73	131.79	DC	42.73
169871280	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	164.68	165.32	DC	9.42
169871284	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	Base Case	operati on	661.760009766	109.29	109.86	DC	8.28
169567118	962490	AG1-098 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operati on	571.520019531	149.78	154.99	DC	29.8
169116708	962560	AG1-105 TAP	230.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 556-D	operati on	814.979980469	159.32	167.88	DC	69.74
169871321	963270	AG1-176 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	571.520019531	158.61	163.82	DC	29.8
168646875	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-C	operati on	571.520019531	158.61	163.82	DC	29.8
169871294	966790	AG1-550 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	Base Case	operati on	661.760009766	108.09	108.66	DC	8.28

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
168099481,168099482,168099483	3	05EDAN 1 138.0 kV - 05DANVL2 138.0 kV Ckt 1	<u>AEP</u> n6124 (538) : 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
168345450,168345449	5	6BRIERY 230.0 kV - 6PRINCE EDW 230.0 kV Ckt 1	<u>DVP</u> dom-212 (1610) : 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
169567120,169567121	13	AG1-098 TAP 230.0 kV - AD1-088 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-391 (1789) : 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
169116777,169116776	7	6CLOVER 230.0 kV - AG1-098 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-343 (1741) : 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
169335909	10	6BREMO 230.0 kV - 3BREMO 115.0 kV Ckt 1	<u>DVP</u> b2989 (1331) : PJM Baseline Upgrade b2989. Install a second 230 -115 kV Transformer(224 MVA) approximately 1 mile north of Bremono and tie 230 kV Line #2028(Bremo Charlottesville) and 115 kV Line #91 (Bremo-Sherwood) together. A three breaker 230 kV ring bus will split Line #2028 into two lines and Line #91 will also be split into two lines with a new three breaker 115 kV ring bus. Install a temporary 230-115 kV transformer at Bremono substation for the interim until the new substation is complete. The baseline project has an projected in-service date of 10/31/2019. Project Type : CON Cost : \$0	\$0

ID	Idx	Facility	Upgrade Description	Cost
169567106,169567107	12	AD1-088 TAP 230.0 kV - AG1-176 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-392 (1790) : 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
169871324,169871323	15	AG1-176 TAP 230.0 kV - AG1-347 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-415 (1813) : 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
163523470	2	8CARSON 500.0 kV - AE1-173 TAP 500.0 kV Ckt 1	<u>DVP</u> No Violation. Incorrect Ratings in PSSE Case. Actual Ratings are 3464.0/3464.0/4156.0 MVA	\$0
168345455,168345454	4	6PRINCE EDW 230.0 kV - 6FARMVIL 230.0 kV Ckt 1	<u>DVP</u> dom-199 (1597) : 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
163523531,163523530	11	AC1-221 TAP 230.0 kV - 6PERSON230 T 230.0 kV Ckt 1	<u>DVP</u> n6449 (1350) : 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 (1657) : 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 dom-387 (1785) : For DEV portion, rebuild 2 miles of 230 kV Line 296 from AC1-221 Tap to Persons DEP with 2-768.2 ACSS 250 C. Project Type : FAC Cost : \$3,000,000 Time Estimate : 30-36 Months	\$9,000,000
169116667,169116666	9	6SEEDGE 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
169116661,169 116660	6	6BUCKING 230.0 kV - 6BREMO 230.0 kV Ckt 1	<u>DVP</u> n6219 (1381) : Rebuild 15.51 miles of 230 kV Line 298 from Buckingham to Bremono with 2-636 ACSR. Project Type : FAC Cost : \$23,265,000 Time Estimate : 30-36 Months dom-337 (1735) : Rebuild 15.51 miles of 230 kV Line 298 from Buckingham to Bremono with 2-768.2 ACSS 250 C. Replace Breaker, Breaker Switch, Breaker Lead, Wave Trap, Relay (Secondary CT), Relay Trip at Bremono terminal. Replace Line Switch at Buckingham terminal Project Type : FAC Cost : \$25,285,000 Time Estimate : 36-40 Months	\$48,550,000
169116640,169 116639	8	6FARMVIL 230.0 kV - 6BUCKING 230.0 kV Ckt 1	<u>DVP</u> n6245 (1383) : 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
169116711,169 116710	14	AG1-105 TAP 230.0 kV - 6SEEDGE HILL 230.0 kV Ckt 1	<u>DVP</u> dom-412 (1810) : Rebuild 13.3 miles of 230 kV Line 2068 from AG1-105 to Sedge Hill with 2-768.2 ACSS 250 C. Replace Wave Trap at Sedge Hill terminal. Project Type : FAC Cost : \$20,150,000 Time Estimate : 36-40 Months	\$20,150,000
163523772	1	8ROGERS RD 500.0 kV - AE1- 068 TAP 500.0 kV Ckt 1	<u>DVP</u> dom-183 (1532) : Build new 500 kV Line from Rawlings to Morrisville Substation 110 miles Project Type : CON Cost : \$400,000,000 Time Estimate : 60-72 Months	\$400,000,000
168646878,168 646877	16	AG1-347 TAP 230.0 kV - 6BRIERY 230.0 kV Ckt 1	<u>DVP</u> dom-297 (1695) : 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
			TOTAL COST	\$613,115,000

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
163523772	314940	8ROGERS RD	DVP	938490	AE1-068_POI	DVP	1	DVP_P1-2: LN 511-C	single	4070.2	99.67	100.1	DC	23.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4501	80/20	0.4501
314429	3JTRSVLE	0.3871	80/20	0.3871
315102	1BRUNSWICKG1	25.0620	80/20	25.0620
315103	1BRUNSWICKG2	25.0620	80/20	25.0620
315104	1BRUNSWICKG3	25.0620	80/20	25.0620
315105	1BRUNSWICKS1	52.0660	80/20	52.0660
315153	1CLOVER1	28.1358	80/20	28.1358
315154	1CLOVER2	27.8554	80/20	27.8554
315158	1KERR 1	0.3224	80/20	0.3224
315159	1KERR 2	0.9028	80/20	0.9028
315160	1KERR 3	0.9028	80/20	0.9028
315161	1KERR 4	0.9028	80/20	0.9028
315162	1KERR 5	0.9028	80/20	0.9028
315163	1KERR 6	0.9028	80/20	0.9028
315164	1KERR 7	0.9028	80/20	0.9028
315241	1Z1-086 GT1	33.3239	80/20	33.3239
315242	1Z1-086 GT2	33.3239	80/20	33.3239
315243	1Z1-086 GT3	33.3239	80/20	33.3239
315244	1Z1-086 ST	57.9294	80/20	57.9294
315266	1PLYWOOD A	1.7322	80/20	1.7322
316118	AC1-105 C	8.2617	80/20	8.2617
316123	AC1-075 C	1.1943	80/20	1.1943
316131	AB2-060 C	1.2970	80/20	1.2970
316132	AB2-190 C	-14.7122	Adder	-17.31
924301	AB2-077 C O1 (Suspended)	1.8391	80/20	1.8391
924311	AB2-078 C O1 (Suspended)	1.8391	80/20	1.8391
924321	AB2-079 C O1 (Suspended)	1.8391	80/20	1.8391
925611	AC1-036 C	0.2065	80/20	0.2065
926023	AC1-080 C	0.3991	80/20	0.3991
926051	AC1-083 C O1	4.7823	80/20	4.7823
926754	AC1-161 C	-27.1829	Adder	-31.98
927251	AC1-221 C	3.7078	80/20	3.7078
927261	AC1-222 C	5.6854	80/20	5.6854
932581	AC2-078 C O1	-3.0043	Adder	-3.53
932761	AC2-100 C	8.5331	80/20	8.5331
933941	AD1-017 C	0.9565	80/20	0.9565
934061	AD1-033 C	-6.1290	Adder	-7.21
934311	AD1-055 C	3.9475	80/20	3.9475
934341	AD1-058 C	9.2949	80/20	9.2949

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934615	AD1-087 C	17.6137	80/20	17.6137
934625	AD1-088 C	22.3004	80/20	22.3004
934991	AD1-131 C	3.0475	80/20	3.0475
935171	AD1-152 C O1	19.3469	80/20	19.3469
935221	AD1-157 C	0.2182	80/20	0.2182
936161	AD2-022 C O1	12.4158	80/20	12.4158
936171	AD2-023 C O1	7.2425	80/20	7.2425
936265	AD2-033 C	11.8583	80/20	11.8583
936361	AD2-046 C O1	7.5997	80/20	7.5997
936485	AD2-063 C	13.6305	80/20	13.6305
937481	AD2-202 C O1	5.1592	80/20	5.1592
938371	AE1-056 C	5.9632	80/20	5.9632
939181	AE1-148 C	7.5157	80/20	7.5157
939431	AE1-175 C	-1.7800	Adder	-2.09
940081	AE1-250 C	12.8997	80/20	12.8997
940601	AE2-047 C O1	4.0999	80/20	4.0999
940661	AE2-053 O1	2.7836	80/20	2.7836
940891	AE2-078 C	-1.8176	Adder	-2.14
940901	AE2-079 C	-1.8176	Adder	-2.14
941791	AE2-182 C	3.6230	80/20	3.6230
942131	AE2-225 C	-1.6251	Adder	-1.91
942171	AE2-229 C	-1.2188	Adder	-1.43
942451	AE2-258	2.1285	80/20	2.1285
942461	AE2-259 C O1	9.2838	80/20	9.2838
942751	AE2-291 C	10.7516	80/20	10.7516
942761	AE2-292 C O1	13.3868	80/20	13.3868
943611	AF1-032 C	-1.3271	Adder	-1.56
943621	AF1-033 C	-1.8176	Adder	-2.14
943811	AF1-049 C	10.3650	80/20	10.3650
943901	AF1-058 C	3.1495	80/20	3.1495
945811	AF1-246 C O1	19.0634	80/20	19.0634
946301	AF1-294 C	3.9099	80/20	3.9099
957481	AF2-042 C	136.1670	80/20	136.1670
957491	AF2-043 C	-1.6251	Adder	-1.91
958211	AF2-115 C	2.3000	80/20	2.3000
958801	AF2-171 C	13.7952	80/20	13.7952
959311	AF2-222 C	15.2380	80/20	15.2380
959751	AF2-266	20.1965	80/20	20.1965
960061	AF2-297 C	12.5981	80/20	12.5981
961791	AG1-021 C	1.8400	80/20	1.8400
961891	AG1-030 C	13.7664	80/20	13.7664
962041	AG1-048 C	11.4997	80/20	11.4997
962441	AG1-093 C O1	22.0312	80/20	22.0312
962491	AG1-098 C O1	26.6370	80/20	26.6370
962561	AG1-105 C O1	23.0550	80/20	23.0550
963041	AG1-153 C	17.5851	80/20	17.5851
963111	AG1-160 C	18.4203	80/20	18.4203
963171	AG1-166 C	1.8400	80/20	1.8400
963181	AG1-167 C	1.8400	80/20	1.8400
963191	AG1-168 C	1.8400	80/20	1.8400
963201	AG1-169 C	1.8400	80/20	1.8400
963211	AG1-170 C	1.8400	80/20	1.8400

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963271	AG1-176 C O1	26.8427	80/20	26.8427
963321	AG1-181 C O1	15.3697	80/20	15.3697
963361	AG1-185 O1	7.4363	80/20	7.4363
963641	AG1-215 C	0.8586	80/20	0.8586
964111	AG1-272 C	2.3474	80/20	2.3474
964121	AG1-273 C	2.3474	80/20	2.3474
964131	AG1-274 C	2.3474	80/20	2.3474
964241	AG1-285 C O1	11.3482	80/20	11.3482
964261	AG1-287 C	2.3621	80/20	2.3621
964471	AG1-310 C	3.2494	80/20	3.2494
964791	AG1-342 C	5.4487	80/20	5.4487
964821	AG1-345 C	0.7359	80/20	0.7359
964841	AG1-347 C	16.7126	80/20	16.7126
964931	AG1-357 C	58.8336	80/20	58.8336
965191	AG1-384 C	2.3474	80/20	2.3474
965281	AG1-393 C	1.8400	80/20	1.8400
965591	AG1-427 C	10.7596	80/20	10.7596
965641	AG1-432 C O1	18.5676	80/20	18.5676
965831	AG1-451	3.0946	80/20	3.0946
966361	AG1-505 C	47.7945	80/20	47.7945
966371	AG1-506 C	47.7945	80/20	47.7945
966691	AG1-539 C	5.6218	80/20	5.6218
966701	AG1-540 C	2.9506	80/20	2.9506
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	1.8568	80/20	1.8568
WEC	WEC	1.5019	Confirmed LTF	1.5019
LGEE	LGEE	3.0894	Confirmed LTF	3.0894
CPL	CPL	14.5093	Confirmed LTF	14.5093
CBM-W2	CBM-W2	65.5334	Confirmed LTF	65.5334
NY	NY	2.0555	Confirmed LTF	2.0555
TVA	TVA	12.3466	Confirmed LTF	12.3466
SIGE	SIGE	1.0043	Confirmed LTF	1.0043
CBM-S2	CBM-S2	180.4972	Confirmed LTF	180.4972
CBM-S1	CBM-S1	3.0818	Confirmed LTF	3.0818
MEC	MEC	8.9747	Confirmed LTF	8.9747
LAGN	LAGN	15.3422	Confirmed LTF	15.3422
AA2-074	AA2-074	9.5854	LTF	9.5854
CBM-W1	CBM-W1	62.8797	Confirmed LTF	62.8797

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
163523470	314902	8CARSON	DVP	939410	AE1-173_POI	DVP	1	DVP_P4-2: 562T563	breaker	3144.0	99.99	100.63	DC	21.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3092	50/50	0.3092
314189	6PAPERMILL	-3.7784	Adder	-4.45
314435	6SAPONY	0.2570	50/50	0.2570
314539	3UNCAMP	-3.8616	Adder	-4.54
315102	1BRUNSWICKG1	13.2311	50/50	13.2311
315103	1BRUNSWICKG2	13.2311	50/50	13.2311
315104	1BRUNSWICKG3	13.2311	50/50	13.2311
315105	1BRUNSWICKS1	27.4875	50/50	27.4875
315153	1CLOVER1	15.9761	50/50	15.9761
315154	1CLOVER2	15.8169	50/50	15.8169
315241	1Z1-086 GT1	17.1480	50/50	17.1480
315242	1Z1-086 GT2	17.1480	50/50	17.1480
315243	1Z1-086 GT3	17.1480	50/50	17.1480
315244	1Z1-086 ST	29.8096	50/50	29.8096
315266	1PLYWOOD A	1.0198	50/50	1.0198
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	-30.4816	Adder	-35.86
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	-30.4816	Adder	-35.86
316114	AB2-068 ST (Withdrawn : 01/11/2021)	-52.8061	Adder	-62.12
316118	AC1-105 C	4.8945	50/50	4.8945
316123	AC1-075 C	0.6875	50/50	0.6875
316131	AB2-060 C	0.8891	50/50	0.8891
316132	AB2-190 C	-11.2593	Adder	-13.25
923852	AB2-025 E	0.7319	50/50	0.7319
924022	AB2-043 E O1	1.7522	50/50	1.7522
924162	AB2-060 E OP	2.6519	50/50	2.6519
924301	AB2-077 C O1 (Suspended)	1.2522	50/50	1.2522
924302	AB2-077 E O1 (Suspended)	0.8348	50/50	0.8348
924311	AB2-078 C O1 (Suspended)	1.2522	50/50	1.2522
924312	AB2-078 E O1 (Suspended)	0.8348	50/50	0.8348
924321	AB2-079 C O1 (Suspended)	1.2522	50/50	1.2522
924322	AB2-079 E O1 (Suspended)	0.8348	50/50	0.8348
925863	AC1-065 C	-4.3013	Adder	-5.06
925997	AC1-075 E	2.4688	50/50	2.4688

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926023	AC1-080 C	0.2298	50/50	0.2298
926024	AC1-080 E	0.8191	50/50	0.8191
926274	AC1-105 E	2.4047	50/50	2.4047
926754	AC1-161 C	-33.7452	Adder	-39.7
927251	AC1-221 C	2.0468	50/50	2.0468
927252	AC1-221 E	2.0468	50/50	2.0468
927261	AC1-222 C	3.2852	50/50	3.2852
927262	AC1-222 E	3.1274	50/50	3.1274
932761	AC2-100 C	4.7104	50/50	4.7104
932762	AC2-100 E	2.2991	50/50	2.2991
934061	AD1-033 C	-9.0896	Adder	-10.69
934141	AD1-041 C	-3.1674	Adder	-3.73
934311	AD1-055 C	2.2810	50/50	2.2810
934312	AD1-055 E	0.5882	50/50	0.5882
934341	AD1-058 C	5.1310	50/50	5.1310
934342	AD1-058 E	1.3038	50/50	1.3038
934615	AD1-087 C	10.0012	50/50	10.0012
934616	AD1-087 E	4.2797	50/50	4.2797
934625	AD1-088 C	12.8934	50/50	12.8934
934626	AD1-088 E	3.3768	50/50	3.3768
934991	AD1-131 C	1.6823	50/50	1.6823
934992	AD1-131 E	1.1215	50/50	1.1215
935171	AD1-152 C O1	10.9853	50/50	10.9853
935172	AD1-152 E O1	7.3235	50/50	7.3235
936161	AD2-022 C O1	6.7644	50/50	6.7644
936162	AD2-022 E O1	4.0586	50/50	4.0586
936171	AD2-023 C O1	3.9459	50/50	3.9459
936172	AD2-023 E O1	2.1421	50/50	2.1421
936265	AD2-033 C	7.9856	50/50	7.9856
936266	AD2-033 E	5.3238	50/50	5.3238
936485	AD2-063 C	9.2745	50/50	9.2745
936486	AD2-063 E	6.1830	50/50	6.1830
937481	AD2-202 C O1	2.9294	50/50	2.9294
937482	AD2-202 E O1	1.6478	50/50	1.6478
938494	AE1-068_C1	51.6375	50/50	51.6375
938497	AE1-068_C2	51.6375	50/50	51.6375
938498	AE1-068_E1	28.5450	50/50	28.5450
938499	AE1-068_E2	28.5450	50/50	28.5450
938504	AE1-069_C1	39.3536	50/50	39.3536
938507	AE1-069_C2	42.4326	50/50	42.4326
938508	AE1-069_E1	22.3870	50/50	22.3870
938509	AE1-069_E2	24.1189	50/50	24.1189
939431	AE1-175 C	-1.8138	Adder	-2.13
940231	AE2-005 C	-0.7820	Adder	-0.92
940471	AE2-031 C	56.5831	50/50	56.5831
940472	AE2-031 E	37.7220	50/50	37.7220
940481	AE2-033 C	10.0312	50/50	10.0312
940482	AE2-033 E	6.7626	50/50	6.7626
940541	AE2-040	1.8534	50/50	1.8534
940552	AE2-041 BAT	4.9116	50/50	4.9116
940891	AE2-078 C	-2.0105	Adder	-2.37
940901	AE2-079 C	-2.0105	Adder	-2.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941031	AE2-094 C	68.3097	50/50	68.3097
941032	AE2-094 E	30.5943	50/50	30.5943
941791	AE2-182 C	2.0947	50/50	2.0947
941792	AE2-182 E	0.9751	50/50	0.9751
942131	AE2-225 C	-2.4492	Adder	-2.88
942171	AE2-229 C	-1.8369	Adder	-2.16
942451	AE2-258	1.4619	50/50	1.4619
942552	AE2-270 BAT	18.7365	50/50	18.7365
942931	AE2-313 C	61.1264	50/50	61.1264
942932	AE2-313 E	40.7509	50/50	40.7509
943472	AF1-018 BAT	4.9116	50/50	4.9116
943611	AF1-032 C	-2.0002	Adder	-2.35
943621	AF1-033 C	-2.0105	Adder	-2.37
943901	AF1-058 C	1.8214	50/50	1.8214
943902	AF1-058 E	1.2142	50/50	1.2142
944011	AF1-069 C	22.3193	50/50	22.3193
944012	AF1-069 E	8.6706	50/50	8.6706
945363	AF1-201 BAT	3.3658	50/50	3.3658
945811	AF1-246 C O1	10.7961	50/50	10.7961
945812	AF1-246 E O1	14.9089	50/50	14.9089
946011	AF1-266	8.3969	50/50	8.3969
957481	AF2-042 C	77.1150	50/50	77.1150
957482	AF2-042 E	51.4100	50/50	51.4100
957491	AF2-043 C	-2.4492	Adder	-2.88
957632	AF2-057 BAT	5.0526	50/50	5.0526
959751	AF2-266	11.4680	50/50	11.4680
960061	AF2-297 C	7.2854	50/50	7.2854
960062	AF2-297 E	4.8570	50/50	4.8570
961091	AF2-400 C	-0.2729	Adder	-0.32
961612	AG1-000B BAT	12.5580	50/50	12.5580
961691	AG1-009 BAT	7.8174	50/50	7.8174
961712	AG1-011 BAT	20.8464	50/50	20.8464
961853	AG1-028 BAT	21.3900	50/50	21.3900
962132	AG1-057 BAT	2.4558	50/50	2.4558
962441	AG1-093 C O1	13.0520	50/50	13.0520
962442	AG1-093 E O1	3.9724	50/50	3.9724
962491	AG1-098 C O1	15.2543	50/50	15.2543
962492	AG1-098 E O1	10.1695	50/50	10.1695
962561	AG1-105 C O1	13.0848	50/50	13.0848
962562	AG1-105 E O1	8.7232	50/50	8.7232
963041	AG1-153 C	9.2838	50/50	9.2838
963042	AG1-153 E	13.9257	50/50	13.9257
963111	AG1-160 C	9.4788	50/50	9.4788
963112	AG1-160 E	14.2182	50/50	14.2182
963271	AG1-176 C O1	15.5728	50/50	15.5728
963272	AG1-176 E O1	10.3819	50/50	10.3819
963321	AG1-181 C O1	10.3395	50/50	10.3395
963352	AG1-184 BAT	70.8000	50/50	70.8000
963613	AG1-210 BAT	1.0459	50/50	1.0459
964241	AG1-285 C O1	7.7430	50/50	7.7430
964242	AG1-285 E O1	5.1620	50/50	5.1620
964261	AG1-287 C	1.3660	50/50	1.3660

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964262	AG1-287 E	0.9107	50/50	0.9107
964471	AG1-310 C	1.8771	50/50	1.8771
964472	AG1-310 E	0.9245	50/50	0.9245
964791	AG1-342 C	3.3221	50/50	3.3221
964792	AG1-342 E	2.6102	50/50	2.6102
964841	AG1-347 C	9.6981	50/50	9.6981
964842	AG1-347 E	7.6199	50/50	7.6199
964931	AG1-357 C	33.2664	50/50	33.2664
964932	AG1-357 E	22.1776	50/50	22.1776
964952	AG1-359 BAT	38.2185	50/50	38.2185
965003	AG1-364 BAT	25.3380	50/50	25.3380
965183	AG1-383 BAT	2.1602	50/50	2.1602
965591	AG1-427 C	7.3382	50/50	7.3382
965592	AG1-427 E	4.9025	50/50	4.9025
965811	AG1-449	39.6732	50/50	39.6732
966361	AG1-505 C	26.9838	50/50	26.9838
966362	AG1-505 E	17.9892	50/50	17.9892
966371	AG1-506 C	26.9838	50/50	26.9838
966372	AG1-506 E	17.9892	50/50	17.9892
966492	AG1-518 BAT	12.0060	50/50	12.0060
966663	AG1-536 BAT	8.3655	50/50	8.3655
966932	AG1-431A BAT	28.2400	50/50	28.2400
WEC	WEC	0.8467	Confirmed LTF	0.8467
LGEE	LGEE	1.7372	Confirmed LTF	1.7372
CPL	CPL	7.7211	Confirmed LTF	7.7211
CBM-W2	CBM-W2	36.0461	Confirmed LTF	36.0461
NY	NY	0.9473	Confirmed LTF	0.9473
TVA	TVA	6.7368	Confirmed LTF	6.7368
O-066	O-066	13.6081	Confirmed LTF	13.6081
SIGE	SIGE	0.5209	Confirmed LTF	0.5209
CBM-S2	CBM-S2	96.6535	Confirmed LTF	96.6535
CBM-S1	CBM-S1	1.6872	Confirmed LTF	1.6872
G-007	G-007	2.1420	Confirmed LTF	2.1420
MEC	MEC	5.0053	Confirmed LTF	5.0053
LAGN	LAGN	8.3720	Confirmed LTF	8.3720
AA2-074	AA2-074	5.1021	LTF	5.1021
CBM-W1	CBM-W1	35.6248	Confirmed LTF	35.6248

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
168099482	242631	05EDAN 1	AEP	242620	05DANVL2	AEP	1	AEP_P2-1_242520 05J.FERR 500 242514 05J.FERR 765 1	single	402.0	118.98	120.08	DC	4.46

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 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

11.6.4 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
168345455	313802	6PRINCE EDW	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 556-B	single	571.52	127.2	130.33	DC	17.88

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

11.6.5 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
168345450	314268	6BRIERY	DVP	313802	6PRINCE EDW	DVP	1	DVP_P1-2: LN 556-B	single	571.52	127.24	130.37	DC	17.88

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

11.6.6 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
169116661	314677	6BUCKING	DVP	314747	6BREMO	DVP	1	DVP_P1-2: LN 556-B	single	571.52	171.04	173.98	DC	16.83

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
963201	AG1-169 C	4.7900	80/20	4.7900

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
CPLE	CPLE	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

11.6.7 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
169116777	314686	6CLOVER	DVP	962490	AG1-098 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	116.37	119.5	DC	17.88

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

11.6.8 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
169116640	314692	6FARMVIL	DVP	314677	6BUCKING	DVP	1	DVP_P1-2: LN 556-B	single	559.3	171.51	174.52	DC	16.84

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
169116667	314697	6SEGE HILL	DVP	927250	AC1-221 TAP	DVP	1	DVP_P1-2: LN 556-C	single	674.92	154.35	159.07	DC	31.84

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
963201	AG1-169 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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
169335909	314747	6BREMO	DVP	314744	3BREMO	DVP	1	DVP_P1-2: LN 2193	single	269.78	123.2	124.35	DC	3.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.1964	80/20	0.1964
314333	6POWHATN	0.2978	80/20	0.2978
314429	3JTRSVLE	0.2939	80/20	0.2939
314677	6BUCKING	0.4512	80/20	0.4512
315153	1CLOVER1	3.8255	80/20	3.8255
315154	1CLOVER2	3.7873	80/20	3.7873
315191	1BEARGRDN G1	7.8222	80/20	7.8222
315192	1BEARGRDN G2	7.8222	80/20	7.8222
315193	1BEARGRDN S1	10.1156	80/20	10.1156
316131	AB2-060 C	0.5816	80/20	0.5816
924301	AB2-077 C O1 (Suspended)	0.7721	80/20	0.7721
924311	AB2-078 C O1 (Suspended)	0.7721	80/20	0.7721
924321	AB2-079 C O1 (Suspended)	0.7721	80/20	0.7721
925611	AC1-036 C	0.1263	80/20	0.1263
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.4445	80/20	0.4445
932854	AC2-112 C	-5.0776	Adder	-5.97
933501	AC2-165 C	9.0146	80/20	9.0146
934615	AD1-087 C	2.3943	80/20	2.3943
934625	AD1-088 C	7.0229	80/20	7.0229
935171	AD1-152 C O1	2.6299	80/20	2.6299
935221	AD1-157 C	0.1771	80/20	0.1771
936265	AD2-033 C	6.8523	80/20	6.8523
936361	AD2-046 C O1	2.8074	80/20	2.8074
936485	AD2-063 C	6.8715	80/20	6.8715
937481	AD2-202 C O1	0.7013	80/20	0.7013
938371	AE1-056 C	4.8384	80/20	4.8384
938561	AE1-075 C	0.2589	80/20	0.2589
939181	AE1-148 C	2.7983	80/20	2.7983
940661	AE2-053 O1	1.0364	80/20	1.0364
941791	AE2-182 C	1.1410	80/20	1.1410
942451	AE2-258	0.9286	80/20	0.9286
942461	AE2-259 C O1	8.8338	80/20	8.8338
943911	AF1-059	5.2100	80/20	5.2100
946301	AF1-294 C	2.9685	80/20	2.9685
957911	AF2-085	1.1020	80/20	1.1020
958211	AF2-115 C	1.7462	80/20	1.7462
958501	AF2-144 C	1.3951	80/20	1.3951
958801	AF2-171 C	10.4355	80/20	10.4355

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959311	AF2-222 C	9.6430	80/20	9.6430
959531	AF2-244 C (Withdrawn : 01/06/2021)	1.2856	80/20	1.2856
959751	AF2-266	2.7460	80/20	2.7460
961791	AG1-021 C	1.3969	80/20	1.3969
961891	AG1-030 C	9.7452	80/20	9.7452
962041	AG1-048 C	8.7308	80/20	8.7308
962491	AG1-098 C O1	5.8538	80/20	5.8538
962561	AG1-105 C O1	3.1146	80/20	3.1146
963171	AG1-166 C	1.3969	80/20	1.3969
963181	AG1-167 C	1.3969	80/20	1.3969
963191	AG1-168 C	1.3969	80/20	1.3969
963201	AG1-169 C	1.3969	80/20	1.3969
963211	AG1-170 C	1.3969	80/20	1.3969
963271	AG1-176 C O1	9.3799	80/20	9.3799
963321	AG1-181 C O1	9.0112	80/20	9.0112
963361	AG1-185 O1	4.3598	80/20	4.3598
963641	AG1-215 C	0.6519	80/20	0.6519
964111	AG1-272 C	1.4356	80/20	1.4356
964121	AG1-273 C	1.4356	80/20	1.4356
964131	AG1-274 C	1.4356	80/20	1.4356
964241	AG1-285 C O1	5.4983	80/20	5.4983
964791	AG1-342 C	1.2713	80/20	1.2713
964821	AG1-345 C	0.5574	80/20	0.5574
964841	AG1-347 C	5.8772	80/20	5.8772
965191	AG1-384 C	1.4356	80/20	1.4356
965281	AG1-393 C	1.3969	80/20	1.3969
965451	AG1-413 C O1	2.1901	80/20	2.1901
965591	AG1-427 C	5.2486	80/20	5.2486
965641	AG1-432 C O1	17.6676	80/20	17.6676
965831	AG1-451	2.9446	80/20	2.9446
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	1.7668	80/20	1.7668
CPLE	CPLE	1.1821	Confirmed LTF	1.1821
NY	NY	0.0879	Confirmed LTF	0.0879
PRAIRIE	PRAIRIE	0.5734	Confirmed LTF	0.5734
CBM-S2	CBM-S2	10.8576	Confirmed LTF	10.8576
GIBSON	GIBSON	0.1900	Confirmed LTF	0.1900
BLUEG	BLUEG	0.6562	Confirmed LTF	0.6562
TRIMBLE	TRIMBLE	0.2137	Confirmed LTF	0.2137
LAGN	LAGN	0.0263	Confirmed LTF	0.0263

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
163523531	927250	AC1-221 TAP	DVP	304070	6PERSON230 T	CPL	1	DVP_P1-2: LN 556-C	single	718.0	157.06	161.49	DC	31.84

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
963181	AG1-167 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912

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

11.6.12 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
169567107	934620	AD1-088 TAP	DVP	963270	AG1-176 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	128.31	131.43	DC	17.88

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

11.6.13 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
169567121	962490	AG1-098 TAP	DVP	934620	AD1-088 TAP	DVP	1	DVP_P1-2: LN 556-C	single	571.52	121.56	124.69	DC	17.88

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

11.6.14 Index 14

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
169116711	962560	AG1-105 TAP	DVP	314697	6SEGE HILL	DVP	1	DVP_P1-2: LN 556-C	single	814.98	128.59	133.72	DC	41.84

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	46.6808	80/20	46.6808
315154	1CLOVER2	46.2156	80/20	46.2156
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	29.3393	80/20	29.3393
934625	AD1-088 C	37.5628	80/20	37.5628
935171	AD1-152 C O1	32.2262	80/20	32.2262
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	8.5937	80/20	8.5937
938371	AE1-056 C	5.9678	80/20	5.9678
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	6.6406	80/20	6.6406
941791	AE2-182 C	6.1026	80/20	6.1026
942461	AE2-259 C O1	12.7938	80/20	12.7938
943901	AF1-058 C	-1.5410	Adder	-1.81
945811	AF1-246 C O1	28.1476	80/20	28.1476
946291	AF1-293 C O1	9.9685	80/20	9.9685
946301	AF1-294 C	3.3642	80/20	3.3642
946591	AF1-323 C	2.0430	80/20	2.0430
957481	AF2-042 C	201.0540	80/20	201.0540
958211	AF2-115 C	1.9790	80/20	1.9790
958501	AF2-144 C	0.6149	80/20	0.6149
958801	AF2-171 C	11.7666	80/20	11.7666
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	33.5085	80/20	33.5085

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960111	AF2-302 C	0.7429	80/20	0.7429
961061	AF2-397 C	7.7259	80/20	7.7259
961791	AG1-021 C	1.5832	80/20	1.5832
961801	AG1-022 C	0.7429	80/20	0.7429
961891	AG1-030 C	9.9432	80/20	9.9432
962041	AG1-048 C	9.8947	80/20	9.8947
962491	AG1-098 C O1	44.5095	80/20	44.5095
962561	AG1-105 C O1	41.8428	80/20	41.8428
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 O1	45.3442	80/20	45.3442
963321	AG1-181 C O1	6.0674	80/20	6.0674
963361	AG1-185 O1	2.9356	80/20	2.9356
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 O1	4.1950	80/20	4.1950
964821	AG1-345 C	0.6297	80/20	0.6297
964841	AG1-347 C	28.2369	80/20	28.2369
964931	AG1-357 C	80.4216	80/20	80.4216
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 O1	25.5876	80/20	25.5876
965831	AG1-451	4.2646	80/20	4.2646
966791	AG1-550 O1	2.9092	80/20	2.9092
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	2.5588	80/20	2.5588
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	0.7005	Confirmed LTF	0.7005
BLUEG	BLUEG	2.1735	Confirmed LTF	2.1735
TRIMBLE	TRIMBLE	0.6906	Confirmed LTF	0.6906
CATAWBA	CATAWBA	1.1613	Confirmed LTF	1.1613

11.6.15 Index 15

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
169871324	963270	AG1-176 TAP	DVP	964840	AG1-347 TAP	DVP	1	DVP_P1-2: LN 556-B	single	571.52	128.32	131.45	DC	17.88

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
SIG	SIG	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

11.6.16 Index 16

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
168646878	964840	AG1-347 TAP	DVP	314268	6BRIERY	DVP	1	DVP_P1-2: LN 556-B	single	571.52	128.32	131.45	DC	17.88

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

11.7 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	CPL-PJM	Confirmed
AA2-165	Hornertown-Whitakers 115kV	In Service
AB1-081	Anaconda-Mayo Dunbar 115kV	In Service
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB2-025	Sapony 34.5kV	In Service
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
AB2-068	Chickahominy 500kV	Withdrawn
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
AB2-174	Emporia-Trego 115kV	In Service
AB2-190	Hopewell-Surry 230kV	Engineering and Procurement
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
AC1-065	Harmony Village-Shackleford 115kV	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-CPL	Confirmed
AC1-145	Gretna DP 69 kV	Engineering and Procurement
AC1-161	Septa 500kV	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

Queue Number	Project Name	Status
AC2-078	Disputanta-Waverly 115kV	Engineering and Procurement
AC2-084	Dawson-South Justice 115kV	Active
AC2-100	Halifax-Person 230kV	Engineering and Procurement
AC2-112	Stuarts Draft-Waynesboro 115kV	Engineering and Procurement
AC2-165	Bremo-Powhatan 230kV	Engineering and Procurement
AD1-017	Smith Mountain-Bearskin 138 kV	Active
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-033	Fentress-Landstown 230 kV	Engineering and Procurement
AD1-041	Harmony Village-Shackleford 115 kV	Engineering and Procurement
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	Boynton 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
AE1-068	Carson-Rogers Rd 500 kV	Active
AE1-069	Carson-Rogers Road 500 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
AE1-175	Light Foot 34.5 kV	Engineering and Procurement
AE1-230	Shockoe 69 kV	Active
AE1-250	Smith Mountain-E. Danville 138 kV	Active
AE2-005	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AE2-031	Carson-Rawlings 500 kV	Active
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-040	Sappony 34.5 kV	Active
AE2-041	Harmony Village 230 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-047	Ridgeway-Solite 69 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-078	Poolesville 34.5 kV	Engineering and Procurement
AE2-079	Poolesville 34.5 kV	Engineering and Procurement
AE2-092	Kidds Store-Sherwood 115 kV	Active
AE2-094	Carson-Rogers Road 500 kV	Active
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
AE2-225	Suffolk 34 kV	Engineering and Procurement
AE2-229	Suffolk 34 kV	Engineering and Procurement
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active

Queue Number	Project Name	Status
AE2-270	Hopewell-Surry 230 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
AE2-313	Carson-Rawlings 500 kV	Active
AE2-346	Ahoskie 34.5 kV	Active
AF1-018	Harmony Village 230 kV	Active
AF1-032	Suffolk 34.5 kV	Engineering and Procurement
AF1-033	Poolesville 34 kV	Engineering and Procurement
AF1-049	Berry Hill 138 kV	Active
AF1-058	Welco 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-069	Carson-Rogers Rd 500 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-173	Gretna DP-Shockoe DP 69 kV	Active
AF1-201	Hayes-White Marsh 115 kV	Active
AF1-246	Clover-Rawlings 500 kV	Active
AF1-266	Clubhouse-Sapony 230 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
AF2-043	Suffolk 34.5 kV	Engineering and Procurement
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-057	Grassfield 34.5 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-085	Midlothian 34.5 kV	Engineering and Procurement
AF2-115	Jetersville-Ponton 115 kV	Active
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
AG1-000B	N/A	N/A
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-009	Hopewell-Surry 230kV	Active
AG1-011	Colonial Trial 230 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-022	Scottsville-Colleen 138 kV	Active
AG1-028	Suffolk-Holland 115 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

Queue Number	Project Name	Status
AG1-048	Jetersville-Ponton 115 kV	Active
AG1-057	Harmony Village 230 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
AG1-153	Heritage 500 kV	Active
AG1-160	Rogers Road 500 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
AG1-184	Carson-Septa 500 kV	Active
AG1-185	Pamplin-Chase City 115 kV	Active
AG1-209	Gretna 12.5 kV	Active
AG1-210	Northern Neck 34.5 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
AG1-312	Earleys-Cashie 230 kV	Active
AG1-313	Jackson DP-Occoneechee 115 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-Rawlins 500 kV	Active
AG1-359	Fentress 230 kV	Active
AG1-364	Deep Creek 115 kV	Active
AG1-383	Hickory 34.5 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

Queue Number	Project Name	Status
AG1-428	Danieltown 69 kV	Active
AG1-431A	Mackeys 230 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
AG1-449	Rawlings-Carson 500 kV	Active
AG1-451	Curdsville DP-Willis Mt. 115 kV	Active
AG1-505	Rawlings-Clover 500 kV	Active
AG1-506	Rawlings-Clover 500 kV	Active
AG1-518	Suffolk 230 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-536	Garner-Northern Neck 115 kV	Active
AG1-539	Grit DP-Perth 115 kV	Active
AG1-540	Berry Hill 138 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	Parmelee 12.5 kV	Active
AG1-552	Carolina 13.2 kV	Active
AG1-557	Curdsville DP 115 kV	Withdrawn
Z1-086	Heritage-Carson	In Service

11.8 Contingency Descriptions - Primary POI

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 563	CONTINGENCY 'DVP_P1-2: LN 563' OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 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
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_P1-2: LN 2193	CONTINGENCY 'DVP_P1-2: LN 2193' OPEN BRANCH FROM BUS 313707 TO BUS 313867 CKT 1 /* 6FORK UNION 230.00 - 6BREMODIST 230.00 OPEN BRANCH FROM BUS 313867 TO BUS 314747 CKT 1 /* 6BREMODIST 230.00 - 6BREMO 230.00 OPEN BUS 313867 /* ISLAND: 6BREMODIST 230.00 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' OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 END

Contingency Name	Contingency Definition
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	
DVP_P1-2: LN 511-C	CONTINGENCY 'DVP_P1-2: LN 511-C' OPEN BRANCH FROM BUS 942930 TO BUS 314936 CKT 1 /* AE2-031 TAP 500.00 - 8RAWLINGS TAP 500.00 END
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
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

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 AG1-105 was evaluated as a 100.0 MW (Capacity 60.0 MW) injection tapping the Mt. Laurel to Barnes Junction 115 kV line in the Dominion area. Project AG1-105 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-105 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)

None

13.2 Multiple Facility Contingency

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

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 LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPACT
174176603	314681	3CHASCT Y	115.0	DVP	314708	3NORVIE W	115.0	DVP	1	DVP_P4-5: FARMVILL L432	breaker	400.0	97.04	100.11	DC	12.27

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	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPACT
168099481	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTI OCH 500 1	single	402.0	119.77	120.93	DC	4.71
168099483	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	single	275.0	109.79	111.22	DC	3.97
173981190	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	126.29	126.74	DC	7.09
163125045	313867	6BREM ODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P7-1: LN 181-2027	tower	809.0	124.12	125.54	DC	11.55
168345459	313867	6BREM ODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009 766	131.34	132.39	DC	6.93
173981200	313867	6BREM ODI ST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P4-2: 202712	breaker	809.0	124.07	125.49	DC	11.55
173981189	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	126.32	126.77	DC	7.09
173797381	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	186.04	186.51	DC	6.96
173797382	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	182.92	183.38	DC	6.96
168930814	314559	3CAROLN A	115.0	DVP	314561	6CAROLN A	230.0	DVP	1	DVP_P1-2: LN 68-A	single	239.888000 488	111.55	113.1	DC	3.73

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 PROJECTIONS LOAD %	POST PROJECTIONS LOAD %	AC/D C	MW IMPACT
168930759	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	173.81	176.61	DC	5.12
168930761	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	112.75	115.59	DC	5.03
163124741	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	129.38	129.9	DC	9.71
173981229	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P4-2: 201262	breaker	830.0	127.97	128.51	DC	9.97
173981151	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P4-2: 556T591	breaker	699.0	185.83	188.85	DC	21.18
175000850	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	571.520019531	170.48	172.7	DC	12.67
173981249	314686	6CLOVER	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	120.23	120.68	DC	7.09
169116618	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P1-2: LN 235-A	single	182.641998291	190.96	195.44	DC	8.17
169116621	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	single	176.81401062	109.95	112.73	DC	4.91
175000819	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298-B	single	198.057998657	117.16	120.23	DC	6.08
173981150	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	DVP_P4-2: 556T591	breaker	684.0	188.98	192.07	DC	21.19
175000835	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	559.299987793	170.92	173.19	DC	12.68
174381300	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P4-2: 511T556	breaker	350.0	111.34	114.73	DC	11.83
174381301	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P4-2: 556T591	breaker	350.0	111.34	114.73	DC	11.83
175805717	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	285.760009766	103.87	106.35	DC	7.09
175805718	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	285.760009766	103.9	106.38	DC	7.09
175201870	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	single	674.91998291	153.5	156.62	DC	21.04
175805641	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	674.91998291	153.62	156.74	DC	21.04
163523363	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P4-6: CAROLIN T122	breaker	199.0	158.02	160.84	DC	12.64
163523364	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P4-2: 13002	breaker	199.0	135.8	138.28	DC	10.97
163524238	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P7-1: LN 22-90	tower	199.0	155.21	161.39	DC	12.5
169116813	314702	3KERR	115.0	DVP	314673	3PALMERSPR NG	115.0	DVP	1	DVP_P1-2: LN 45	single	138.179992676	103.34	106.41	DC	4.25
174381308	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P4-2: 556T591	breaker	342.0	108.19	111.65	DC	11.83

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 PROJECTIONS LOADING %	POST PROJECTIONS LOADING %	ACDC	MW IMPACT
174381309	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P4-2: 511T556	breaker	342.0	108.19	111.65	DC	11.83
175805707	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	269.779998779	102.68	105.31	DC	7.09
175805708	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	269.779998779	102.72	105.35	DC	7.09
169116626	314726	3WILLIS	115.0	DVP	314691	3FARMVIL	115.0	DVP	1	Base Case	single	186.119995117	106.29	108.35	DC	3.84
163125030	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	DVP_P7-1: LN 181-2027	tower	809.0	125.89	127.31	DC	11.55
169335892	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	133.5	134.55	DC	6.93
169335909	314747	6BREMO	230.0	DVP	314744	3BREMO	115.0	DVP	1	DVP_P1-2: LN 2193	single	269.779998779	123.01	124.18	DC	3.17
173981196	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	DVP_P4-2: 202712	breaker	809.0	125.84	127.26	DC	11.55
173314970	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-C	single	718.0	156.26	159.19	DC	21.04
173314971	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-B	single	718.0	156.36	159.29	DC	21.04
173981236	934620	AD1-088 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	127.29	127.75	DC	7.09
174381292	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P4-2: 556T591	breaker	350.0	112.23	115.61	DC	11.83
174381293	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P4-2: 511T556	breaker	350.0	112.23	115.61	DC	11.83
175805712	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-C	single	285.760009766	104.92	107.4	DC	7.09
175805713	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-A	single	285.760009766	104.95	107.43	DC	7.09
173981225	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P4-2: 511T556	breaker	699.0	127.29	127.75	DC	7.09
173981149	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P4-2: 511T556	breaker	684.0	188.96	192.05	DC	21.19
175000843	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B-A	single	559.299987793	170.92	173.19	DC	12.68

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 PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
168099480	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	Base Case	operati on	275.0	129.37	130.45	DC	6.62
175201960	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOC H 500 1	operati on	402.0	145.93	146.81	DC	7.85
168345435	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	154.25	155.88	DC	10.74
168345439	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	Base Case	operati on	661.760009766	102.55	103.16	DC	8.89
168345376	313755	3FLAT CREEK	115.0	DVP	314707	3MORAN	115.0	DVP	1	Base Case	operati on	203.979995728	144.88	146.73	DC	8.38
175000949	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	571.520019531	151.83	152.39	DC	7.05
168345457	313867	6BREMOD IST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operati on	661.760009766	151.73	153.47	DC	11.55
168345461	313867	6BREMOD IST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	Base Case	operati on	661.760009766	103.63	104.28	DC	9.53
168647165	314267	3CHASCTY 2	115.0	DVP	314681	3CHASCTY	115.0	DVP	Z1	DVP_P1-2: LN 158	operati on	449.320007324	109.12	116.59	DC	33.58
175000947	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operati on	571.520019531	151.87	152.42	DC	7.05
168646910	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P1-2: LN 563	operati on	559.299987793	178.19	178.66	DC	5.89
168646920	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P1-2: LN 563	operati on	559.299987793	174.38	174.85	DC	5.89
168930813	314559	3CAROLN A	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operati on	226.539993286	115.98	117.12	DC	5.69
168930757	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	operati on	182.641998291	224.8	226.9	DC	8.53
168930758	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operati on	176.81401062	160.39	162.52	DC	8.39
168930856	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2012-B	operati on	678.679992676	154.27	154.92	DC	9.87
169116850	314666	3ALTVSTA	115.0	DVP	314667	4ALTVSTA	138.0	DVP	1	DVP_P1-3: 4ALTVST A-TX#4	operati on	126.524002075	102.23	105.04	DC	7.9
169116662	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	Base Case	operati on	571.520019531	131.57	134.06	DC	14.25

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
175000849	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operation	571.520019531	225.37	229.06	DC	21.12
175000959	314686	6CLOVER	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	571.520019531	144.24	144.8	DC	7.05
169116616	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P1-2: LN 235-A	operation	182.641998291	305.44	312.88	DC	13.62
169116619	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	operation	176.81401062	187.85	189.94	DC	8.19
169116630	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	Base Case	operation	193.734008789	138.07	139.6	DC	6.6
175000818	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298-B	operation	198.057998657	216.24	221.35	DC	10.14
175000834	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operation	559.299987793	231.83	235.6	DC	21.14
175000836	314692	6FARMVIL	230.0	DVP	966860	AG1-557 TAP	230.0	DVP	1	Base Case	operation	559.299987793	130.63	133.18	DC	14.26
175805715	314694	3GRIT	115.0	DVP	314712	3OTTER R	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	285.760009766	135.54	139.68	DC	11.82
169116687	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 31-A	operation	226.727996826	135.55	147.53	DC	27.23
169116689	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	1	Base Case	operation	223.531997681	95.79	106.17	DC	23.2
169116702	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	2	DVP_P1-3: 6SEEDGE HILL-TX#1	operation	256.055999756	146.77	161.97	DC	39.03
169116668	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	Base Case	operation	509.480010986	96.14	100.62	DC	22.83
175201869	314697	6SEEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	674.91998291	202.23	207.4	DC	35.06
168345371	314701	3LONEPN	115.0	DVP	313755	3FLAT CREEK	115.0	DVP	1	Base Case	operation	203.979995728	144.88	146.73	DC	8.38
163523571	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P1-2: LN 90	operation	199.0	126.09	128.39	DC	10.24
163523572	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	Base Case	operation	191.0	120.12	122.22	DC	8.95
169116810	314702	3KERR	115.0	DVP	314673	3PALMERSP RNG	115.0	DVP	1	DVP_P1-2: LN 45	operation	138.179992676	126.0	128.32	DC	7.08
169116655	314707	3MORAN	115.0	DVP	314691	3FARMVIL	115.0	DVP	1	Base Case	operation	203.979995728	141.45	143.3	DC	8.38
175805705	314712	3OTTER R	115.0	DVP	314666	3ALTVSTA	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	269.779998779	136.23	140.61	DC	11.82
169335890	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	153.89	155.63	DC	11.55
169335894	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	Base Case	operation	661.760009766	105.79	106.44	DC	9.53

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
169335880	314765	6MTEAGLE	230.0	DVP	314749	6CHARLV	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	155.47	157.1	DC	10.74
169335884	314765	6MTEAGLE	230.0	DVP	314749	6CHARLV	230.0	DVP	1	Base Case	operation	661.760009766	105.01	105.62	DC	8.89
163523535	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	Base Case	operation	542.0	109.14	113.35	DC	22.83
173314965	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON230 T	230.0	CPL E	1	DVP_P1-2: LN 556-B-C	operation	718.0	207.45	212.31	DC	35.06
175000943	934620	AD1-088 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	571.520019531	152.86	153.42	DC	7.05
175805710	942750	AE2-291 TAP	115.0	DVP	314694	3GRIT	115.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	285.760009766	136.59	140.73	DC	11.82
175000894	961060	AF2-397 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	163.08	164.71	DC	10.74
175000896	961060	AF2-397 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	Base Case	operation	661.760009766	108.46	109.06	DC	8.89
175000937	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-B-C	operation	571.520019531	152.86	153.42	DC	7.05
175000842	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B-A	operation	559.299987793	227.94	231.72	DC	21.14
175000844	966860	AG1-557 TAP	230.0	DVP	314677	6BUCKING	230.0	DVP	1	Base Case	operation	559.299987793	130.63	133.18	DC	14.26

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
174176603	314681	3CHASCTY	DVP	314708	3NORVIEW	DVP	1	DVP_P4-5: FARMVIL L432	breaker	400.0	97.04	100.11	DC	12.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	-3.0178	Adder	-3.55
313527	AB2-043 C	0.5764	50/50	0.5764
313853	3PONTONDP	0.7724	50/50	0.7724
314429	3JTRSVLE	0.4875	50/50	0.4875
314713	3PAMPLIN	1.8810	50/50	1.8810
316118	AC1-105 C	2.3366	Adder	2.75
316131	AB2-060 C	1.6574	50/50	1.6574
923991	AB2-040 C O1	-3.2867	Adder	-3.87
924022	AB2-043 E O1	3.2666	50/50	3.2666
924162	AB2-060 E OP	4.9436	50/50	4.9436
924301	AB2-077 C O1 (Suspended)	2.2213	50/50	2.2213
924302	AB2-077 E O1 (Suspended)	1.4809	50/50	1.4809
924311	AB2-078 C O1 (Suspended)	2.2213	50/50	2.2213
924312	AB2-078 E O1 (Suspended)	1.4809	50/50	1.4809
924321	AB2-079 C O1 (Suspended)	2.2213	50/50	2.2213
924322	AB2-079 E O1 (Suspended)	1.4809	50/50	1.4809
925611	AC1-036 C	0.2622	50/50	0.2622
925612	AC1-036 E	0.9954	50/50	0.9954
926274	AC1-105 E	1.1480	Adder	1.35
935221	AD1-157 C	0.2744	50/50	0.2744
935222	AD1-157 E	1.1597	50/50	1.1597
936265	AD2-033 C	15.0626	50/50	15.0626
936266	AD2-033 E	10.0417	50/50	10.0417
936361	AD2-046 C O1	6.3102	50/50	6.3102
936362	AD2-046 E O1	2.9018	50/50	2.9018
936485	AD2-063 C	17.3961	50/50	17.3961
936486	AD2-063 E	11.5974	50/50	11.5974
938371	AE1-056 C	7.4993	50/50	7.4993
938372	AE1-056 E	4.0975	50/50	4.0975
939181	AE1-148 C	6.3860	50/50	6.3860
939182	AE1-148 E	4.2574	50/50	4.2574
940661	AE2-053 O1	2.3652	50/50	2.3652
942451	AE2-258	2.7254	50/50	2.7254
942461	AE2-259 C O1	11.5968	50/50	11.5968
942462	AE2-259 E O1	7.7312	50/50	7.7312

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943912	AF1-059 BAT	50.4829	50/50	50.4829
946301	AF1-294 C	4.9243	50/50	4.9243
946302	AF1-294 E	3.2829	50/50	3.2829
958211	AF2-115 C	2.8967	50/50	2.8967
958212	AF2-115 E	1.9311	50/50	1.9311
958801	AF2-171 C	17.3952	50/50	17.3952
958802	AF2-171 E	11.5968	50/50	11.5968
959311	AF2-222 C	19.3280	50/50	19.3280
959312	AF2-222 E	12.9498	50/50	12.9498
961791	AG1-021 C	2.3173	50/50	2.3173
961792	AG1-021 E	1.5449	50/50	1.5449
961891	AG1-030 C	17.3799	50/50	17.3799
961892	AG1-030 E	11.5866	50/50	11.5866
962041	AG1-048 C	14.4833	50/50	14.4833
962042	AG1-048 E	9.6555	50/50	9.6555
962491	AG1-098 C O2	14.4833	50/50	14.4833
962492	AG1-098 E O2	9.6555	50/50	9.6555
962561	AG1-105 C O2	7.3638	50/50	7.3638
962562	AG1-105 E O2	4.9092	50/50	4.9092
963171	AG1-166 C	2.3173	50/50	2.3173
963172	AG1-166 E	1.5449	50/50	1.5449
963181	AG1-167 C	2.3173	50/50	2.3173
963182	AG1-167 E	1.5449	50/50	1.5449
963191	AG1-168 C	2.3173	50/50	2.3173
963192	AG1-168 E	1.5449	50/50	1.5449
963201	AG1-169 C	2.3173	50/50	2.3173
963202	AG1-169 E	1.5449	50/50	1.5449
963211	AG1-170 C	2.3173	50/50	2.3173
963212	AG1-170 E	1.5449	50/50	1.5449
963312	AG1-180 BAT	11.7888	50/50	11.7888
963321	AG1-181 C O2	19.5387	50/50	19.5387
963361	AG1-185 O2	9.4533	50/50	9.4533
963641	AG1-215 C	1.0814	50/50	1.0814
963642	AG1-215 E	1.6221	50/50	1.6221
964111	AG1-272 C	2.9804	50/50	2.9804
964112	AG1-272 E	0.8852	50/50	0.8852
964121	AG1-273 C	2.9804	50/50	2.9804
964122	AG1-273 E	0.8852	50/50	0.8852
964131	AG1-274 C	2.9804	50/50	2.9804
964132	AG1-274 E	0.8852	50/50	0.8852
964791	AG1-342 C	2.7594	50/50	2.7594
964792	AG1-342 E	2.1681	50/50	2.1681
964821	AG1-345 C	0.9269	50/50	0.9269
964822	AG1-345 E	0.6180	50/50	0.6180
964931	AG1-357 C O2	23.1732	50/50	23.1732
964932	AG1-357 E O2	15.4488	50/50	15.4488
965191	AG1-384 C	2.9804	50/50	2.9804
965192	AG1-384 E	0.8852	50/50	0.8852
965281	AG1-393 C	2.3173	50/50	2.3173
965282	AG1-393 E	1.5449	50/50	1.5449
965591	AG1-427 C	13.7429	50/50	13.7429
965592	AG1-427 E	9.1813	50/50	9.1813

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965641	AG1-432 C O2	23.1936	50/50	23.1936
965642	AG1-432 E O2	15.4624	50/50	15.4624
965721	AG1-440 C	1.6273	Adder	3.61
965722	AG1-440 E	1.0848	Adder	2.41
965731	AG1-441 C	1.6273	Adder	3.61
965732	AG1-441 E	1.0848	Adder	2.41
965771	AG1-445	0.9402	Adder	2.09
965781	AG1-446	0.9402	Adder	2.09
965831	AG1-451	3.8656	50/50	3.8656
WEC	WEC	0.0510	Confirmed LTF	0.0510
LGEE	LGEE	0.1068	Confirmed LTF	0.1068
CPL	CPL	0.3406	Confirmed LTF	0.3406
CBM-W2	CBM-W2	1.9085	Confirmed LTF	1.9085
NY	NY	0.0487	Confirmed LTF	0.0487
TVA	TVA	0.3430	Confirmed LTF	0.3430
O-066	O-066	0.7134	Confirmed LTF	0.7134
SIGE	SIGE	0.0295	Confirmed LTF	0.0295
CBM-S2	CBM-S2	4.3222	Confirmed LTF	4.3222
CBM-S1	CBM-S1	0.0882	Confirmed LTF	0.0882
G-007	G-007	0.1134	Confirmed LTF	0.1134
MEC	MEC	0.2860	Confirmed LTF	0.2860
LAGN	LAGN	0.4217	Confirmed LTF	0.4217
CBM-W1	CBM-W1	2.1591	Confirmed LTF	2.1591

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
168099481	242631	05EDAN 1	AEP	242620	05DANVL2	AEP	1	AEP_P2-1_242520 05J.FERR 500 306719 8ANTIOCH 500 1	single	402.0	119.77	120.93	DC	4.71

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

13.5.3 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
173981190	313802	6PRINCE EDW	DVP	314692	6FARMVIL	DVP	1	DVP_P4-2: 511T556	breaker	699.0	126.29	126.74	DC	7.09

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
CPLE	CPLE	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

13.5.4 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
168345459	313867	6BREMODIST	DVP	313707	6FORK UNION	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	131.34	132.39	DC	6.93

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
CPLE	CPLE	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

13.5.5 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
173981189	314268	6BRIERY	DVP	313802	6PRINCE EDW	DVP	1	DVP_P4-2: 511T556	breaker	699.0	126.32	126.77	DC	7.09

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
CPLE	CPLE	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
173797381	314282	6CARSON	DVP	314285	6CHRL249	DVP	1	DVP_P4-2: 562T563	breaker	684.0	186.04	186.51	DC	6.96

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
946282	AF1-292 E	0.8063	50/50	0.8063

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
964241	AG1-285 C O2	2.9361	Adder	6.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
CBM-S2	CBM-S2	45.9778	Confirmed LTF	45.9778

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
173797382	314285	6CHRL249	DVP	314316	6LOCKS	DVP	1	DVP_P4-2: 562T563	breaker	684.0	182.92	183.38	DC	6.96

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
946282	AF1-292 E	0.8063	50/50	0.8063

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
964241	AG1-285 C O2	2.9361	Adder	6.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
CBM-S2	CBM-S2	45.9778	Confirmed LTF	45.9778

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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

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
168930814	314559	3CAROLNA	DVP	314561	6CAROLNA	DVP	1	DVP_P1-2: LN 68-A	single	239.89	111.55	113.1	DC	3.73

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.1583	80/20	9.1583
313527	AB2-043 C	0.2767	80/20	0.2767
313719	3CHESTNUT	0.6686	80/20	0.6686
314429	3JTRSVLE	0.1425	80/20	0.1425
314572	3EMPORIA	0.3133	80/20	0.3133
314582	3KELFORD	0.2006	80/20	0.2006
314589	3MURPHYS	0.1129	80/20	0.1129
314623	3WITAKRS	0.0694	80/20	0.0694
314704	3LAWRENC	0.1513	80/20	0.1513
315115	1S HAMPT1	2.4343	80/20	2.4343
315126	1ROARAP2	3.2338	80/20	3.2338
315128	1ROARAP4	3.0859	80/20	3.0859
315158	1KERR 1	0.3617	80/20	0.3617
315159	1KERR 2	1.0128	80/20	1.0128
315160	1KERR 3	1.0128	80/20	1.0128
315161	1KERR 4	1.0128	80/20	1.0128
315162	1KERR 5	1.0128	80/20	1.0128
315163	1KERR 6	1.0128	80/20	1.0128
315164	1KERR 7	1.0128	80/20	1.0128
315606	3AA2-053SOLA	2.9990	80/20	2.9990
315607	3AA1-063SOLA	2.9020	80/20	2.9020
315608	3AA2-088SOLA	1.7420	80/20	1.7420
316087	AB2-174 C	1.2565	80/20	1.2565
316103	AB2-015 C	14.5285	80/20	14.5285
316129	AC1-054 C	11.8223	80/20	11.8223
316131	AB2-060 C	0.7844	80/20	0.7844
316140	AB2-099 C (Suspended)	0.3725	80/20	0.3725
920591	AA2-165 C	0.0898	80/20	0.0898
923991	AB2-040 C O1	9.9744	80/20	9.9744
924301	AB2-077 C O1 (Suspended)	1.1269	80/20	1.1269
924311	AB2-078 C O1 (Suspended)	1.1269	80/20	1.1269
924321	AB2-079 C O1 (Suspended)	1.1269	80/20	1.1269
925611	AC1-036 C	0.0993	80/20	0.0993
926201	AC1-098 C	5.1546	80/20	5.1546
926211	AC1-099 C	1.7273	80/20	1.7273
927145	AC1-208 C	10.1194	80/20	10.1194
932631	AC2-084 C	7.3480	80/20	7.3480
935221	AD1-157 C	0.0717	80/20	0.0717
936265	AD2-033 C	6.0029	80/20	6.0029

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936361	AD2-046 C O1	7.8298	80/20	7.8298
936485	AD2-063 C	7.6716	80/20	7.6716
938371	AE1-056 C	1.9594	80/20	1.9594
938771	AE1-103 C	6.1020	80/20	6.1020
939181	AE1-148 C	7.6064	80/20	7.6064
940661	AE2-053 O1	2.8172	80/20	2.8172
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0703	80/20	0.0703
942451	AE2-258	1.3082	80/20	1.3082
943171	AE2-346 C	0.8941	80/20	0.8941
943911	AF1-059	8.8526	80/20	8.8526
946281	AF1-292 C	0.7553	80/20	0.7553
946301	AF1-294 C	1.4395	80/20	1.4395
957521	AF2-046 C	19.9560	80/20	19.9560
958211	AF2-115 C	0.8468	80/20	0.8468
958801	AF2-171 C	5.1111	80/20	5.1111
959311	AF2-222 C	7.0820	80/20	7.0820
960081	AF2-299 C	1.2731	80/20	1.2731
961091	AF2-400 C	0.7845	80/20	0.7845
961681	AG1-008 C	19.9960	80/20	19.9960
961791	AG1-021 C	0.6774	80/20	0.6774
961891	AG1-030 C	5.6061	80/20	5.6061
961931	AG1-036 C	1.2171	80/20	1.2171
961941	AG1-037 C	0.3193	80/20	0.3193
962041	AG1-048 C	4.2337	80/20	4.2337
962331	AG1-082 C	1.2773	80/20	1.2773
962341	AG1-083 C	1.2773	80/20	1.2773
962351	AG1-084 C	0.7200	80/20	0.7200
962361	AG1-085 C	0.7200	80/20	0.7200
962491	AG1-098 C O2	6.6698	80/20	6.6698
962561	AG1-105 C O2	3.7326	80/20	3.7326
963171	AG1-166 C	0.6774	80/20	0.6774
963181	AG1-167 C	0.6774	80/20	0.6774
963191	AG1-168 C	0.6774	80/20	0.6774
963201	AG1-169 C	0.6774	80/20	0.6774
963211	AG1-170 C	0.6774	80/20	0.6774
963301	AG1-179 C	2.9574	80/20	2.9574
963311	AG1-180	1.4409	80/20	1.4409
963321	AG1-181 C O2	7.5777	80/20	7.5777
963361	AG1-185 O2	3.6663	80/20	3.6663
963641	AG1-215 C	0.3161	80/20	0.3161
964111	AG1-272 C	1.1289	80/20	1.1289
964121	AG1-273 C	1.1289	80/20	1.1289
964131	AG1-274 C	1.1289	80/20	1.1289
964501	AG1-313 C O2	7.4230	80/20	7.4230
964791	AG1-342 C	1.4230	80/20	1.4230
964801	AG1-343 C	9.7545	80/20	9.7545
964821	AG1-345 C	0.2719	80/20	0.2719
964931	AG1-357 C O2	10.2612	80/20	10.2612
965191	AG1-384 C	1.1289	80/20	1.1289
965281	AG1-393 C	0.6774	80/20	0.6774
965291	AG1-394 C	3.4868	80/20	3.4868
965451	AG1-413 C O2	3.7338	80/20	3.7338

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965591	AG1-427 C	6.1900	80/20	6.1900
965601	AG1-428 C O2	2.4689	80/20	2.4689
965721	AG1-440 C	8.7340	80/20	8.7340
965731	AG1-441 C	8.7340	80/20	8.7340
965771	AG1-445	5.0463	80/20	5.0463
965781	AG1-446	5.0463	80/20	5.0463
966621	AG1-532 C	0.6874	80/20	0.6874
966751	AG1-546 C	27.3941	80/20	27.3941
966811	AG1-552 C	5.1344	80/20	5.1344
WEC	WEC	0.0176	Confirmed LTF	0.0176
LGEE	LGEE	0.0390	Confirmed LTF	0.0390
CPL	CPL	0.1269	Confirmed LTF	0.1269
CBM-W2	CBM-W2	0.7168	Confirmed LTF	0.7168
NY	NY	0.0597	Confirmed LTF	0.0597
TVA	TVA	0.1344	Confirmed LTF	0.1344
SIGE	SIGE	0.0194	Confirmed LTF	0.0194
CBM-S2	CBM-S2	1.7226	Confirmed LTF	1.7226
CBM-S1	CBM-S1	0.0338	Confirmed LTF	0.0338
MEC	MEC	0.1017	Confirmed LTF	0.1017
LAGN	LAGN	0.1610	Confirmed LTF	0.1610
CBM-W1	CBM-W1	0.7150	Confirmed LTF	0.7150

13.5.9 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
168930759	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	173.81	176.61	DC	5.12

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	1.9757	80/20	1.9757
957521	AF2-046 C	7.4161	80/20	7.4161
958211	AF2-115 C	1.1622	80/20	1.1622
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	0.9298	80/20	0.9298
961891	AG1-030 C	7.7220	80/20	7.7220
961931	AG1-036 C	0.5625	80/20	0.5625
961941	AG1-037 C	0.1955	80/20	0.1955
962041	AG1-048 C	5.8110	80/20	5.8110
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
962491	AG1-098 C O2	9.2813	80/20	9.2813
962561	AG1-105 C O2	5.1162	80/20	5.1162
962571	AG1-106 C	2.7843	80/20	2.7843
963171	AG1-166 C	0.9298	80/20	0.9298
963181	AG1-167 C	0.9298	80/20	0.9298
963191	AG1-168 C	0.9298	80/20	0.9298
963201	AG1-169 C	0.9298	80/20	0.9298
963211	AG1-170 C	0.9298	80/20	0.9298
963301	AG1-179 C	12.9655	80/20	12.9655

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963311	AG1-180	6.3171	80/20	6.3171
963321	AG1-181 C O2	10.5053	80/20	10.5053
963361	AG1-185 O2	5.0827	80/20	5.0827
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
964501	AG1-313 C O2	3.1550	80/20	3.1550
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
964931	AG1-357 C O2	14.2668	80/20	14.2668
965191	AG1-384 C	1.5637	80/20	1.5637
965281	AG1-393 C	0.9298	80/20	0.9298
965291	AG1-394 C	0.9982	80/20	0.9982
965451	AG1-413 C O2	12.4174	80/20	12.4174
965591	AG1-427 C	8.6159	80/20	8.6159
965601	AG1-428 C O2	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
SIGE	SIGE	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

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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
163124741	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	129.38	129.9	DC	9.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	13.8867	50/50	13.8867
313719	3CHESTNUT	1.2185	50/50	1.2185
313853	3PONTONDP	0.3272	Adder	0.38
314541	3WATKINS	0.3552	Adder	0.42
314572	3EMPORIA	0.9898	50/50	0.9898
314582	3KELFORD	0.3498	50/50	0.3498
314589	3MURPHYS	0.0779	50/50	0.0779
314623	3WITAKRS	0.2162	50/50	0.2162
314704	3LAWRENC	0.5820	50/50	0.5820
315126	1ROARAP2	1.9893	50/50	1.9893
315128	1ROARAP4	1.8984	50/50	1.8984
315131	1EDGECEMA (Deactivation : 22/04/2019)	8.9790	50/50	8.9790
315132	1EDGECEMB (Deactivation : 22/04/2019)	8.9790	50/50	8.9790
315136	1ROSEMG1	3.6122	50/50	3.6122
315137	1ROSEMS1	2.2400	50/50	2.2400
315138	1ROSEMG2	1.6929	50/50	1.6929
315139	1GASTONA	5.5340	50/50	5.5340
315141	1GASTONB	5.5340	50/50	5.5340
315293	1DOMTR9	3.4788	Adder	4.09
315294	1DOMTR10	4.2632	Adder	5.02
315606	3AA2-053SOLA	2.0171	50/50	2.0171
315607	3AA1-063SOLA	1.7021	50/50	1.7021
316020	AB2-059 C OP	1.5986	50/50	1.5986
316087	AB2-174 C	2.4040	50/50	2.4040
316088	AB2-174 E	13.7864	50/50	13.7864
316096	AB2-100 C1	2.7313	50/50	2.7313
316097	AB2-100 E1	8.5269	50/50	8.5269
316098	AB2-100 C2	2.7313	50/50	2.7313
316099	AB2-100 E2	8.5269	50/50	8.5269
316103	AB2-015 C	4.0974	Adder	4.82
316104	AB2-015 E	3.3599	Adder	3.95
316129	AC1-054 C	8.5809	50/50	8.5809
316140	AB2-099 C (Suspended)	0.5367	50/50	0.5367
316141	AB2-099 E (Suspended)	0.2300	50/50	0.2300
900672	V4-068 E	0.2705	50/50	0.2705
917332	Z2-043 E	1.0433	50/50	1.0433
917342	Z2-044 E	0.5873	50/50	0.5873
917512	Z2-088 E OP1	5.8408	Adder	6.87
918492	AA1-063AE OP	5.0870	50/50	5.0870

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
918512	AA1-065 E OP	2.7942	Adder	3.29
918532	AA1-067 E	0.4668	Adder	0.55
919692	AA2-053 E OP	5.2493	50/50	5.2493
919702	AA2-057 E OP	3.6457	50/50	3.6457
920042	AA2-088 E OP	7.6895	Adder	9.05
920591	AA2-165 C	0.1636	50/50	0.1636
920592	AA2-165 E	0.5011	50/50	0.5011
922922	AB1-081 C OP	1.3564	50/50	1.3564
922923	AB1-081 E OP	3.6845	50/50	3.6845
923262	AB1-132 C OP (Suspended)	26.7859	50/50	26.7859
923263	AB1-132 E OP (Suspended)	11.4797	50/50	11.4797
923573	AB1-173 E OP	2.1655	50/50	2.1655
923991	AB2-040 C O1	15.1241	50/50	15.1241
923992	AB2-040 E O1	12.3743	50/50	12.3743
924022	AB2-043 E O1	2.0077	Adder	2.36
924152	AB2-059 E OP	5.2197	50/50	5.2197
924162	AB2-060 E OP	3.0038	Adder	3.53
924301	AB2-077 C O1 (Suspended)	1.4054	Adder	1.65
924302	AB2-077 E O1 (Suspended)	0.9369	Adder	1.1
924311	AB2-078 C O1 (Suspended)	1.4054	Adder	1.65
924312	AB2-078 E O1 (Suspended)	0.9369	Adder	1.1
924321	AB2-079 C O1 (Suspended)	1.4054	Adder	1.65
924322	AB2-079 E O1 (Suspended)	0.9369	Adder	1.1
925122	AB2-169 E	3.2044	Adder	3.77
925591	AC1-034 C	6.5630	50/50	6.5630
925592	AC1-034 E	4.9510	50/50	4.9510
925612	AC1-036 E	0.5092	Adder	0.6
925785	AC1-054 E	3.9530	50/50	3.9530
926070	AC1-086 C	39.4455	50/50	39.4455
926071	AC1-086 E	17.9529	50/50	17.9529
926201	AC1-098 C	6.7545	50/50	6.7545
926202	AC1-098 E	4.0239	50/50	4.0239
926211	AC1-099 C	2.2635	50/50	2.2635
926212	AC1-099 E	1.3293	50/50	1.3293
927024	AC1-189 C	6.0446	Adder	7.11
927025	AC1-189 E	3.0110	Adder	3.54
927145	AC1-208 C	10.7199	50/50	10.7199
927146	AC1-208 E	4.7407	50/50	4.7407
932631	AC2-084 C	9.6287	50/50	9.6287
932632	AC2-084 E	4.7425	50/50	4.7425
933991	AD1-023 C	6.9493	Adder	8.18
933992	AD1-023 E	3.7832	Adder	4.45
934331	AD1-057 C O1	13.9218	50/50	13.9218
934332	AD1-057 E O1	7.4265	50/50	7.4265
934521	AD1-076 C	25.6185	Adder	30.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934522	AD1-076 E	13.0449	Adder	15.35
936265	AD2-033 C	8.0077	Adder	9.42
936266	AD2-033 E	5.3385	Adder	6.28
936361	AD2-046 C O1	6.7839	Adder	7.98
936362	AD2-046 E O1	3.1196	Adder	3.67
936401	AD2-051 C O1	6.3189	Adder	7.43
936402	AD2-051 E O1	2.7133	Adder	3.19
936485	AD2-063 C	10.0008	Adder	11.77
936486	AD2-063 E	6.6672	Adder	7.84
938222	AE1-035 E	0.7684	Adder	0.9
939181	AE1-148 C	6.6734	Adder	7.85
939182	AE1-148 E	4.4489	Adder	5.23
940542	AE2-040 BAT	4.0845	50/50	4.0845
940571	AE2-044 C	4.2986	50/50	4.2986
940572	AE2-044 E	1.8422	50/50	1.8422
940661	AE2-053 O1	2.4716	Adder	2.91
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1574	50/50	0.1574
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5373	50/50	0.5373
942451	AE2-258	1.6750	Adder	1.97
942471	AE2-260 C O1	44.7837	50/50	44.7837
942472	AE2-260 E O1	63.5203	50/50	63.5203
943171	AE2-346 C	1.2881	50/50	1.2881
943172	AE2-346 E	0.5520	50/50	0.5520
943911	AF1-059	26.1590	50/50	26.1590
944141	AF1-082	2.7634	50/50	2.7634
946012	AF1-266 BAT	21.5610	50/50	21.5610
946281	AF1-292 C	3.7088	50/50	3.7088
946282	AF1-292 E	2.5003	50/50	2.5003
946301	AF1-294 C	2.0860	Adder	2.45
946302	AF1-294 E	1.3907	Adder	1.64
957521	AF2-046 C	15.2614	50/50	15.2614
957522	AF2-046 E	7.6766	50/50	7.6766
957861	AF2-080 C	5.4899	Adder	6.46
957862	AF2-080 E	2.4337	Adder	2.86
958211	AF2-115 C	1.2271	Adder	1.44
958212	AF2-115 E	0.8180	Adder	0.96
958801	AF2-171 C	7.3945	Adder	8.7
958802	AF2-171 E	4.9297	Adder	5.8
959311	AF2-222 C	9.6441	Adder	11.35
959312	AF2-222 E	6.4615	Adder	7.6
959511	AF2-242 C	4.3096	Adder	5.07
959512	AF2-242 E	3.3519	Adder	3.94
960081	AF2-299 C	6.2508	50/50	6.2508
960082	AF2-299 E	4.1672	50/50	4.1672
961091	AF2-400 C	0.2213	Adder	0.26
961092	AF2-400 E	0.3630	Adder	0.43
961671	AG1-007 C	0.4951	Adder	1.1
961672	AG1-007 E	0.2765	Adder	0.61
961681	AG1-008 C	15.2920	50/50	15.2920
961682	AG1-008 E	7.6460	50/50	7.6460
961791	AG1-021 C	0.5203	Adder	1.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961792	AG1-021 E	0.3468	Adder	0.77
961891	AG1-030 C	4.1851	Adder	9.29
961892	AG1-030 E	2.7900	Adder	6.19
961931	AG1-036 C	1.2404	50/50	1.2404
961932	AG1-036 E	0.8270	50/50	0.8270
961941	AG1-037 C	0.4600	50/50	0.4600
961942	AG1-037 E	0.3067	50/50	0.3067
962041	AG1-048 C	3.2517	Adder	7.22
962042	AG1-048 E	2.1678	Adder	4.81
962331	AG1-082 C	1.8401	50/50	1.8401
962332	AG1-082 E	1.2267	50/50	1.2267
962341	AG1-083 C	1.8401	50/50	1.8401
962342	AG1-083 E	1.2267	50/50	1.2267
962351	AG1-084 C	1.6119	50/50	1.6119
962352	AG1-084 E	1.0746	50/50	1.0746
962361	AG1-085 C	1.6119	50/50	1.6119
962362	AG1-085 E	1.0746	50/50	1.0746
962491	AG1-098 C O2	4.5644	Adder	10.13
962492	AG1-098 E O2	3.0429	Adder	6.75
962561	AG1-105 C O2	2.6257	Adder	5.83
962562	AG1-105 E O2	1.7505	Adder	3.89
962571	AG1-106 C	10.9695	50/50	10.9695
962572	AG1-106 E	4.9745	50/50	4.9745
963171	AG1-166 C	0.5203	Adder	1.15
963172	AG1-166 E	0.3468	Adder	0.77
963181	AG1-167 C	0.5203	Adder	1.15
963182	AG1-167 E	0.3468	Adder	0.77
963191	AG1-168 C	0.5203	Adder	1.15
963192	AG1-168 E	0.3468	Adder	0.77
963201	AG1-169 C	0.5203	Adder	1.15
963202	AG1-169 E	0.3468	Adder	0.77
963211	AG1-170 C	0.5203	Adder	1.15
963212	AG1-170 E	0.3468	Adder	0.77
963301	AG1-179 C	10.5002	50/50	10.5002
963311	AG1-180	5.1160	50/50	5.1160
963321	AG1-181 C O2	5.3930	Adder	11.97
963361	AG1-185 O2	2.6093	Adder	5.79
963641	AG1-215 C	0.2428	Adder	0.54
963642	AG1-215 E	0.3642	Adder	0.81
964111	AG1-272 C	0.8080	Adder	1.79
964112	AG1-272 E	0.2400	Adder	0.53
964121	AG1-273 C	0.8080	Adder	1.79
964122	AG1-273 E	0.2400	Adder	0.53
964131	AG1-274 C	0.8080	Adder	1.79
964132	AG1-274 E	0.2400	Adder	0.53
964491	AG1-312 C O1	6.6950	Adder	14.86
964492	AG1-312 E O1	1.6738	Adder	3.72
964501	AG1-313 C O2	5.8225	50/50	5.8225
964502	AG1-313 E O2	3.8817	50/50	3.8817
964801	AG1-343 C	5.3396	50/50	5.3396
964802	AG1-343 E	4.1954	50/50	4.1954
964821	AG1-345 C	0.2086	Adder	0.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964822	AG1-345 E	0.1391	Adder	0.31
964931	AG1-357 C O2	7.0824	Adder	15.72
964932	AG1-357 E O2	4.7216	Adder	10.48
965191	AG1-384 C	0.8080	Adder	1.79
965192	AG1-384 E	0.2400	Adder	0.53
965281	AG1-393 C	0.5203	Adder	1.15
965282	AG1-393 E	0.3468	Adder	0.77
965291	AG1-394 C	1.8301	50/50	1.8301
965292	AG1-394 E	1.2201	50/50	1.2201
965451	AG1-413 C O2	10.5551	50/50	10.5551
965452	AG1-413 E O2	7.0367	50/50	7.0367
965591	AG1-427 C	4.2575	Adder	9.45
965592	AG1-427 E	2.8443	Adder	6.31
965601	AG1-428 C O2	8.7658	50/50	8.7658
965602	AG1-428 E O2	5.8335	50/50	5.8335
965691	AG1-437 C O1	3.0849	Adder	6.85
965692	AG1-437 E O1	2.0566	Adder	4.57
965701	AG1-438 C O1	3.0849	Adder	6.85
965702	AG1-438 E O1	2.0566	Adder	4.57
965711	AG1-439 C O1	9.3618	Adder	20.78
965712	AG1-439 E O1	6.2412	Adder	13.85
965721	AG1-440 C	7.3638	50/50	7.3638
965722	AG1-440 E	4.9092	50/50	4.9092
965731	AG1-441 C	7.3638	50/50	7.3638
965732	AG1-441 E	4.9092	50/50	4.9092
965741	AG1-442 O1	1.7995	Adder	3.99
965751	AG1-443 O1	1.7995	Adder	3.99
965761	AG1-444 O1	4.9930	Adder	11.08
965771	AG1-445	4.2546	50/50	4.2546
965781	AG1-446	4.2546	50/50	4.2546
966621	AG1-532 C	3.3754	50/50	3.3754
966622	AG1-532 E	2.2503	50/50	2.2503
966751	AG1-546 C	19.4195	50/50	19.4195
966752	AG1-546 E	10.4200	50/50	10.4200
966801	AG1-551 C	0.7384	Adder	1.64
966802	AG1-551 E	0.3165	Adder	0.7
966811	AG1-552 C	3.1586	50/50	3.1586
966812	AG1-552 E	1.3537	50/50	1.3537
WEC	WEC	0.2753	Confirmed LTF	0.2753
LGEE	LGEE	0.5648	Confirmed LTF	0.5648
CPL	CPL	3.1586	Confirmed LTF	3.1586
CBM-W2	CBM-W2	11.9526	Confirmed LTF	11.9526
NY	NY	0.3512	Confirmed LTF	0.3512
TVA	TVA	2.2470	Confirmed LTF	2.2470
O-066	O-066	4.9869	Confirmed LTF	4.9869
SIGE	SIGE	0.1786	Confirmed LTF	0.1786
CBM-S2	CBM-S2	34.8278	Confirmed LTF	34.8278
CBM-S1	CBM-S1	0.5613	Confirmed LTF	0.5613
G-007	G-007	0.7844	Confirmed LTF	0.7844
MEC	MEC	1.6414	Confirmed LTF	1.6414
LAGN	LAGN	2.7947	Confirmed LTF	2.7947
AA2-074	AA2-074	2.0862	LTF	2.0862

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W1	CBM-W1	11.5385	Confirmed LTF	11.5385

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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
173981151	314677	6BUCKING	DVP	314747	6BREMO	DVP	1	DVP_P4-2: 556T591	breaker	699.0	185.83	188.85	DC	21.18

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
CPLE	CPLE	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
173981249	314686	6CLOVER	DVP	934620	AD1-088 TAP	DVP	1	DVP_P4-2: 511T556	breaker	699.0	120.23	120.68	DC	7.09

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

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
169116618	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	2	DVP_P1-2: LN 235-A	single	182.64	190.96	195.44	DC	8.17

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
962491	AG1-098 C O2	17.5920	80/20	17.5920
962561	AG1-105 C O2	8.1702	80/20	8.1702
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 O2	33.5265	80/20	33.5265
963361	AG1-185 O2	16.2210	80/20	16.2210
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
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
964931	AG1-357 C O2	30.9912	80/20	30.9912
965191	AG1-384 C	5.3022	80/20	5.3022
965281	AG1-393 C	5.5216	80/20	5.5216
965451	AG1-413 C O2	6.1149	80/20	6.1149
965591	AG1-427 C	17.6058	80/20	17.6058
965601	AG1-428 C O2	3.2273	80/20	3.2273
965641	AG1-432 C O2	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
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

13.5.14 Index 14

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
175000819	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 298-B	single	198.06	117.16	120.23	DC	6.08

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	1.5711	80/20	1.5711
924301	AB2-077 C O1 (Suspended)	2.0005	80/20	2.0005
924311	AB2-078 C O1 (Suspended)	2.0005	80/20	2.0005
924321	AB2-079 C O1 (Suspended)	2.0005	80/20	2.0005
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	6.2359	80/20	6.2359
940661	AE2-053 O1	2.3096	80/20	2.3096
942451	AE2-258	2.4541	80/20	2.4541
942461	AE2-259 C O1	33.4614	80/20	33.4614
943911	AF1-059	11.3951	80/20	11.3951
946301	AF1-294 C	10.5154	80/20	10.5154
958211	AF2-115 C	6.1856	80/20	6.1856
958801	AF2-171 C	36.9207	80/20	36.9207
959311	AF2-222 C	31.8180	80/20	31.8180
961791	AG1-021 C	4.9484	80/20	4.9484
961891	AG1-030 C	33.6636	80/20	33.6636
962041	AG1-048 C	30.9277	80/20	30.9277
962491	AG1-098 C O2	14.9415	80/20	14.9415
962561	AG1-105 C O2	6.0834	80/20	6.0834
963171	AG1-166 C	4.9484	80/20	4.9484
963181	AG1-167 C	4.9484	80/20	4.9484
963191	AG1-168 C	4.9484	80/20	4.9484

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963201	AG1-169 C	4.9484	80/20	4.9484
963211	AG1-170 C	4.9484	80/20	4.9484
963301	AG1-179 C	3.0910	80/20	3.0910
963311	AG1-180	1.5060	80/20	1.5060
963321	AG1-181 C O2	29.4142	80/20	29.4142
963361	AG1-185 O2	14.2313	80/20	14.2313
963641	AG1-215 C	2.3093	80/20	2.3093
964111	AG1-272 C	4.6646	80/20	4.6646
964121	AG1-273 C	4.6646	80/20	4.6646
964131	AG1-274 C	4.6646	80/20	4.6646
964791	AG1-342 C	2.2108	80/20	2.2108
964821	AG1-345 C	1.9730	80/20	1.9730
964931	AG1-357 C O2	26.5932	80/20	26.5932
965191	AG1-384 C	4.6646	80/20	4.6646
965281	AG1-393 C	4.9484	80/20	4.9484
965451	AG1-413 C O2	5.0007	80/20	5.0007
965591	AG1-427 C	15.0419	80/20	15.0419
965601	AG1-428 C O2	2.5804	80/20	2.5804
965641	AG1-432 C O2	66.9228	80/20	66.9228
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	11.1538	80/20	11.1538
966751	AG1-546 C	6.5405	80/20	6.5405
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
173981150	314692	6FARMVIL	DVP	966860	AG1-557 TAP	DVP	1	DVP_P4-2: 556T591	breaker	684.0	188.98	192.07	DC	21.19

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
174381301	314694	3GRIT	DVP	314712	3OTTER R	DVP	1	DVP_P4-2: 556T591	breaker	350.0	111.34	114.73	DC	11.83

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	Gendeliv 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
175805641	314697	6SEGE HILL	DVP	927250	AC1-221 TAP	DVP	1	DVP_P1-2: LN 556-B-A	single	674.92	153.62	156.74	DC	21.04

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
963201	AG1-169 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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
163524238	314702	3KERR	DVP	304102	3GW KING TAP	CPL	1	DVP_P7-1: LN 22-90	tower	199.0	155.21	161.39	DC	12.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5729	50/50	0.5729
313853	3PONTONDP	0.4017	Adder	0.47
314713	3PAMPLIN	0.8769	Adder	1.03
315158	1KERR 1	0.8387	50/50	0.8387
315159	1KERR 2	2.3485	50/50	2.3485
315160	1KERR 3	2.3485	50/50	2.3485
315161	1KERR 4	2.3485	50/50	2.3485
315162	1KERR 5	2.3485	50/50	2.3485
315163	1KERR 6	2.3485	50/50	2.3485
315164	1KERR 7	2.3485	50/50	2.3485
316118	AC1-105 C	2.4595	Adder	2.89
316131	AB2-060 C	1.6250	50/50	1.6250
924022	AB2-043 E O1	3.2472	50/50	3.2472
924162	AB2-060 E OP	4.8468	50/50	4.8468
924301	AB2-077 C O1 (Suspended)	2.3525	50/50	2.3525
924302	AB2-077 E O1 (Suspended)	1.5683	50/50	1.5683
924311	AB2-078 C O1 (Suspended)	2.3525	50/50	2.3525
924312	AB2-078 E O1 (Suspended)	1.5683	50/50	1.5683
924321	AB2-079 C O1 (Suspended)	2.3525	50/50	2.3525
924322	AB2-079 E O1 (Suspended)	1.5683	50/50	1.5683
925611	AC1-036 C	0.2066	50/50	0.2066
925612	AC1-036 E	0.7841	50/50	0.7841
926274	AC1-105 E	1.2084	Adder	1.42
935222	AD1-157 E	0.5406	Adder	0.64
936265	AD2-033 C	12.4745	50/50	12.4745
936266	AD2-033 E	8.3164	50/50	8.3164
936361	AD2-046 C O1	17.9481	50/50	17.9481
936362	AD2-046 E O1	8.2535	50/50	8.2535
936485	AD2-063 C	15.9102	50/50	15.9102
936486	AD2-063 E	10.6068	50/50	10.6068
938371	AE1-056 C	3.4959	Adder	4.11
938372	AE1-056 E	1.9101	Adder	2.25
939181	AE1-148 C	17.3918	50/50	17.3918
939182	AE1-148 E	11.5945	50/50	11.5945
940661	AE2-053 O1	6.4414	50/50	6.4414
942451	AE2-258	2.7092	50/50	2.7092

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942461	AE2-259 C O1	3.7240	Adder	4.38
942462	AE2-259 E O1	2.4827	Adder	2.92
943911	AF1-059	10.2643	Adder	12.08
946301	AF1-294 C	2.5607	Adder	3.01
946302	AF1-294 E	1.7071	Adder	2.01
958211	AF2-115 C	1.5063	Adder	1.77
958212	AF2-115 E	1.0042	Adder	1.18
958801	AF2-171 C	9.0890	Adder	10.69
958802	AF2-171 E	6.0593	Adder	7.13
959311	AF2-222 C	14.7390	50/50	14.7390
959312	AF2-222 E	9.8751	50/50	9.8751
961791	AG1-021 C	0.6387	Adder	1.42
961792	AG1-021 E	0.4258	Adder	0.95
961891	AG1-030 C	11.7036	50/50	11.7036
961892	AG1-030 E	7.8024	50/50	7.8024
962041	AG1-048 C	3.9917	Adder	8.86
962042	AG1-048 E	2.6611	Adder	5.91
962491	AG1-098 C O2	13.8233	50/50	13.8233
962492	AG1-098 E O2	9.2155	50/50	9.2155
962561	AG1-105 C O2	7.4970	50/50	7.4970
962562	AG1-105 E O2	4.9980	50/50	4.9980
963171	AG1-166 C	0.6387	Adder	1.42
963172	AG1-166 E	0.4258	Adder	0.95
963181	AG1-167 C	0.6387	Adder	1.42
963182	AG1-167 E	0.4258	Adder	0.95
963191	AG1-168 C	0.6387	Adder	1.42
963192	AG1-168 E	0.4258	Adder	0.95
963201	AG1-169 C	0.6387	Adder	1.42
963202	AG1-169 E	0.4258	Adder	0.95
963211	AG1-170 C	0.6387	Adder	1.42
963212	AG1-170 E	0.4258	Adder	0.95
963301	AG1-179 C	1.4301	Adder	3.17
963311	AG1-180	0.6968	Adder	1.55
963321	AG1-181 C O2	15.7539	50/50	15.7539
963361	AG1-185 O2	7.6221	50/50	7.6221
963641	AG1-215 C	0.2980	Adder	0.66
963642	AG1-215 E	0.4471	Adder	0.99
964111	AG1-272 C	2.3478	50/50	2.3478
964112	AG1-272 E	0.6974	50/50	0.6974
964121	AG1-273 C	2.3478	50/50	2.3478
964122	AG1-273 E	0.6974	50/50	0.6974
964131	AG1-274 C	2.3478	50/50	2.3478
964132	AG1-274 E	0.6974	50/50	0.6974
964791	AG1-342 C	1.2752	Adder	2.83
964792	AG1-342 E	1.0020	Adder	2.22
964821	AG1-345 C	0.2563	Adder	0.57
964822	AG1-345 E	0.1709	Adder	0.38
964931	AG1-357 C O2	21.2832	50/50	21.2832
964932	AG1-357 E O2	14.1888	50/50	14.1888
965191	AG1-384 C	2.3478	50/50	2.3478
965192	AG1-384 E	0.6974	50/50	0.6974
965281	AG1-393 C	0.6387	Adder	1.42

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965282	AG1-393 E	0.4258	Adder	0.95
965451	AG1-413 C O2	5.3268	50/50	5.3268
965452	AG1-413 E O2	3.5512	50/50	3.5512
965591	AG1-427 C	12.8328	50/50	12.8328
965592	AG1-427 E	8.5733	50/50	8.5733
965601	AG1-428 C O2	1.1939	Adder	2.65
965602	AG1-428 E O2	0.7945	Adder	1.76
965641	AG1-432 C O2	3.9475	Adder	8.76
965642	AG1-432 E O2	2.6316	Adder	5.84
965721	AG1-440 C	15.9493	50/50	15.9493
965722	AG1-440 E	10.6329	50/50	10.6329
965731	AG1-441 C	15.9493	50/50	15.9493
965732	AG1-441 E	10.6329	50/50	10.6329
965771	AG1-445	9.2152	50/50	9.2152
965781	AG1-446	9.2152	50/50	9.2152
965831	AG1-451	0.6579	Adder	1.46
G-007A	G-007A	0.1582	Confirmed LTF	0.1582
VFT	VFT	0.4193	Confirmed LTF	0.4193
CALDERWOOD	CALDERWOOD	0.3668	Confirmed LTF	0.3668
PRAIRIE	PRAIRIE	1.2398	Confirmed LTF	1.2398
CHEOAH	CHEOAH	0.3764	Confirmed LTF	0.3764
CBM-N	CBM-N	0.0756	Confirmed LTF	0.0756
COTTONWOOD	COTTONWOOD	1.3482	Confirmed LTF	1.3482
HAMLET	HAMLET	0.7941	Confirmed LTF	0.7941
GIBSON	GIBSON	0.2162	Confirmed LTF	0.2162
BLUEG	BLUEG	0.6632	Confirmed LTF	0.6632
TRIMBLE	TRIMBLE	0.2104	Confirmed LTF	0.2104
CATAWBA	CATAWBA	0.4109	Confirmed LTF	0.4109

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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
169116813	314702	3KERR	DVP	314673	3PALMERSPRNG	DVP	1	DVP_P1-2: LN 45	single	138.18	103.34	106.41	DC	4.25

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3145	80/20	0.3145
314429	3JTRSVLE	0.1632	80/20	0.1632
315158	1KERR 1	0.4757	80/20	0.4757
315159	1KERR 2	1.3319	80/20	1.3319
315160	1KERR 3	1.3319	80/20	1.3319
315161	1KERR 4	1.3319	80/20	1.3319
315162	1KERR 5	1.3319	80/20	1.3319
315163	1KERR 6	1.3319	80/20	1.3319
315164	1KERR 7	1.3319	80/20	1.3319
315266	1PLYWOOD A	0.4101	80/20	0.4101
316129	AC1-054 C	3.5524	80/20	3.5524
316131	AB2-060 C	0.8921	80/20	0.8921
924301	AB2-077 C O1 (Suspended)	1.2964	80/20	1.2964
924311	AB2-078 C O1 (Suspended)	1.2964	80/20	1.2964
924321	AB2-079 C O1 (Suspended)	1.2964	80/20	1.2964
925611	AC1-036 C	0.1133	80/20	0.1133
935221	AD1-157 C	0.0823	80/20	0.0823
936265	AD2-033 C	6.8422	80/20	6.8422
936361	AD2-046 C O1	10.1468	80/20	10.1468
936485	AD2-063 C	8.7300	80/20	8.7300
938371	AE1-056 C	2.2488	80/20	2.2488
939181	AE1-148 C	9.8258	80/20	9.8258
940661	AE2-053 O1	3.6392	80/20	3.6392
942451	AE2-258	1.4873	80/20	1.4873
943911	AF1-059	5.1118	80/20	5.1118
946301	AF1-294 C	1.6486	80/20	1.6486
958211	AF2-115 C	0.9698	80/20	0.9698
958801	AF2-171 C	5.8518	80/20	5.8518
959311	AF2-222 C	8.0790	80/20	8.0790
961791	AG1-021 C	0.7758	80/20	0.7758
961891	AG1-030 C	6.4098	80/20	6.4098
962041	AG1-048 C	4.8487	80/20	4.8487
962491	AG1-098 C O2	7.5878	80/20	7.5878
962561	AG1-105 C O2	4.2456	80/20	4.2456
963171	AG1-166 C	0.7758	80/20	0.7758
963181	AG1-167 C	0.7758	80/20	0.7758
963191	AG1-168 C	0.7758	80/20	0.7758
963201	AG1-169 C	0.7758	80/20	0.7758
963211	AG1-170 C	0.7758	80/20	0.7758

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963321	AG1-181 C O2	8.6381	80/20	8.6381
963361	AG1-185 O2	4.1794	80/20	4.1794
963641	AG1-215 C	0.3620	80/20	0.3620
964111	AG1-272 C	1.2873	80/20	1.2873
964121	AG1-273 C	1.2873	80/20	1.2873
964131	AG1-274 C	1.2873	80/20	1.2873
964791	AG1-342 C	1.6188	80/20	1.6188
964821	AG1-345 C	0.3114	80/20	0.3114
964931	AG1-357 C O2	11.6796	80/20	11.6796
965191	AG1-384 C	1.2873	80/20	1.2873
965281	AG1-393 C	0.7758	80/20	0.7758
965451	AG1-413 C O2	2.3406	80/20	2.3406
965591	AG1-427 C	7.0425	80/20	7.0425
966751	AG1-546 C	6.2252	80/20	6.2252
WEC	WEC	0.0047	Confirmed LTF	0.0047
LGEE	LGEE	0.0126	Confirmed LTF	0.0126
CALDERWOOD	CALDERWOOD	0.0035	Confirmed LTF	0.0035
CBM-W2	CBM-W2	0.0269	Confirmed LTF	0.0269
NY	NY	0.0171	Confirmed LTF	0.0171
SIGE	SIGE	0.0056	Confirmed LTF	0.0056
CHEOAH	CHEOAH	0.0045	Confirmed LTF	0.0045
CBM-S1	CBM-S1	0.0004	Confirmed LTF	0.0004
COTTONWOOD	COTTONWOOD	0.0126	Confirmed LTF	0.0126
HAMLET	HAMLET	0.0733	Confirmed LTF	0.0733
MEC	MEC	0.0175	Confirmed LTF	0.0175
CATAWBA	CATAWBA	0.0175	Confirmed LTF	0.0175
CBM-W1	CBM-W1	0.2103	Confirmed LTF	0.2103

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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
174381309	314712	3OTTER R	DVP	314666	3ALTVSTA	DVP	1	DVP_P4-2: 511T556	breaker	342.0	108.19	111.65	DC	11.83

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	Gendeliv 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
169116626	314726	3WILLIS	DVP	314691	3FARMVIL	DVP	1	Base Case	single	186.12	106.29	108.35	DC	3.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3073	80/20	0.3073
315158	1KERR 1	0.1459	80/20	0.1459
315159	1KERR 2	0.4086	80/20	0.4086
315160	1KERR 3	0.4086	80/20	0.4086
315161	1KERR 4	0.4086	80/20	0.4086
315162	1KERR 5	0.4086	80/20	0.4086
315163	1KERR 6	0.4086	80/20	0.4086
315164	1KERR 7	0.4086	80/20	0.4086
316131	AB2-060 C	0.8460	80/20	0.8460
924301	AB2-077 C O1 (Suspended)	1.1882	80/20	1.1882
924311	AB2-078 C O1 (Suspended)	1.1882	80/20	1.1882
924321	AB2-079 C O1 (Suspended)	1.1882	80/20	1.1882
925611	AC1-036 C	0.4720	80/20	0.4720
935221	AD1-157 C	0.8970	80/20	0.8970
936265	AD2-033 C	4.1426	80/20	4.1426
936361	AD2-046 C O1	3.7549	80/20	3.7549
936485	AD2-063 C	17.7615	80/20	17.7615
938371	AE1-056 C	24.5107	80/20	24.5107
939181	AE1-148 C	3.7735	80/20	3.7735
940661	AE2-053 O1	1.3976	80/20	1.3976
942451	AE2-258	1.4531	80/20	1.4531
942461	AE2-259 C O1	50.0496	80/20	50.0496
943911	AF1-059	6.8468	80/20	6.8468
958801	AF2-171 C	49.7817	80/20	49.7817
959311	AF2-222 C	37.7730	80/20	37.7730
962491	AG1-098 C O2	6.8108	80/20	6.8108
962561	AG1-105 C O2	3.8424	80/20	3.8424
963301	AG1-179 C	1.8776	80/20	1.8776
963311	AG1-180	0.9148	80/20	0.9148
963321	AG1-181 C O2	32.9422	80/20	32.9422
963361	AG1-185 O2	15.9383	80/20	15.9383
964111	AG1-272 C	5.3637	80/20	5.3637
964121	AG1-273 C	5.3637	80/20	5.3637
964131	AG1-274 C	5.3637	80/20	5.3637
964791	AG1-342 C	1.4298	80/20	1.4298
964931	AG1-357 C O2	9.6072	80/20	9.6072
965191	AG1-384 C	5.3637	80/20	5.3637
965451	AG1-413 C O2	2.9995	80/20	2.9995
965591	AG1-427 C	12.4098	80/20	12.4098

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965601	AG1-428 C O2	1.5674	80/20	1.5674
965641	AG1-432 C O2	100.0992	80/20	100.0992
965721	AG1-440 C	2.4885	80/20	2.4885
965731	AG1-441 C	2.4885	80/20	2.4885
965771	AG1-445	1.4378	80/20	1.4378
965781	AG1-446	1.4378	80/20	1.4378
965831	AG1-451	16.6832	80/20	16.6832
WEC	WEC	0.0283	Confirmed LTF	0.0283
LGEE	LGEE	0.0578	Confirmed LTF	0.0578
CPL	CPL	0.4020	Confirmed LTF	0.4020
CBM-W2	CBM-W2	1.3619	Confirmed LTF	1.3619
NY	NY	0.0426	Confirmed LTF	0.0426
TVA	TVA	0.2632	Confirmed LTF	0.2632
SIGE	SIGE	0.0196	Confirmed LTF	0.0196
CBM-S2	CBM-S2	4.4579	Confirmed LTF	4.4579
CBM-S1	CBM-S1	0.0650	Confirmed LTF	0.0650
MEC	MEC	0.1764	Confirmed LTF	0.1764
LAGN	LAGN	0.3290	Confirmed LTF	0.3290
CBM-W1	CBM-W1	1.1777	Confirmed LTF	1.1777

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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
169335892	314747	6BREMO	DVP	313867	6BREMODIST	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	133.5	134.55	DC	6.93

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
CPLE	CPLE	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
169335909	314747	6BREMO	DVP	314744	3BREMO	DVP	1	DVP_P1-2: LN 2193	single	269.78	123.01	124.18	DC	3.17

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.1964	80/20	0.1964
314333	6POWHATN	0.2978	80/20	0.2978
314429	3JTRSVLE	0.2938	80/20	0.2938
314677	6BUCKING	0.4512	80/20	0.4512
315153	1CLOVER1	3.8262	80/20	3.8262
315154	1CLOVER2	3.7880	80/20	3.7880
315191	1BEARGRDN G1	7.8222	80/20	7.8222
315192	1BEARGRDN G2	7.8222	80/20	7.8222
315193	1BEARGRDN S1	10.1156	80/20	10.1156
316131	AB2-060 C	0.5816	80/20	0.5816
924301	AB2-077 C O1 (Suspended)	0.7721	80/20	0.7721
924311	AB2-078 C O1 (Suspended)	0.7721	80/20	0.7721
924321	AB2-079 C O1 (Suspended)	0.7721	80/20	0.7721
925611	AC1-036 C	0.1263	80/20	0.1263
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.4445	80/20	0.4445
932854	AC2-112 C	-5.0776	Adder	-5.97
933501	AC2-165 C	9.0146	80/20	9.0146
934615	AD1-087 C	2.3943	80/20	2.3943
934625	AD1-088 C	7.0236	80/20	7.0236
935171	AD1-152 C O1	2.6299	80/20	2.6299
935221	AD1-157 C	0.1771	80/20	0.1771
936265	AD2-033 C	6.8523	80/20	6.8523
936361	AD2-046 C O1	2.8074	80/20	2.8074
936485	AD2-063 C	6.8715	80/20	6.8715
937481	AD2-202 C O1	0.7013	80/20	0.7013
938371	AE1-056 C	4.8380	80/20	4.8380
938561	AE1-075 C	0.2589	80/20	0.2589
939181	AE1-148 C	2.7983	80/20	2.7983
940661	AE2-053 O1	1.0364	80/20	1.0364
941791	AE2-182 C	1.1411	80/20	1.1411
942451	AE2-258	0.9286	80/20	0.9286
942461	AE2-259 C O1	8.8332	80/20	8.8332
943911	AF1-059	5.2100	80/20	5.2100
946301	AF1-294 C	2.9682	80/20	2.9682
957911	AF2-085	1.1020	80/20	1.1020
958211	AF2-115 C	1.7460	80/20	1.7460
958501	AF2-144 C	1.3950	80/20	1.3950
958801	AF2-171 C	10.4355	80/20	10.4355

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959311	AF2-222 C	9.6430	80/20	9.6430
959531	AF2-244 C (Withdrawn : 01/06/2021)	1.2855	80/20	1.2855
959751	AF2-266	2.7465	80/20	2.7465
961791	AG1-021 C	1.3968	80/20	1.3968
961891	AG1-030 C	9.7443	80/20	9.7443
962041	AG1-048 C	8.7300	80/20	8.7300
962491	AG1-098 C O2	5.3400	80/20	5.3400
962561	AG1-105 C O2	3.1734	80/20	3.1734
963171	AG1-166 C	1.3968	80/20	1.3968
963181	AG1-167 C	1.3968	80/20	1.3968
963191	AG1-168 C	1.3968	80/20	1.3968
963201	AG1-169 C	1.3968	80/20	1.3968
963211	AG1-170 C	1.3968	80/20	1.3968
963271	AG1-176 C O2	12.8432	80/20	12.8432
963321	AG1-181 C O2	9.1648	80/20	9.1648
963361	AG1-185 O2	4.4342	80/20	4.4342
963641	AG1-215 C	0.6518	80/20	0.6518
964111	AG1-272 C	1.4356	80/20	1.4356
964121	AG1-273 C	1.4356	80/20	1.4356
964131	AG1-274 C	1.4356	80/20	1.4356
964791	AG1-342 C	1.2713	80/20	1.2713
964821	AG1-345 C	0.5574	80/20	0.5574
964841	AG1-347 C	5.8772	80/20	5.8772
964931	AG1-357 C O2	9.1140	80/20	9.1140
965191	AG1-384 C	1.4356	80/20	1.4356
965281	AG1-393 C	1.3968	80/20	1.3968
965451	AG1-413 C O2	2.2376	80/20	2.2376
965591	AG1-427 C	5.2486	80/20	5.2486
965641	AG1-432 C O2	17.6664	80/20	17.6664
965831	AG1-451	2.9444	80/20	2.9444
966861	AG1-557 C O2 (Withdrawn : 12/14/2020)	2.3702	80/20	2.3702
CPLE	CPLE	1.1821	Confirmed LTF	1.1821
NY	NY	0.0879	Confirmed LTF	0.0879
PRAIRIE	PRAIRIE	0.5734	Confirmed LTF	0.5734
CBM-S2	CBM-S2	10.8576	Confirmed LTF	10.8576
GIBSON	GIBSON	0.1900	Confirmed LTF	0.1900
BLUEG	BLUEG	0.6562	Confirmed LTF	0.6562
TRIMBLE	TRIMBLE	0.2137	Confirmed LTF	0.2137
LAGN	LAGN	0.0263	Confirmed LTF	0.0263

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
173314971	927250	AC1-221 TAP	DVP	304070	6PERSON230 T	CPL	1	DVP_P1-2: LN 556-B-B	single	718.0	156.36	159.29	DC	21.04

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
963181	AG1-167 C	2.8618	80/20	2.8618

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
GIBSON	GIBSON	0.7912	Confirmed LTF	0.7912

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

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
173981236	934620	AD1-088 TAP	DVP	964840	AG1-347 TAP	DVP	1	DVP_P4-2: 511T556	breaker	699.0	127.29	127.75	DC	7.09

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

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
174381293	942750	AE2-291 TAP	DVP	314694	3GRIT	DVP	1	DVP_P4-2: 511T556	breaker	350.0	112.23	115.61	DC	11.83

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	Gendeliv 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
173981225	964840	AG1-347 TAP	DVP	314268	6BRIERY	DVP	1	DVP_P4-2: 511T556	breaker	699.0	127.29	127.75	DC	7.09

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

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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
173981149	966860	AG1-557 TAP	DVP	314677	6BUCKING	DVP	1	DVP_P4-2: 511T556	breaker	684.0	188.96	192.05	DC	21.19

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
CPLE	CPLE	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_P7-1: LN 181-2027	CONTINGENCY 'DVP_P7-1: LN 181-2027' /* . OPEN BRANCH FROM BUS 314321 TO BUS 314447 CKT 1 /* 3LITLECREEK 115.00 - 3BURTN67 115.00 OPEN BRANCH FROM BUS 314321 TO BUS 314488 CKT 1 /* 3LITLECREEK 115.00 - 3OAKWOOD 115.00 OPEN BUS 314321 /* ISLAND: 3LITLECREEK 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 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_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
Base Case	

Contingency Name	Contingency Definition
DVP_P2-2: BREMO B1	CONTINGENCY 'DVP_P2-2: BREMO B1' /* BREMO 230 KV OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 1 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315191 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G118.000 OPEN BUS 315191 /* ISLAND: 1BEARGRDN G118.000 OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 2 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315192 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G218.000 OPEN BRANCH FROM BUS 314326 TO BUS 315193 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN S122.000 OPEN BUS 315192 /* ISLAND: 1BEARGRDN G218.000 OPEN BUS 315193 /* ISLAND: 1BEARGRDN S122.000 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313867 TO BUS 314747 CKT 1 /* 6BREMODIST 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314744 TO BUS 314747 CKT 1 /* 3BREMO 115.00 - 6BREMO 230.00 OPEN BUS 314747 /* 6BREMO 230.00 KV OPEN BUS 314326 /* ISLAND: 6BEARGRDN 230.00 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
DVP_P4-2: 201262	CONTINGENCY 'DVP_P4-2: 201262' / 173 OPEN BRANCH FROM BUS 314569 TO BUS 936400 CKT 1 / 314569 6EARLEYS 230 936400 AD2-051 TAP 230 1 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 / 314568 3EARLEYS 115 314569 6EARLEYS 230 1 END
DVP_P1-2: LN 2201	CONTINGENCY 'DVP_P1-2: LN 2201' / 187 OPEN BRANCH FROM BUS 313725 TO BUS 314563 CKT 1 / 313725 6DRY BREAD 230 314563 6CLUBHSE 230 1 END
DVP_P1-2: LN 45	CONTINGENCY 'DVP_P1-2: LN 45' / 1588 OPEN BRANCH FROM BUS 304099 TO BUS 304102 CKT 1 / 304099 3WARREN TAP 115 304102 3GW KING TAP 115 1 OPEN BRANCH FROM BUS 304099 TO BUS 304107 CKT 1 / 304099 3WARREN TAP 115 304107 3WARRENTN BU 115 1 OPEN BRANCH FROM BUS 304099 TO BUS 305640 CKT 1 / 304099 3WARREN TAP 115 305640 3BULLOKSOLTA 115 1 OPEN BRANCH FROM BUS 304089 TO BUS 304100 CKT 1 / 304089 3HEND

Contingency Name	Contingency Definition
DVP_P1-3: 6SEdge HILL-TX#1	CONTINGENCY 'DVP_P1-3: 6SEdge HILL-TX#1' / 857 OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 1 / 314696 3SEdge HILL 115 314697 6SEdge HILL 230 1 END
DVP_P4-5: FARMVIL L432	CONTINGENCY 'DVP_P4-5: FARMVIL L432' / 1172 OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 / 313802 6PRINCE EDW 230 314268 6BRIERY 230 1 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 / 313802 6PRINCE EDW 230 314692 6FARMVIL 230 1 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 / 314268 6BRIERY 230 964840 AG1-347 TAP 230 1 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 / 314691 3FARMVIL 115 314692 6FARMVIL 230 1 OPEN BRANCH FROM BUS 314691 TO BUS 314707 CKT 1 / 314691 3FARMVIL 115 314707 3MORAN 115 1 OPEN BRANCH FROM BUS 314691 TO BUS 314726 CKT 1 / 314691 3FARMVIL 115 314726 3WILLIS 115 1 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 2 / 314691 3FARMVIL 115 314692 6FARMVIL 230 2 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

Contingency Name	Contingency Definition
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
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
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 68-A	CONTINGENCY 'DVP_P1-2: LN 68-A' / 353 OPEN BRANCH FROM BUS 313737 TO BUS 314527 CKT 1 / 313737 3COPELD DP 115 314527 3HOLLAND 115 1 OPEN BRANCH FROM BUS 313737 TO BUS 961850 CKT 1 / 313737 3COPELD DP 115 961850 AG1-027 TAP 115 1 OPEN BRANCH FROM BUS 314527 TO BUS 938770 CKT 1 / 314527 3HOLLAND 115 938770 AE1-103 TAP 115 1 END
DVP_P1-2: LN 298-B	CONTINGENCY 'DVP_P1-2: LN 298-B' OPEN BRANCH FROM BUS 966860 TO BUS 314692 CKT 1 /* AG1-557 TAP 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 2 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 END

Contingency Name	Contingency Definition
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_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

Contingency Name	Contingency Definition
DVP_P1-2: LN 31-A	CONTINGENCY 'DVP_P1-2: LN 31-A' / 285 OPEN BRANCH FROM BUS 314666 TO BUS 314712 CKT 1 / 314666 3ALTVSTA 115 314712 3OTTER R 115 1 OPEN BRANCH FROM BUS 314694 TO BUS 314712 CKT 1 / 314694 3GRIT 115 314712 3OTTER R 115 1 OPEN BRANCH FROM BUS 314694 TO BUS 942750 CKT 1 / 314694 3GRIT 115 942750 AE2-291 TAP 115 1 END
DVP_P1-2: LN 2193	CONTINGENCY 'DVP_P1-2: LN 2193' / 583 OPEN BRANCH FROM BUS 313707 TO BUS 313867 CKT 1 / 313707 6FORK UNION 230 313867 6BREMODIST 230 1 OPEN BRANCH FROM BUS 313867 TO BUS 314747 CKT 1 / 313867 6BREMODIST 230 314747 6BREMO 230 1 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
DVP_P1-2: LN 235-A	CONTINGENCY 'DVP_P1-2: LN 235-A' / 450 OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 / 313802 6PRINCE EDW 230 314268 6BRIERY 230 1 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 / 313802 6PRINCE EDW 230 314692 6FARMVIL 230 1 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 / 314268 6BRIERY 230 964840 AG1-347 TAP 230 1 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 / 314691 3FARMVIL 115 314692 6FARMVIL 230 1 OPEN BRANCH FROM BUS 314268 TO BUS 963271 CKT 1 / 314268 6BRIERY 230 963271 AG1-176 C O2 230 1 END
DVP_P1-2: LN 2012-B	CONTINGENCY 'DVP_P1-2: LN 2012-B' / 1410 OPEN BRANCH FROM BUS 314569 TO BUS 936400 CKT 1 / 314569 6EARLEYS 230 936400 AD2-051 TAP 230 1 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 158	CONTINGENCY 'DVP_P1-2: LN 158' / 367 OPEN BRANCH FROM BUS 313755 TO BUS 314701 CKT 1 / 313755 3FLAT CREEK 115 314701 3LONEPN 115 1 OPEN BRANCH FROM BUS 313755 TO BUS 314707 CKT 1 / 313755 3FLAT CREEK 115 314707 3MORAN 115 1 OPEN BRANCH FROM BUS 314519 TO BUS 314701 CKT 1 / 314519 3LONEPINE_1 115 314701 3LONEPN 115 1 OPEN BRANCH FROM BUS 314691 TO BUS 314707 CKT 1 / 314691 3FARMVIL 115 314707 3MORAN 115 1 END
DVP_P1-3: 4ALTVSTA-TX#4	CONTINGENCY 'DVP_P1-3: 4ALTVSTA-TX#4' / 455 OPEN BRANCH FROM BUS 314667 TO BUS 314666 CKT 2 / 314667 4ALTVSTA 138 314666 3ALTVSTA 115 2 END
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

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).