



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-347
BRIERY DP-CLOVER 230 KV
56 MW Capacity / 100 MW Energy**

January 2021

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1 Introduction

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

2 Preface

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

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

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

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

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

3 General

The Interconnection Customer (IC), has proposed a Solar and Storage generating facility located in Lunenburg County, Virginia. The installed facilities will have a total capability of 100 MW with 56 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	AG1-347
Project Name	BRIERY DP-CLOVER 230 KV
State	Virginia
County	Lunenburg
Transmission Owner	Dominion
MFO	100
MWE	100
MWC	56
Fuel	Solar; Storage
Basecase Study Year	2024

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

4 Point of Interconnection

4.1 Primary Point of Interconnection

AG1-347 "Briery DP-Clover 230 kV" 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 Briery DP substation and Clover 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

There is no secondary point of interconnection specified for AG1-347.

5 Cost Summary

The AG1-347 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 10,400,000
Total System Network Upgrade Costs	\$ 445,482,500 ¹
Total Costs	\$ 455,882,500

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 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.

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.

6 Transmission Owner Scope of Work

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of AG1-347 to the Dominion Transmission System is detailed in the following sections. The associated one-line showing the generation project attachment facilities and primary direct and non-direct connection is shown in Attachment 1.

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

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

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

AG1-347 "Briery DP-Clover 230 kV" 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 Briery DP substation and Clover 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.

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.

The estimated schedule for the required Network Impact Reinforcements is identified in the “System Reinforcements” section of this report.

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

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-347 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).
1. 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.
2. 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.
3. 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

The Queue Project AG1-347 was evaluated as a 100 MW (Capacity 56.0 MW) injection tapping the Briery to Clover 230 kV line in the Dominion area. Project AG1-347 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-347 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 IMPACT
163749742	314923	8SEPTA	500.0	DVP	314924	8SURREY	500.0	DVP	1	DVP_P1-2: LN 563	single	2442.12011719	99.99	100.13	DC	7.79
169211555	962490	AG1-098 TAP	230.0	DVP	314686	6CLOVER	230.0	DVP	1	DVP_P1-2: LN 298	single	571.520019531	92.38	101.07	DC	49.65

11.2 Multiple Facility Contingency

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

None

11.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
168474641	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	148.29	150.07	DC	11.82
168474642	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	144.48	146.27	DC	11.82
168474658	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	single	571.520019531	138.9	143.71	DC	27.5
168474659	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-B	single	571.520019531	138.93	143.75	DC	27.5
168474663	313867	6BREMODIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	147.96	149.92	DC	12.99
168474664	313867	6BREMODIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	143.79	145.75	DC	12.99

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 IMPA CT
1632849 87	31386 8	6CARTERV	230. 0	DVP	93350 0	AC2-165 TAP	230. 0	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	106.88	108.55	DC	16.31
1684748 06	31386 8	6CARTERV	230. 0	DVP	93350 0	AC2-165 TAP	230. 0	DVP	1	DVP_P1-2: LN 2028-B	single	800.8800048 83	109.65	110.79	DC	9.14
1684748 07	31386 8	6CARTERV	230. 0	DVP	93350 0	AC2-165 TAP	230. 0	DVP	1	314765 6MTEAGL E 230 966790 AG1-550 TAP 230 1	single	800.8800048 83	109.64	110.78	DC	9.14
1684745 99	31389 8	3BUTCHER CRK	115. 0	DVP	31426 7	3CHASCTY 2	115. 0	DVP	1	DVP_P1-2: LN 298	single	269.7799987 79	103.58	104.9	DC	3.58
1684746 53	31426 8	6BRIERY	230. 0	DVP	31380 2	6PRINCE EDW	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	571.5200195 31	138.95	143.76	DC	27.5
1684746 54	31426 8	6BRIERY	230. 0	DVP	31380 2	6PRINCE EDW	230. 0	DVP	1	DVP_P1-2: LN 556-B	single	571.5200195 31	138.97	143.78	DC	27.5
1632849 41	31431 0	6JUDES F	230. 0	DVP	31432 2	6MDLTHA N	230. 0	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	115.52	117.18	DC	16.3
1687788 78	31431 0	6JUDES F	230. 0	DVP	31432 2	6MDLTHA N	230. 0	DVP	1	DVP_P1-2: LN 2028-B	single	800.8800048 83	115.43	116.57	DC	9.13
1687788 79	31431 0	6JUDES F	230. 0	DVP	31432 2	6MDLTHA N	230. 0	DVP	1	314765 6MTEAGL E 230 966790 AG1-550 TAP 230 1	single	800.8800048 83	115.42	116.56	DC	9.13
1632849 36	31433 3	6POWHAT N	230. 0	DVP	31431 0	6JUDES F	230. 0	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	115.63	117.29	DC	16.3
1687788 73	31433 3	6POWHAT N	230. 0	DVP	31431 0	6JUDES F	230. 0	DVP	1	314765 6MTEAGL E 230 966790 AG1-550 TAP 230 1	single	800.8800048 83	115.55	116.69	DC	9.13
1687788 74	31433 3	6POWHAT N	230. 0	DVP	31431 0	6JUDES F	230. 0	DVP	1	DVP_P1-2: LN 2028-B	single	800.8800048 83	115.55	116.69	DC	9.13
1692114 54	31467 7	6BUCKING	230. 0	DVP	31474 7	6BREMO	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	571.5200195 31	202.76	206.9	DC	23.68
1692114 55	31467 7	6BUCKING	230. 0	DVP	31474 7	6BREMO	230. 0	DVP	1	DVP_P1-2: LN 556-B	single	571.5200195 31	202.77	206.92	DC	23.68
1692114 57	31467 7	6BUCKING	230. 0	DVP	31474 7	6BREMO	230. 0	DVP	1	Base Case	single	571.5200195 31	118.61	121.5	DC	16.49
1692115 28	31468 6	6CLOVER	230. 0	DVP	31469 0	6BLACK WALNU	230. 0	DVP	1	DVP_P1-2: LN 556-D	single	814.9799804 69	128.67	132.13	DC	28.24
1692115 29	31468 6	6CLOVER	230. 0	DVP	31469 0	6BLACK WALNU	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	814.9799804 69	128.7	132.17	DC	28.24
1692115 24	31469 0	6BLACK WALNU	230. 0	DVP	96256 0	AG1-105 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-D	single	814.9799804 69	137.28	140.74	DC	28.24
1692115 25	31469 0	6BLACK WALNU	230. 0	DVP	96256 0	AG1-105 TAP	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	814.9799804 69	137.31	140.78	DC	28.24
1692114 33	31469 2	6FARMVIL	230. 0	DVP	31467 7	6BUCKING	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	559.2999877 93	203.92	208.15	DC	23.69

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 DC	MW IMPACT
169211434	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-B	single	559.299987793	203.95	208.19	DC	23.69
169211436	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	Base Case	single	559.299987793	118.48	121.43	DC	16.5
169211460	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	single	674.91998291	180.95	184.28	DC	22.47
169211461	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	single	674.91998291	180.98	184.31	DC	22.47
163284973	314747	6BREMO	230.0	DVP	313868	6CARTERV	230.0	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	108.03	109.7	DC	16.31
168474784	314747	6BREMO	230.0	DVP	313868	6CARTERV	230.0	DVP	1	DVP_P1-2: LN 2028-B	single	800.880004883	111.06	112.2	DC	9.14
168474785	314747	6BREMO	230.0	DVP	313868	6CARTERV	230.0	DVP	1	314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	single	800.880004883	111.05	112.19	DC	9.14
169428022	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	150.12	152.08	DC	12.99
169428023	314747	6BREMO	230.0	DVP	313867	6BREMODIST	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	145.95	147.91	DC	12.99
169428039	314747	6BREMO	230.0	DVP	314744	3BREMO	115.0	DVP	1	DVP_P1-2: LN 2193	single	269.779998779	139.93	142.11	DC	5.88
169428012	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.760009766	152.16	153.95	DC	11.82
169428013	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	DVP_P1-2: LN 2027	single	661.760009766	148.37	150.16	DC	11.82
169428015	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	Base Case	single	661.760009766	100.24	101.61	DC	9.15
163749526	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-D	single	718.0	182.06	185.19	DC	22.47
163749527	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-C	single	718.0	182.09	185.22	DC	22.47
163284951	933500	AC2-165 TAP	230.0	DVP	314333	6POWHAT N	230.0	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	113.84	115.5	DC	16.31
169700866	933500	AC2-165 TAP	230.0	DVP	314333	6POWHAT N	230.0	DVP	1	DVP_P1-2: LN 2028-B	single	800.880004883	114.47	115.61	DC	9.14
169700867	933500	AC2-165 TAP	230.0	DVP	314333	6POWHAT N	230.0	DVP	1	314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	single	800.880004883	114.46	115.6	DC	9.14
163284575	934620	AD1-088 TAP	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	118.49	130.97	DC	87.32

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
1699891 64	96106 0	AF2-397 TAP	230. 0	DVP	96679 0	AG1-550 TAP	230. 0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.7600097 66	155.73	157.52	DC	11.82
1699891 65	96106 0	AF2-397 TAP	230. 0	DVP	96679 0	AG1-550 TAP	230. 0	DVP	1	DVP_P1-2: LN 2027	single	661.7600097 66	151.93	153.72	DC	11.82
1699891 67	96106 0	AF2-397 TAP	230. 0	DVP	96679 0	AG1-550 TAP	230. 0	DVP	1	Base Case	single	661.7600097 66	103.79	105.16	DC	9.15
1632845 20	96249 0	AG1-098 TAP	230. 0	DVP	31468 6	6CLOVER	230. 0	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	134.86	147.34	DC	87.32
1692115 04	96256 0	AG1-105 TAP	230. 0	DVP	31469 7	6SEEDGE HILL	230. 0	DVP	1	DVP_P1-2: LN 556-D	single	814.9799804 69	142.41	145.88	DC	28.24
1692115 05	96256 0	AG1-105 TAP	230. 0	DVP	31469 7	6SEEDGE HILL	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	814.9799804 69	142.45	145.91	DC	28.24
1632845 96	96327 0	AG1-176 TAP	230. 0	DVP	93462 0	AD1-088 TAP	230. 0	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	104.99	117.47	DC	87.32
1687787 45	96484 0	AG1-347 TAP	230. 0	DVP	31426 8	6BRIERY	230. 0	DVP	1	DVP_P1-2: LN 556-C	single	571.5200195 31	140.02	144.83	DC	27.5
1687787 46	96484 0	AG1-347 TAP	230. 0	DVP	31426 8	6BRIERY	230. 0	DVP	1	DVP_P1-2: LN 556-B	single	571.5200195 31	140.05	144.87	DC	27.5
1699891 74	96679 0	AG1-550 TAP	230. 0	DVP	31476 5	6MTEAGLE	230. 0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	single	661.7600097 66	155.7	157.49	DC	11.82
1699891 75	96679 0	AG1-550 TAP	230. 0	DVP	31476 5	6MTEAGLE	230. 0	DVP	1	DVP_P1-2: LN 2027	single	661.7600097 66	151.92	153.7	DC	11.82
1699891 77	96679 0	AG1-550 TAP	230. 0	DVP	31476 5	6MTEAGLE	230. 0	DVP	1	Base Case	single	661.7600097 66	103.79	105.15	DC	9.15

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	KV	FROM BUS AREA	TO BUS#	TO BUS	KV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECTIONS LOADING %	POST PROJECTIONS LOADING %	AC/D C	MW IMPACT
168474639	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	179.43	182.63	DC	21.11
168474643	313707	6FORK UNION	230.0	DVP	961060	AF2-397 TAP	230.0	DVP	1	Base Case	operation	661.760009766	121.67	124.14	DC	16.34
168474887	313708	3FORK UNION	115.0	DVP	313707	6FORK UNION	230.0	DVP	1	DVP_P1-2: LN 2193	operation	269.779998779	119.95	121.01	DC	6.34
168474656	313802	6PRINCE EDW	230.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	177.95	186.54	DC	49.11
168474661	313867	6BREMODIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	174.43	177.93	DC	23.19
168474665	313867	6BREMODIST	230.0	DVP	313707	6FORK UNION	230.0	DVP	1	Base Case	operation	661.760009766	120.44	123.16	DC	17.96
168474804	313868	6CARTERV	230.0	DVP	933500	AC2-165 TAP	230.0	DVP	1	DVP_P1-2: LN 2028-B	operation	800.880004883	129.7	131.74	DC	16.31
168474651	314268	6BRIERY	230.0	DVP	313802	6PRINCE EDW	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	178.0	186.6	DC	49.11
168778876	314310	6JUDES F	230.0	DVP	314322	6MDLTHA N	230.0	DVP	1	DVP_P1-2: LN 2028-B	operation	800.880004883	140.27	142.3	DC	16.3
168778871	314333	6POWHAT N	230.0	DVP	314310	6JUDES F	230.0	DVP	1	3147656MTEAGL E 230 966790 AG1-550 TAP 230 1	operation	800.880004883	140.39	142.43	DC	16.3
168778872	314333	6POWHAT N	230.0	DVP	314310	6JUDES F	230.0	DVP	1	DVP_P1-2: LN 2028-B	operation	800.880004883	140.39	142.43	DC	16.3
169211452	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	271.28	278.68	DC	42.29
169211456	314677	6BUCKING	230.0	DVP	314747	6BREMO	230.0	DVP	1	Base Case	operation	571.520019531	165.33	170.48	DC	29.45
169211526	314686	6CLOVER	230.0	DVP	314690	6BLACK WALNU	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	814.979980469	160.25	166.44	DC	50.42
169211568	314686	6CLOVER	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	148.19	149.97	DC	10.18
169211522	314690	6BLACK WALNU	230.0	DVP	962560	AG1-105 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	814.979980469	172.35	178.54	DC	50.42
169211421	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298	operation	198.057998657	273.87	275.01	DC	2.27
169211431	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	559.299987793	274.89	282.45	DC	42.31
169211435	314692	6FARMVIL	230.0	DVP	314677	6BUCKING	230.0	DVP	1	Base Case	operation	559.299987793	164.22	169.49	DC	29.46
169211458	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	674.91998291	241.44	247.36	DC	40.12

ID	FROM BUS#	FROM BUS	KV	FROM BUS AREA	TO BUS#	TO BUS	KV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECTIONS LOAD %	POST PROJECTIONS LOAD %	AC/D C	MW IMPACT
169211462	314697	6SEDGE HILL	230.0	DVP	927250	AC1-221 TAP	230.0	DVP	1	Base Case	operation	509.480010986	123.38	126.77	DC	17.26
169211653	314714	3PERTH	115.0	DVP	942750	AE2-291 TAP	115.0	DVP	1	DVP_P1-2: LN 556-D	operation	285.760009766	113.12	114.15	DC	6.58
168474782	314747	6BREMO	230.0	DVP	313868	6CARTERV	230.0	DVP	1	DVP_P1-2: LN 2028-B	operation	800.880004883	131.11	133.15	DC	16.31
169428020	314747	6BREMO	230.0	DVP	313867	6BREMOD IST	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	176.59	180.09	DC	23.19
169428024	314747	6BREMO	230.0	DVP	313867	6BREMOD IST	230.0	DVP	1	Base Case	operation	661.760009766	122.6	125.32	DC	17.96
169428038	314747	6BREMO	230.0	DVP	314744	3BREMO	115.0	DVP	1	DVP_P1-2: LN 2193	operation	269.779998779	168.71	172.61	DC	10.5
169428010	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	177.79	180.98	DC	21.1
169428014	314765	6MTEAGLE	230.0	DVP	314749	6CHARLVL	230.0	DVP	1	Base Case	operation	661.760009766	123.48	125.95	DC	16.34
163749521	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	DVP_P1-2: LN 556-D	operation	718.0	244.3	249.86	DC	40.12
163749531	927250	AC1-221 TAP	230.0	DVP	304070	6PERSON2 30 T	230.0	CPL E	1	Base Case	operation	542.0	134.45	137.63	DC	17.26
169700864	933500	AC2-165 TAP	230.0	DVP	314333	6POWHAT N	230.0	DVP	1	DVP_P1-2: LN 2028-B	operation	800.880004883	138.21	140.25	DC	16.31
169700748	934620	AD1-088 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	165.62	167.4	DC	10.18
169700792	934620	AD1-088 TAP	230.0	DVP	962490	AG1-098 TAP	230.0	DVP	1	DVP_P1-2: LN 298	operation	571.520019531	130.06	145.55	DC	88.66
169989162	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	314333 6POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	188.93	192.12	DC	21.11
169989166	961060	AF2-397 TAP	230.0	DVP	966790	AG1-550 TAP	230.0	DVP	1	Base Case	operation	661.760009766	127.62	130.09	DC	16.34
169211553	962490	AG1-098 TAP	230.0	DVP	314686	6CLOVER	230.0	DVP	1	DVP_P1-2: LN 298	operation	571.520019531	150.29	165.79	DC	88.66
169700762	962490	AG1-098 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	571.520019531	156.89	158.67	DC	10.18
169211502	962560	AG1-105 TAP	230.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 556-D	operation	814.979980469	179.13	185.32	DC	50.42
169700840	963270	AG1-176 TAP	230.0	DVP	934620	AD1-088 TAP	230.0	DVP	1	DVP_P1-2: LN 298	operation	571.520019531	113.32	128.82	DC	88.66
169989203	963270	AG1-176 TAP	230.0	DVP	964840	AG1-347 TAP	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	179.07	180.85	DC	10.18
168778743	964840	AG1-347 TAP	230.0	DVP	314268	6BRIERY	230.0	DVP	1	DVP_P1-2: LN 556-C	operation	571.520019531	179.07	187.66	DC	49.11

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 %	POST PROJECTIONS %	AC/D C	MW IMPACT
169989382	964840	AG1-347 TAP	230.0	DVP	963270	AG1-176 TAP	230.0	DVP	1	DVP_P1-2: LN 298	operation	571.520019531	90.14	105.64	DC	88.66
169989172	966790	AG1-550 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	3143336POWHA TN 230 933500 AC2-165 TAP 230 1	operation	661.760009766	185.61	188.8	DC	21.11
169989176	966790	AG1-550 TAP	230.0	DVP	314765	6MTEAGLE	230.0	DVP	1	Base Case	operation	661.760009766	126.42	128.89	DC	16.34

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
168474664,168 474663	5	6BREMODIST 230.0 kV - 6FORK UNION 230.0 kV Ckt 1	<u>DVP</u> dom-202 (1760) : Rebuild 1.63 miles of 230 kV Line 2028 from Fork Union to Brema Dist with 2-636 ACSR. Project Type : FAC Cost : \$2,445,000 Time Estimate : 30-36 Months dom-276 (1834) : Rebuild 1.63 miles of 230 kV Line 2028 from Fork Union to Brema Dist with 2-795 ACSR (26/7) 150 C Project Type : FAC Cost : \$2,445,000 Time Estimate : 30-36 Months	\$4,890,000
168778874,163 284936,168778 873	10	6POWHATN 230.0 kV - 6JUDES F 230.0 kV Ckt 1	<u>DVP</u> dom-303 (1861) : Rebuild 7.09 miles of 230 kV Line 2027 from Judes to Powhatan with 2-795 ACSR 150 C Project Type : FAC Cost : \$17,725,000 Time Estimate : 36-40 Months	\$17,725,000
168474784,168 474785,163284 973	16	6BREMO 230.0 kV - 6CARTERV 230.0 kV Ckt 1	<u>DVP</u> dom-364 (1922) : Rebuild 9.46 miles of 230 kV Line 2027 from Brema to Cartersville with 2-795 ACSR 150 C. Replace breaker lead at Brema terminal. Project Type : FAC Cost : \$23,650,000 Time Estimate : 36-40 Months	\$23,650,000
169989177,169 989175,169989 174	27	J1180 TAP 345.0 kV - 6MTEAGLE 230.0 kV Ckt 1	<u>DVP</u> dom-421 (1979) : Rebuild 6.5 miles of 230 kV Line 2028 from AG1-550 Tap to Mt Eagle with 2-768.2 ACSS 250 C Project Type : FAC Cost : \$16,250,000 Time Estimate : 30-36 Months	\$16,250,000
169428039	18	6BREMO 230.0 kV - 3BREMO 115.0 kV Ckt 1	<u>DVP</u> b2989 (1491) : PJM Baseline Upgrade b2989. Install a second 230 -115 kV Transformer (224 MVA) approximately 1 mile north of Brema and tie 230 kV Line #2028(Brema Charlottesville) and 115 kV Line #91 (Brema-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 Brema 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 Time Estimate : N/A Months	\$0
163284941,168 778879,168778 878	9	6JUDES F 230.0 kV - 6MDLTHAN 230.0 kV Ckt 1	<u>DVP</u> dom-302 (1860) : Rebuild 7.09 miles of 230 kV Line 2027 from Judes to Midlothian with 2-795 ACSR 150 C. Project Type : FAC Cost : \$17,725,000 Time Estimate : 36-40 Months	\$17,725,000
168474658,168 474659	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

ID	Idx	Facility	Upgrade Description	Cost
169211524,169 211525	13	6BLACK WALNU 230.0 kV - AG1- 105 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-345 (1903) : Rebuild 3.441 miles of 230 kV Line 2068 from AG1-105 to Black Walnut with 2-768.2 ACSS 250 C Project Type : FAC Cost : \$5,161,500 Time Estimate : 30-36 Months	\$5,161,500
163284575	22	AD1-088 TAP 230.0 kV - AG1- 098 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-391 (1949) : 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
168474654,168 474653	8	6BRIERY 230.0 kV - 6PRINCE EDW 230.0 kV Ckt 1	<u>DVP</u> dom-212 (1770) : 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
169211555,163 284520	2	AG1-098 TAP 230.0 kV - 6CLOVER 230.0 kV Ckt 1	<u>DVP</u> dom-343 (1901) : 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
163284951,169 700866,169700 867	21	AC2-165 TAP 230.0 kV - 6POWHATN 230.0 kV Ckt 1	<u>DVP</u> dom-389 (1947) : Rebuild 4.01 miles of 230 kV Line 2027 from Powhatan to AC2-165 Tap with 2-795 ACSR (26/7) 150 C Project Type : FAC Cost : \$10,025,000 Time Estimate : 30-36 Months	\$10,025,000
163284596	25	AG1-176 TAP 230.0 kV - AD1- 088 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-392 (1950) : 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
163749526,163 749527	20	AC1-221 TAP 230.0 kV - 6PERSON230 T 230.0 kV Ckt 1	<u>DVP</u> n6449 (1510) : 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 (1817) : 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 (1945) : 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

ID	Idx	Facility	Upgrade Description	Cost
168778746,168778745	26	AG1-347 TAP 230.0 kV - 6BRIERY 230.0 kV Ckt 1	<u>DVP</u> dom-297 (1855) : 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
169211454,169211455,169211457	11	6BUCKING 230.0 kV - 6BREMO 230.0 kV Ckt 1	<u>DVP</u> n6219 (1541) : Rebuild 15.51 miles of 230 kV Line 298 from Buckingham to BreMO with 2-636 ACSR. Project Type : FAC Cost : \$23,265,000 Time Estimate : 30-36 Months dom-337 (1895) : Rebuild 15.51 miles of 230 kV Line 298 from Buckingham to BreMO with 2-768.2 ACSS 250 C. Replace Breaker, Breaker Switch, Breaker Lead, Wave Trap, Relay (Secondary CT), Relay Trip at BreMO terminal. Replace Line Switch at Buckingham terminal Project Type : FAC Cost : \$25,285,000 Time Estimate : 36-40 Months	\$48,550,000
169211436,169211434,169211433	14	6FARMVIL 230.0 kV - 6BUCKING 230.0 kV Ckt 1	<u>DVP</u> n6245 (1543) : 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 dom-346 (1904) : Rebuild 12.76 miles of 230 kV Line 298 from Buckingham to Farmville with 2-768.2 ACSS 250 C. Replace Line Lead, Line Switch, Relay (CT), Wave trap at Farmville terminal Project Type : FAC Cost : \$19,710,000 Time Estimate : 36-40 Months	\$38,850,000
163749742	1	8SEPTA 500.0 kV - 8SURRY 500.0 kV Ckt 1	<u>DVP</u> dom-380 (1938) : Rebuild 11.46 miles of 500 kV Line 578 from Septa to Surry with 3-1351.5 113C ACSR. Replace wave traps at both terminals. Project Type : FAC Cost : \$36,126,000 Time Estimate : 48-60 Months	\$36,126,000
169428012,169428013,169428015	19	6MTEAGLE 230.0 kV - 6CHARLVL 230.0 kV Ckt 1	<u>DVP</u> n6184 (1747) : Rebuild 6.47 miles of 230 kV Line 2028 from Mt Eagle to Charlottesville with 2-636 ACSR. Project Type : FAC Cost : \$16,175,000 Time Estimate : 30-36 Months dom-369 (1927) : Rebuild 6.47 miles of 230 kV Line 2028 from Mt Eagle to Charlottesville with 2-768.2 ACSS 250 C. Replace Wave Trap at Charlottesville terminal Project Type : FAC Cost : \$16,375,000 Time Estimate : 36-40 Months	\$32,550,000

ID	Idx	Facility	Upgrade Description	Cost
163284987,168 474807,168474 806	6	6CARTERV 230.0 kV - AC2- 165 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-277 (1835) : Rebuild 7.67 miles of 230 kV Line 2027 from Carterville to AC2-165 Tap with 2-636 ACSR (24/7) 150 C Project Type : FAC Cost : \$19,175,000 Time Estimate : 36-40 Months	\$19,175,000
169211461,169 211460	15	6SEEDGE HILL 230.0 kV - AC1- 221 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-177 (1630) : No upgrade needed on Dominion system. Need coordination with Duke. <u>CPL</u> NonPJMArea(994): The external (i.e. Non PJM) Transmission Owner, CPL, Will not evaluate this violation until the impact study phase.	\$0
169211528,169 211529	12	6CLOVER 230.0 kV - 6BLACK WALNU 230.0 kV Ckt 1	<u>DVP</u> dom-342 (1900) : Rebuild 0.16 miles of 230 kV Line 2068 from Clover to Black Walnut with 2-768.2 ACS 250 C. Replace wave trap at Clover terminal. Project Type : FAC Cost : \$440,000 Time Estimate : 30-36 Months	\$440,000
168474642,168 474641	3	6FORK UNION 230.0 kV - AF2- 397 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-198 (1756) : Rebuild 5 miles of 230 kV Line 2028 from Fork Union to AF2-397 Tap with 2-636 ACSR. Project Type : FAC Cost : \$7,500,000 Time Estimate : 30-36 Months dom-265 (1823) : Rebuild 5 miles of 230 kV Line 2028 from Fork Union to AF2-397 Tap with 2-795 ACSR 150 C. Project Type : FAC Cost : \$12,500,000 Time Estimate : 36-42 Months	\$20,000,000
169428023,169 428022	17	6BREMO 230.0 kV - 6BREMODIST 230.0 kV Ckt 1	<u>DVP</u> n5873 (1709) : Rebuild 0.16 miles of Line 2028 from Brema to Brema Dist with 2-636 ACSR. Project Type : FAC Cost : \$500,000 Time Estimate : 30-36 Months dom-363 (1921) : Rebuild 0.16 miles of Line 2028 from Brema to Brema Dist with 2-795 ACSR 150 C. Replace Breaker, Breaker Switch, Breaker Lead, Line Lead at Brema terminal Project Type : FAC Cost : \$1,690,000 Time Estimate : 30-36 Months	\$2,190,000
169989164,169 989165,169989 167	23	AF2-397 TAP 230.0 kV - J1180 TAP 345.0 kV Ckt 1	<u>DVP</u> dom-409 (1967) : Rebuild 5.6 miles of 230 kV Line 2028 from AG1-550 Tap to AF2-397 Tap with 2-636 ACSR 150 C. Project Type : FAC Cost : \$14,000,000 Time Estimate : 36-40 Months	\$14,000,000

ID	Idx	Facility	Upgrade Description	Cost
169211504,169 211505	24	AG1-105 TAP 230.0 kV - 6SEEDGE HILL 230.0 kV Ckt 1	<u>DVP</u> dom-412 (1970) : 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
168474599	7	3BUTCHER CRK 115.0 kV - 3CHASCTY2 115.0 kV Ckt 1	<u>DVP</u> dom-279 (1837) : Rebuild 1.17 miles of 115 kV line 1045 from Butcher Creek to Chase City with 2-636 ACSR 150 C. Replace Breaker Switch at Chase City terminal Project Type : FAC Cost : \$2,005,000 Time Estimate : 30-36 Months	\$2,005,000
			TOTAL COST	\$445,482,500

11.6 Flow Gate Details

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
163749742	314923	8SEPTA	DVP	314924	8SURREY	DVP	1	DVP_P1-2: LN 563	single	2442.12	99.99	100.13	DC	7.79

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	4.2606	Adder	5.01
314295	6BIRDNECK	0.0396	80/20	0.0396
314491	3PENDLTN	0.2951	80/20	0.2951
314507	3THOMPSN	0.2933	80/20	0.2933
314572	3EMPORIA	0.2664	Adder	0.31
315098	1CHESPKA	0.3912	80/20	0.3912
315099	1CHESPKB (Deactivation : 31/05/2019)	2.7120	80/20	2.7120
315102	1BRUNSWICKG1	10.1352	80/20	10.1352
315103	1BRUNSWICKG2	10.1352	80/20	10.1352
315104	1BRUNSWICKG3	10.1352	80/20	10.1352
315105	1BRUNSWICKS1	21.0558	80/20	21.0558
315108	1ELIZAR1	2.9439	80/20	2.9439
315109	1ELIZAR2	2.8927	80/20	2.8927
315110	1ELIZAR3	2.9815	80/20	2.9815
315131	1EDGECEMA (Deactivation : 22/04/2019)	6.1388	Adder	7.22
315132	1EDGECEMB (Deactivation : 22/04/2019)	6.1388	Adder	7.22
315153	1CLOVER1	12.7023	80/20	12.7023
315154	1CLOVER2	12.5757	80/20	12.5757
315241	1Z1-086 GT1	13.0884	80/20	13.0884
315242	1Z1-086 GT2	13.0884	80/20	13.0884
315243	1Z1-086 GT3	13.0884	80/20	13.0884
315244	1Z1-086 ST	22.7525	80/20	22.7525
315260	1GOSPORTA	0.3109	80/20	0.3109
315261	1GOSPORTB	0.3971	80/20	0.3971
315262	1GOSPORTC	0.3371	80/20	0.3371
315293	1DOMTR9	4.2729	Adder	5.03
315294	1DOMTR10	5.2364	Adder	6.16
315603	6AA1-139SOLA	2.0185	80/20	2.0185
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	-35.3241	Adder	-41.56
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	-35.3241	Adder	-41.56
316114	AB2-068 ST (Withdrawn : 01/11/2021)	-61.1952	Adder	-71.99
316118	AC1-105 C	3.8782	Adder	4.56
316129	AC1-054 C	4.5889	Adder	5.4
316140	AB2-099 C (Suspended)	0.3496	Adder	0.41
923991	AB2-040 C O1	4.6402	Adder	5.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	1.2123	Adder	1.43
924311	AB2-078 C O1 (Suspended)	1.2123	Adder	1.43
924321	AB2-079 C O1 (Suspended)	1.2123	Adder	1.43
925591	AC1-034 C	4.5204	Adder	5.32
926070	AC1-086 C	13.0863	Adder	15.4
926201	AC1-098 C	3.8857	Adder	4.57
926211	AC1-099 C	1.3021	Adder	1.53
926661	AC1-147 C	0.3308	80/20	0.3308
926754	AC1-161 C	88.0847	80/20	88.0847
927024	AC1-189 C	5.5698	Adder	6.55
927145	AC1-208 C	5.7610	Adder	6.78
927251	AC1-221 C	1.6036	Adder	1.89
927261	AC1-222 C	2.5001	Adder	2.94
932044	AC2-012 C	9.4854	80/20	9.4854
932631	AC2-084 C	5.5392	Adder	6.52
932761	AC2-100 C	3.6905	Adder	4.34
933294	AC2-141 C	88.0847	80/20	88.0847
933731	AC2-196 C	0.2715	80/20	0.2715
933991	AD1-023 C	8.0700	Adder	9.49
934061	AD1-033 C	7.1959	80/20	7.1959
934311	AD1-055 C	1.7359	Adder	2.04
934331	AD1-057 C O1	6.4881	Adder	7.63
934341	AD1-058 C	4.0200	Adder	4.73
934521	AD1-076 C	33.7009	Adder	39.65
934615	AD1-087 C	7.9560	80/20	7.9560
934625	AD1-088 C	8.7885	Adder	10.34
934991	AD1-131 C	1.3180	Adder	1.55
935171	AD1-152 C O1	8.7389	80/20	8.7389
936265	AD2-033 C	7.3268	Adder	8.62
936361	AD2-046 C O1	5.6148	Adder	6.61
936401	AD2-051 C O1	5.2677	Adder	6.2
936485	AD2-063 C	8.7638	Adder	10.31
937221	AD2-160 C O1	5.4222	80/20	5.4222
937481	AD2-202 C O1	2.3304	80/20	2.3304
938494	AE1-068_C1	39.3130	80/20	39.3130
938497	AE1-068_C2	39.3130	80/20	39.3130
938504	AE1-069_C1	29.9609	80/20	29.9609
938507	AE1-069_C2	32.3050	80/20	32.3050
938535	AE1-072 C	15.8113	80/20	15.8113
939181	AE1-148 C	5.5287	Adder	6.5
939414	AE1-173_C1	32.6962	80/20	32.6962
939415	AE1-173_C2	28.0253	80/20	28.0253
939416	AE1-173_C3	32.6962	80/20	32.6962
939431	AE1-175 C	-1.7110	Adder	-2.01
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	164.5307	80/20	164.5307
940471	AE2-031 C	42.9293	80/20	42.9293
940481	AE2-033 C	10.0599	Adder	11.84
940491	AE2-034 C	4.4928	Adder	5.29
940541	AE2-040	1.7834	Adder	2.1

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940571	AE2-044 C	2.9607	Adder	3.48
940641	AE2-051 C O1	27.9441	80/20	27.9441
940661	AE2-053 O1	2.0476	Adder	2.41
941031	AE2-094 C	51.7668	80/20	51.7668
941281	AE2-122 C O1	26.6269	80/20	26.6269
941291	AE2-123 C O1	27.3642	80/20	27.3642
941301	AE2-124 C O1	24.9020	80/20	24.9020
941501	AE2-147 C	9.7553	Adder	11.48
941591	AE2-156 O1	16.8230	80/20	16.8230
941791	AE2-182 C	1.4278	Adder	1.68
942401	AE2-253 C	5.7032	80/20	5.7032
942451	AE2-258	1.4173	Adder	1.67
942471	AE2-260 C O1	9.0814	Adder	10.68
942931	AE2-313 C	46.3916	80/20	46.3916
943171	AE2-346 C	0.8389	Adder	0.99
943901	AF1-058 C	1.3860	Adder	1.63
943911	AF1-059	10.2601	Adder	12.07
944011	AF1-069 C	16.9142	80/20	16.9142
944141	AF1-082	1.9033	Adder	2.24
944581	AF1-123 C O1	52.0448	80/20	52.0448
944591	AF1-124 C O1	52.0448	80/20	52.0448
944601	AF1-125 C O1	52.0448	80/20	52.0448
944871	AF1-152 C	3.2518	Adder	3.83
945711	AF1-236 C O1	49.1860	Adder	57.87
945811	AF1-246 C O1	8.4441	80/20	8.4441
946011	AF1-266	8.4210	Adder	9.91
946281	AF1-292 C	0.9524	Adder	1.12
957481	AF2-042 C	60.3150	80/20	60.3150
957521	AF2-046 C	9.7868	Adder	11.51
957531	AF2-047 C	10.6759	Adder	12.56
957631	AF2-057	3.3282	80/20	3.3282
957861	AF2-080 C	5.0587	Adder	5.95
957871	AF2-081 C	9.1039	80/20	9.1039
959511	AF2-242 C	4.6814	Adder	5.51
959751	AF2-266	9.1180	80/20	9.1180
960061	AF2-297 C	5.5439	Adder	6.52
960081	AF2-299 C	1.6052	Adder	1.89
961671	AG1-007 C	0.4284	Adder	0.95
961681	AG1-008 C	5.1974	Adder	11.54
961931	AG1-036 C	0.4251	Adder	0.94
961941	AG1-037 C	0.1588	Adder	0.35
962331	AG1-082 C	0.6352	Adder	1.41
962341	AG1-083 C	0.6352	Adder	1.41
962351	AG1-084 C	0.5599	Adder	1.24
962361	AG1-085 C	0.5599	Adder	1.24
962441	AG1-093 C O1	5.4812	Adder	12.17
962491	AG1-098 C O1	12.1777	80/20	12.1777
962561	AG1-105 C O1	10.5372	80/20	10.5372
962571	AG1-106 C	1.9288	Adder	4.28
963041	AG1-153 C	7.1115	80/20	7.1115
963111	AG1-160 C	7.2348	80/20	7.2348
963271	AG1-176 C O1	5.6352	Adder	12.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963291	AG1-178 C O1	106.8630	80/20	106.8630
963301	AG1-179 C	1.8653	Adder	4.14
963311	AG1-180	0.9088	Adder	2.02
963321	AG1-181 C O1	1.6709	Adder	3.71
963351	AG1-184 O1	57.5720	80/20	57.5720
963361	AG1-185 O1	2.4251	Adder	5.38
963821	AG1-235 C O1	22.7988	80/20	22.7988
964241	AG1-285 C O1	3.9068	Adder	8.67
964261	AG1-287 C	0.5509	Adder	1.22
964471	AG1-310 C	0.7570	Adder	1.68
964491	AG1-312 C O1	5.9866	Adder	13.29
964501	AG1-313 C O1	1.4975	Adder	3.32
964791	AG1-342 C	1.4596	Adder	3.24
964801	AG1-343 C	1.7907	Adder	3.97
964841	AG1-347 C	3.5097	Adder	7.79
964931	AG1-357 C	25.7592	80/20	25.7592
964951	AG1-359 O1	25.8135	80/20	25.8135
965001	AG1-364 C O1	6.7172	80/20	6.7172
965181	AG1-383 C	2.6179	80/20	2.6179
965291	AG1-394 C	0.6125	Adder	1.36
965451	AG1-413 C O1	2.2859	Adder	5.07
965591	AG1-427 C	3.6979	Adder	8.21
965601	AG1-428 C O1	1.5572	Adder	3.46
965631	AG1-431	15.0923	Adder	33.5
965691	AG1-437 C O1	3.2717	Adder	7.26
965701	AG1-438 C O1	3.2717	Adder	7.26
965711	AG1-439 C O1	8.3225	Adder	18.47
965721	AG1-440 C	2.4552	Adder	5.45
965731	AG1-441 C	2.4552	Adder	5.45
965741	AG1-442 O1	1.9085	Adder	4.24
965751	AG1-443 O1	1.9085	Adder	4.24
965761	AG1-444 O1	4.4387	Adder	9.85
965771	AG1-445	1.4186	Adder	3.15
965781	AG1-446	1.4186	Adder	3.15
965811	AG1-449	30.0998	80/20	30.0998
966361	AG1-505 C	20.6919	80/20	20.6919
966371	AG1-506 C	20.6919	80/20	20.6919
966621	AG1-532 C	0.4594	Adder	1.02
966751	AG1-546 C	5.3371	Adder	11.85
966801	AG1-551 C	0.7701	Adder	1.71
966811	AG1-552 C	0.6909	Adder	1.53
966931	AG1-431A	11.3391	Adder	25.17
WEC	WEC	0.7462	Confirmed LTF	0.7462
LGEE	LGEE	1.5343	Confirmed LTF	1.5343
CPL	CPL	7.8863	Confirmed LTF	7.8863
CBM-W2	CBM-W2	33.1878	Confirmed LTF	33.1878
NY	NY	1.0828	Confirmed LTF	1.0828
TVA	TVA	6.2860	Confirmed LTF	6.2860
SIGE	SIGE	0.5120	Confirmed LTF	0.5120
CBM-S2	CBM-S2	94.8161	Confirmed LTF	94.8161
CBM-S1	CBM-S1	1.5648	Confirmed LTF	1.5648
MEC	MEC	4.4969	Confirmed LTF	4.4969

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	7.8173	Confirmed LTF	7.8173
AA2-074	AA2-074	5.2092	LTF	5.2092
CBM-W1	CBM-W1	31.1665	Confirmed LTF	31.1665

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
163284520	962490	AG1-098 TAP	DVP	314686	6CLOVER	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	134.86	147.34	DC	87.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5789	50/50	0.5789
313853	3PONTONDP	1.8407	50/50	1.8407
314429	3JTRSVLE	1.1616	50/50	1.1616
314677	6BUCKING	1.6095	50/50	1.6095
314713	3PAMPLIN	4.9032	50/50	4.9032
315161	1KERR 4	0.7452	50/50	0.7452
315162	1KERR 5	0.7452	50/50	0.7452
315163	1KERR 6	0.7452	50/50	0.7452
315164	1KERR 7	0.7452	50/50	0.7452
316131	AB2-060 C	1.7524	50/50	1.7524
924022	AB2-043 E O1	3.2808	50/50	3.2808
924032	AB2-045 E	4.7608	50/50	4.7608
924162	AB2-060 E OP	5.2270	50/50	5.2270
924301	AB2-077 C O1 (Suspended)	2.2313	50/50	2.2313
924302	AB2-077 E O1 (Suspended)	1.4875	50/50	1.4875
924311	AB2-078 C O1 (Suspended)	2.2313	50/50	2.2313
924312	AB2-078 E O1 (Suspended)	1.4875	50/50	1.4875
924321	AB2-079 C O1 (Suspended)	2.2313	50/50	2.2313
924322	AB2-079 E O1 (Suspended)	1.4875	50/50	1.4875
925611	AC1-036 C	0.4580	50/50	0.4580
925612	AC1-036 E	1.7382	50/50	1.7382
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.5857	50/50	1.5857
932512	AC2-071 E (Withdrawn : 01/22/2021)	5.0631	50/50	5.0631
934625	AD1-088 C	63.1640	50/50	63.1640
934626	AD1-088 E	16.5430	50/50	16.5430
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.7154	50/50	0.7154
935222	AD1-157 E (Withdrawn : 01/26/2021)	3.0229	50/50	3.0229
936265	AD2-033 C	24.1714	50/50	24.1714
936266	AD2-033 E	16.1143	50/50	16.1143
936361	AD2-046 C O1	6.9048	50/50	6.9048
936362	AD2-046 E O1	3.1752	50/50	3.1752
936485	AD2-063 C	22.4433	50/50	22.4433

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936486	AD2-063 E	14.9622	50/50	14.9622
938371	AE1-056 C	19.5482	50/50	19.5482
938372	AE1-056 E	10.6810	50/50	10.6810
939181	AE1-148 C	6.9525	50/50	6.9525
939182	AE1-148 E	4.6350	50/50	4.6350
940661	AE2-053 O1	2.5750	50/50	2.5750
941791	AE2-182 C	10.2619	50/50	10.2619
941792	AE2-182 E	4.7771	50/50	4.7771
942451	AE2-258	2.7372	50/50	2.7372
942461	AE2-259 C O1	37.3440	50/50	37.3440
942462	AE2-259 E O1	24.8960	50/50	24.8960
943911	AF1-059	12.7036	50/50	12.7036
946301	AF1-294 C	11.7343	50/50	11.7343
946302	AF1-294 E	7.8229	50/50	7.8229
958211	AF2-115 C	6.9026	50/50	6.9026
958212	AF2-115 E	4.6017	50/50	4.6017
958801	AF2-171 C	41.2002	50/50	41.2002
958802	AF2-171 E	27.4668	50/50	27.4668
959311	AF2-222 C	35.5030	50/50	35.5030
959312	AF2-222 E	23.7870	50/50	23.7870
961791	AG1-021 C	5.5220	50/50	5.5220
961792	AG1-021 E	3.6814	50/50	3.6814
961891	AG1-030 C	37.5642	50/50	37.5642
961892	AG1-030 E	25.0428	50/50	25.0428
962041	AG1-048 C	34.5128	50/50	34.5128
962042	AG1-048 E	23.0085	50/50	23.0085
962491	AG1-098 C O1	68.9970	50/50	68.9970
962492	AG1-098 E O1	45.9980	50/50	45.9980
963171	AG1-166 C	5.5220	50/50	5.5220
963172	AG1-166 E	3.6814	50/50	3.6814
963181	AG1-167 C	5.5220	50/50	5.5220
963182	AG1-167 E	3.6814	50/50	3.6814
963191	AG1-168 C	5.5220	50/50	5.5220
963192	AG1-168 E	3.6814	50/50	3.6814
963201	AG1-169 C	5.5220	50/50	5.5220
963202	AG1-169 E	3.6814	50/50	3.6814
963211	AG1-170 C	5.5220	50/50	5.5220
963212	AG1-170 E	3.6814	50/50	3.6814
963271	AG1-176 C O1	78.3861	50/50	78.3861
963272	AG1-176 E O1	52.2574	50/50	52.2574
963321	AG1-181 C O1	32.0091	50/50	32.0091
963361	AG1-185 O1	15.4869	50/50	15.4869
963641	AG1-215 C	2.5770	50/50	2.5770
963642	AG1-215 E	3.8654	50/50	3.8654
964111	AG1-272 C	5.2046	50/50	5.2046
964112	AG1-272 E	1.5458	50/50	1.5458
964121	AG1-273 C	5.2046	50/50	5.2046
964122	AG1-273 E	1.5458	50/50	1.5458
964131	AG1-274 C	5.2046	50/50	5.2046
964132	AG1-274 E	1.5458	50/50	1.5458
964241	AG1-285 C O1	17.4997	50/50	17.4997
964242	AG1-285 E O1	11.6665	50/50	11.6665

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964821	AG1-345 C	2.2018	50/50	2.2018
964822	AG1-345 E	1.4679	50/50	1.4679
964841	AG1-347 C	48.8992	50/50	48.8992
964842	AG1-347 E	38.4208	50/50	38.4208
965191	AG1-384 C	5.2046	50/50	5.2046
965192	AG1-384 E	1.5458	50/50	1.5458
965281	AG1-393 C	5.5220	50/50	5.5220
965282	AG1-393 E	3.6814	50/50	3.6814
965451	AG1-413 C O1	5.3401	50/50	5.3401
965452	AG1-413 E O1	3.5601	50/50	3.5601
965591	AG1-427 C	16.7803	50/50	16.7803
965592	AG1-427 E	11.2105	50/50	11.2105
965641	AG1-432 C O1	74.6880	50/50	74.6880
965642	AG1-432 E O1	49.7920	50/50	49.7920
965831	AG1-451	12.4480	50/50	12.4480
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	7.4688	50/50	7.4688
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	4.9792	50/50	4.9792
WEC	WEC	0.0233	Confirmed LTF	0.0233
LGEE	LGEE	0.0496	Confirmed LTF	0.0496
CPLE	CPLE	0.2539	Confirmed LTF	0.2539
CBM-W2	CBM-W2	0.9677	Confirmed LTF	0.9677
NY	NY	0.0420	Confirmed LTF	0.0420
TVA	TVA	0.1806	Confirmed LTF	0.1806
O-066	O-066	0.5855	Confirmed LTF	0.5855
SIGE	SIGE	0.0177	Confirmed LTF	0.0177
CBM-S2	CBM-S2	2.6726	Confirmed LTF	2.6726
CBM-S1	CBM-S1	0.0456	Confirmed LTF	0.0456
G-007	G-007	0.0924	Confirmed LTF	0.0924
MEC	MEC	0.1367	Confirmed LTF	0.1367
LAGN	LAGN	0.2223	Confirmed LTF	0.2223
CBM-W1	CBM-W1	0.9814	Confirmed LTF	0.9814

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
168474641	313707	6FORK UNION	DVP	961060	AF2-397 TAP	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	148.29	150.07	DC	11.82

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458
963361	AG1-185 O1	8.8762	80/20	8.8762

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

11.6.4 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
168474659	313802	6PRINCE EDW	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 556-B	single	571.52	138.93	143.75	DC	27.5

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
168474663	313867	6BREMODIST	DVP	313707	6FORK UNION	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	147.96	149.92	DC	12.99

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0262	80/20	11.0262
938821	AE1-108 C O1	11.0132	80/20	11.0132
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7368	80/20	6.7368
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9629	80/20	3.9629
958801	AF2-171 C	23.6781	80/20	23.6781
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1703	80/20	3.1703
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0131	80/20	22.0131
962041	AG1-048 C	19.8142	80/20	19.8142
962441	AG1-093 C O1	9.1200	80/20	9.1200
962491	AG1-098 C O1	12.3900	80/20	12.3900
962561	AG1-105 C O1	6.1674	80/20	6.1674
963171	AG1-166 C	3.1703	80/20	3.1703
963181	AG1-167 C	3.1703	80/20	3.1703
963191	AG1-168 C	3.1703	80/20	3.1703
963201	AG1-169 C	3.1703	80/20	3.1703
963211	AG1-170 C	3.1703	80/20	3.1703
963271	AG1-176 C O1	20.7171	80/20	20.7171
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

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

11.6.6 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
168474807	313868	6CARTERV	DVP	933500	AC2-165 TAP	DVP	1	314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	single	800.88	109.64	110.78	DC	9.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.2811	80/20	0.2811
314429	3JTRSVLE	0.4835	80/20	0.4835
314677	6BUCKING	0.8051	80/20	0.8051
315153	1CLOVER1	4.3284	80/20	4.3284
315154	1CLOVER2	4.2852	80/20	4.2852
315158	1KERR 1	0.1411	80/20	0.1411
315159	1KERR 2	0.3952	80/20	0.3952
315160	1KERR 3	0.3952	80/20	0.3952
315161	1KERR 4	0.3952	80/20	0.3952
315162	1KERR 5	0.3952	80/20	0.3952
315163	1KERR 6	0.3952	80/20	0.3952
315164	1KERR 7	0.3952	80/20	0.3952
315191	1BEARGRDN G1	14.2615	80/20	14.2615
315192	1BEARGRDN G2	14.2615	80/20	14.2615
315193	1BEARGRDN S1	18.4429	80/20	18.4429
315266	1PLYWOOD A	0.4253	80/20	0.4253
316118	AC1-105 C	2.1876	80/20	2.1876
316131	AB2-060 C	0.8407	80/20	0.8407
924301	AB2-077 C O1 (Suspended)	1.0994	80/20	1.0994
924311	AB2-078 C O1 (Suspended)	1.0994	80/20	1.0994
924321	AB2-079 C O1 (Suspended)	1.0994	80/20	1.0994
925611	AC1-036 C	0.1990	80/20	0.1990
927261	AC1-222 C	1.2313	80/20	1.2313
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.7932	80/20	0.7932
934311	AD1-055 C	0.8549	80/20	0.8549
934615	AD1-087 C	2.7103	80/20	2.7103
934625	AD1-088 C	10.6986	80/20	10.6986
935171	AD1-152 C O1	2.9770	80/20	2.9770
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2946	80/20	0.2946
936265	AD2-033 C	10.6548	80/20	10.6548
936361	AD2-046 C O1	3.5828	80/20	3.5828
936485	AD2-063 C	10.3014	80/20	10.3014
937481	AD2-202 C O1	0.7939	80/20	0.7939
938371	AE1-056 C	8.0514	80/20	8.0514
938821	AE1-108 C O1	29.3769	80/20	29.3769

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939181	AE1-148 C	3.5932	80/20	3.5932
940661	AE2-053 O1	1.3308	80/20	1.3308
941011	AE2-092 C	25.2830	80/20	25.2830
941791	AE2-182 C	1.7381	80/20	1.7381
942451	AE2-258	1.3292	80/20	1.3292
942461	AE2-259 C O1	15.0522	80/20	15.0522
943901	AF1-058 C	0.6646	80/20	0.6646
943911	AF1-059	5.9093	80/20	5.9093
946291	AF1-293 C O1	39.5443	80/20	39.5443
946301	AF1-294 C	4.8845	80/20	4.8845
946591	AF1-323 C	9.4261	80/20	9.4261
958131	AF2-107 C	4.3750	80/20	4.3750
958211	AF2-115 C	2.8733	80/20	2.8733
958801	AF2-171 C	17.1603	80/20	17.1603
959311	AF2-222 C	15.3100	80/20	15.3100
959751	AF2-266	3.1070	80/20	3.1070
960061	AF2-297 C	2.6582	80/20	2.6582
960111	AF2-302 C	3.4277	80/20	3.4277
961061	AF2-397 C	36.6545	80/20	36.6545
961791	AG1-021 C	2.2986	80/20	2.2986
961801	AG1-022 C	3.4277	80/20	3.4277
961891	AG1-030 C	15.8319	80/20	15.8319
962041	AG1-048 C	14.3663	80/20	14.3663
962441	AG1-093 C O1	5.8337	80/20	5.8337
962491	AG1-098 C O1	8.1622	80/20	8.1622
962561	AG1-105 C O1	3.5664	80/20	3.5664
962741	AG1-123 C O1	3.1842	80/20	3.1842
962751	AG1-124 C O1	3.5741	80/20	3.5741
963171	AG1-166 C	2.2986	80/20	2.2986
963181	AG1-167 C	2.2986	80/20	2.2986
963191	AG1-168 C	2.2986	80/20	2.2986
963201	AG1-169 C	2.2986	80/20	2.2986
963211	AG1-170 C	2.2986	80/20	2.2986
963271	AG1-176 C O1	14.5637	80/20	14.5637
963321	AG1-181 C O1	14.0576	80/20	14.0576
963361	AG1-185 O1	6.8014	80/20	6.8014
963641	AG1-215 C	1.0727	80/20	1.0727
964111	AG1-272 C	2.2621	80/20	2.2621
964121	AG1-273 C	2.2621	80/20	2.2621
964131	AG1-274 C	2.2621	80/20	2.2621
964231	AG1-284 C O1	17.0012	80/20	17.0012
964241	AG1-285 C O1	8.1450	80/20	8.1450
964261	AG1-287 C	0.4984	80/20	0.4984
964471	AG1-310 C	0.7118	80/20	0.7118
964791	AG1-342 C	1.8023	80/20	1.8023
964821	AG1-345 C	0.9169	80/20	0.9169
964841	AG1-347 C	9.1358	80/20	9.1358
965191	AG1-384 C	2.2621	80/20	2.2621
965281	AG1-393 C	2.2986	80/20	2.2986
965451	AG1-413 C O1	2.4841	80/20	2.4841
965581	AG1-426	6.4002	80/20	6.4002
965591	AG1-427 C	7.7911	80/20	7.7911

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965641	AG1-432 C O1	30.1044	80/20	30.1044
965721	AG1-440 C	2.3620	80/20	2.3620
965731	AG1-441 C	2.3620	80/20	2.3620
965771	AG1-445	1.3647	80/20	1.3647
965781	AG1-446	1.3647	80/20	1.3647
965831	AG1-451	5.0174	80/20	5.0174
966251	AG1-494 C	1.6494	80/20	1.6494
966791	AG1-550 O1	16.4475	80/20	16.4475
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.0104	80/20	3.0104
WEC	WEC	0.1988	Confirmed LTF	0.1988
LGEE	LGEE	0.4247	Confirmed LTF	0.4247
CPL	CPL	1.0859	Confirmed LTF	1.0859
CBM-W2	CBM-W2	7.3114	Confirmed LTF	7.3114
NY	NY	0.3512	Confirmed LTF	0.3512
TVA	TVA	1.3104	Confirmed LTF	1.3104
SIGE	SIGE	0.1503	Confirmed LTF	0.1503
CBM-S2	CBM-S2	14.4907	Confirmed LTF	14.4907
CBM-S1	CBM-S1	0.3374	Confirmed LTF	0.3374
MEC	MEC	1.1075	Confirmed LTF	1.1075
LAGN	LAGN	1.5942	Confirmed LTF	1.5942
CBM-W1	CBM-W1	8.3419	Confirmed LTF	8.3419

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
168474599	313898	3BUTCHER CRK	DVP	314267	3CHASCTY2	DVP	1	DVP_P1-2: LN 298	single	269.78	103.58	104.9	DC	3.58

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314429	3JTRSVLE	1.3113	80/20	1.3113
316131	AB2-060 C	7.6090	80/20	7.6090
934625	AD1-088 C	4.1455	80/20	4.1455
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.1688	80/20	0.1688
936265	AD2-033 C	57.3284	80/20	57.3284
938371	AE1-056 C	4.6129	80/20	4.6129
941791	AE2-182 C	0.6735	80/20	0.6735
942461	AE2-259 C O1	12.1362	80/20	12.1362
946301	AF1-294 C	13.2465	80/20	13.2465
958211	AF2-115 C	7.7921	80/20	7.7921
958801	AF2-171 C	7.7868	80/20	7.7868
961791	AG1-021 C	6.2336	80/20	6.2336
961891	AG1-030 C	52.2747	80/20	52.2747
962041	AG1-048 C	38.9602	80/20	38.9602
963171	AG1-166 C	6.2336	80/20	6.2336
963181	AG1-167 C	6.2336	80/20	6.2336
963191	AG1-168 C	6.2336	80/20	6.2336
963201	AG1-169 C	6.2336	80/20	6.2336
963211	AG1-170 C	6.2336	80/20	6.2336
963271	AG1-176 C O1	5.6995	80/20	5.6995
963641	AG1-215 C	2.9090	80/20	2.9090
964821	AG1-345 C	2.5035	80/20	2.5035
964841	AG1-347 C	3.5773	80/20	3.5773
965281	AG1-393 C	6.2336	80/20	6.2336
965641	AG1-432 C O1	24.2724	80/20	24.2724
965831	AG1-451	4.0454	80/20	4.0454
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	2.4272	80/20	2.4272
G-007A	G-007A	0.0048	Confirmed LTF	0.0048
VFT	VFT	0.0129	Confirmed LTF	0.0129
CALDERWOOD	CALDERWOOD	0.0581	Confirmed LTF	0.0581
NY	NY	0.0022	Confirmed LTF	0.0022
PRAIRIE	PRAIRIE	0.2325	Confirmed LTF	0.2325
CHEOAH	CHEOAH	0.0591	Confirmed LTF	0.0591
CBM-N	CBM-N	0.0012	Confirmed LTF	0.0012
COTTONWOOD	COTTONWOOD	0.2226	Confirmed LTF	0.2226
HAMLET	HAMLET	0.0964	Confirmed LTF	0.0964
GIBSON	GIBSON	0.0448	Confirmed LTF	0.0448
BLUEG	BLUEG	0.1406	Confirmed LTF	0.1406
TRIMBLE	TRIMBLE	0.0445	Confirmed LTF	0.0445

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CATAWBA	CATAWBA	0.0539	Confirmed LTF	0.0539

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
168474654	314268	6BRIERY	DVP	313802	6PRINCE EDW	DVP	1	DVP_P1-2: LN 556-B	single	571.52	138.97	143.78	DC	27.5

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

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

11.6.9 Index 9

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163284941	314310	6JUDES F	DVP	314322	6MDLTHAN	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	115.52	117.18	DC	16.3

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.7657	50/50	0.7657
314333	6POWHATN	1.5975	50/50	1.5975
314429	3JTRSVLE	0.4832	50/50	0.4832
314677	6BUCKING	0.8048	50/50	0.8048
314713	3PAMPLIN	2.0181	50/50	2.0181
315191	1BEARGRDN G1	14.2573	50/50	14.2573
315192	1BEARGRDN G2	14.2573	50/50	14.2573
315193	1BEARGRDN S1	18.4374	50/50	18.4374
923862	AB2-026 E	4.5491	50/50	4.5491
924022	AB2-043 E O1	1.3522	Adder	1.59
924032	AB2-045 E	2.3806	50/50	2.3806
924162	AB2-060 E OP	2.1283	Adder	2.5
925611	AC1-036 C	0.1989	50/50	0.1989
925612	AC1-036 E	0.7548	50/50	0.7548
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.7929	50/50	0.7929
932512	AC2-071 E (Withdrawn : 01/22/2021)	2.5317	50/50	2.5317
933501	AC2-165 C	39.2365	50/50	39.2365
933502	AC2-165 E	29.5306	50/50	29.5306
934625	AD1-088 C	10.6886	50/50	10.6886
934626	AD1-088 E	2.7994	50/50	2.7994
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2944	50/50	0.2944
935222	AD1-157 E (Withdrawn : 01/26/2021)	1.2442	50/50	1.2442
936265	AD2-033 C	10.6447	50/50	10.6447
936266	AD2-033 E	7.0964	50/50	7.0964
936485	AD2-063 C	10.2897	50/50	10.2897
936486	AD2-063 E	6.8598	50/50	6.8598
938371	AE1-056 C	8.0460	50/50	8.0460
938372	AE1-056 E	4.3962	50/50	4.3962
938561	AE1-075 C	1.3891	50/50	1.3891
938562	AE1-075 E	4.3290	50/50	4.3290
938821	AE1-108 C O1	29.3641	50/50	29.3641
938822	AE1-108 E O1	13.1786	50/50	13.1786
941011	AE2-092 C	25.2714	50/50	25.2714
941012	AE2-092 E	16.8476	50/50	16.8476
941791	AE2-182 C	1.7365	50/50	1.7365
941792	AE2-182 E	0.8084	50/50	0.8084
942451	AE2-258	1.1281	Adder	1.33
942461	AE2-259 C O1	15.0438	50/50	15.0438

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942462	AE2-259 E O1	10.0292	50/50	10.0292
946291	AF1-293 C O1	39.5291	50/50	39.5291
946292	AF1-293 E O1	7.1109	50/50	7.1109
946301	AF1-294 C	4.8812	50/50	4.8812
946302	AF1-294 E	3.2541	50/50	3.2541
946591	AF1-323 C	9.4218	50/50	9.4218
946592	AF1-323 E	6.2812	50/50	6.2812
958131	AF2-107 C	4.3708	50/50	4.3708
958132	AF2-107 E	2.3952	50/50	2.3952
958211	AF2-115 C	2.8713	50/50	2.8713
958212	AF2-115 E	1.9142	50/50	1.9142
958501	AF2-144 C	7.4840	50/50	7.4840
958502	AF2-144 E	4.9894	50/50	4.9894
958801	AF2-171 C	17.1486	50/50	17.1486
958802	AF2-171 E	11.4324	50/50	11.4324
959311	AF2-222 C	15.2960	50/50	15.2960
959312	AF2-222 E	10.2483	50/50	10.2483
959531	AF2-244 C (Withdrawn : 01/06/2021)	6.8971	50/50	6.8971
959532	AF2-244 E (Withdrawn : 01/06/2021)	4.1089	50/50	4.1089
960111	AF2-302 C	3.4261	50/50	3.4261
960112	AF2-302 E	2.2841	50/50	2.2841
961061	AF2-397 C	36.6436	50/50	36.6436
961062	AF2-397 E	24.4291	50/50	24.4291
961791	AG1-021 C	2.2970	50/50	2.2970
961792	AG1-021 E	1.5314	50/50	1.5314
961801	AG1-022 C	3.4261	50/50	3.4261
961802	AG1-022 E	2.2841	50/50	2.2841
961891	AG1-030 C	15.8193	50/50	15.8193
961892	AG1-030 E	10.5462	50/50	10.5462
962041	AG1-048 C	14.3565	50/50	14.3565
962042	AG1-048 E	9.5710	50/50	9.5710
962491	AG1-098 C O1	8.1525	50/50	8.1525
962492	AG1-098 E O1	5.4350	50/50	5.4350
963171	AG1-166 C	2.2970	50/50	2.2970
963172	AG1-166 E	1.5314	50/50	1.5314
963181	AG1-167 C	2.2970	50/50	2.2970
963182	AG1-167 E	1.5314	50/50	1.5314
963191	AG1-168 C	2.2970	50/50	2.2970
963192	AG1-168 E	1.5314	50/50	1.5314
963201	AG1-169 C	2.2970	50/50	2.2970
963202	AG1-169 E	1.5314	50/50	1.5314
963211	AG1-170 C	2.2970	50/50	2.2970
963212	AG1-170 E	1.5314	50/50	1.5314
963271	AG1-176 C O1	14.5511	50/50	14.5511
963272	AG1-176 E O1	9.7008	50/50	9.7008
963321	AG1-181 C O1	14.0444	50/50	14.0444
963361	AG1-185 O1	6.7951	50/50	6.7951
963641	AG1-215 C	1.0720	50/50	1.0720
963642	AG1-215 E	1.6079	50/50	1.6079
964111	AG1-272 C	2.2600	50/50	2.2600
964112	AG1-272 E	0.6712	50/50	0.6712

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964121	AG1-273 C	2.2600	50/50	2.2600
964122	AG1-273 E	0.6712	50/50	0.6712
964131	AG1-274 C	2.2600	50/50	2.2600
964132	AG1-274 E	0.6712	50/50	0.6712
964231	AG1-284 C O1	16.9953	50/50	16.9953
964232	AG1-284 E O1	11.3302	50/50	11.3302
964241	AG1-285 C O1	8.1345	50/50	8.1345
964242	AG1-285 E O1	5.4230	50/50	5.4230
964821	AG1-345 C	0.9162	50/50	0.9162
964822	AG1-345 E	0.6108	50/50	0.6108
964841	AG1-347 C	9.1280	50/50	9.1280
964842	AG1-347 E	7.1720	50/50	7.1720
965191	AG1-384 C	2.2600	50/50	2.2600
965192	AG1-384 E	0.6712	50/50	0.6712
965281	AG1-393 C	2.2970	50/50	2.2970
965282	AG1-393 E	1.5314	50/50	1.5314
965581	AG1-426	6.3974	50/50	6.3974
965591	AG1-427 C	7.7812	50/50	7.7812
965592	AG1-427 E	5.1984	50/50	5.1984
965641	AG1-432 C O1	30.0876	50/50	30.0876
965642	AG1-432 E O1	20.0584	50/50	20.0584
965831	AG1-451	5.0146	50/50	5.0146
966791	AG1-550 O1	16.4427	50/50	16.4427
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.0088	50/50	3.0088
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	2.0058	50/50	2.0058
WEC	WEC	0.1947	Confirmed LTF	0.1947
LGEE	LGEE	0.4166	Confirmed LTF	0.4166
CPLE	CPLE	1.0770	Confirmed LTF	1.0770
CBM-W2	CBM-W2	7.1949	Confirmed LTF	7.1949
NY	NY	0.3583	Confirmed LTF	0.3583
TVA	TVA	1.2922	Confirmed LTF	1.2922
O-066	O-066	5.0812	Confirmed LTF	5.0812
SIGE	SIGE	0.1503	Confirmed LTF	0.1503
CBM-S2	CBM-S2	14.3550	Confirmed LTF	14.3550
CBM-S1	CBM-S1	0.3325	Confirmed LTF	0.3325
G-007	G-007	0.8001	Confirmed LTF	0.8001
MEC	MEC	1.0869	Confirmed LTF	1.0869
LAGN	LAGN	1.5715	Confirmed LTF	1.5715
CBM-W1	CBM-W1	8.1596	Confirmed LTF	8.1596

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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
163284936	314333	6POWHATN	DVP	314310	6JUDES F	DVP	1	DVP_P7-1: LN 5-2028-C	tower	980.0	115.63	117.29	DC	16.3

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.7657	50/50	0.7657
314333	6POWHATN	1.5975	50/50	1.5975
314429	3JTRSVLE	0.4832	50/50	0.4832
314677	6BUCKING	0.8048	50/50	0.8048
314713	3PAMPLIN	2.0181	50/50	2.0181
315191	1BEARGRDN G1	14.2573	50/50	14.2573
315192	1BEARGRDN G2	14.2573	50/50	14.2573
315193	1BEARGRDN S1	18.4374	50/50	18.4374
923862	AB2-026 E	4.5491	50/50	4.5491
924022	AB2-043 E O1	1.3522	Adder	1.59
924032	AB2-045 E	2.3806	50/50	2.3806
924162	AB2-060 E OP	2.1283	Adder	2.5
925611	AC1-036 C	0.1989	50/50	0.1989
925612	AC1-036 E	0.7548	50/50	0.7548
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.7929	50/50	0.7929
932512	AC2-071 E (Withdrawn : 01/22/2021)	2.5317	50/50	2.5317
933501	AC2-165 C	39.2365	50/50	39.2365
933502	AC2-165 E	29.5306	50/50	29.5306
934625	AD1-088 C	10.6886	50/50	10.6886
934626	AD1-088 E	2.7994	50/50	2.7994
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2944	50/50	0.2944
935222	AD1-157 E (Withdrawn : 01/26/2021)	1.2442	50/50	1.2442
936265	AD2-033 C	10.6447	50/50	10.6447
936266	AD2-033 E	7.0964	50/50	7.0964
936485	AD2-063 C	10.2897	50/50	10.2897
936486	AD2-063 E	6.8598	50/50	6.8598
938371	AE1-056 C	8.0460	50/50	8.0460
938372	AE1-056 E	4.3962	50/50	4.3962
938561	AE1-075 C	1.3891	50/50	1.3891
938562	AE1-075 E	4.3290	50/50	4.3290
938821	AE1-108 C O1	29.3641	50/50	29.3641
938822	AE1-108 E O1	13.1786	50/50	13.1786
941011	AE2-092 C	25.2714	50/50	25.2714
941012	AE2-092 E	16.8476	50/50	16.8476
941791	AE2-182 C	1.7365	50/50	1.7365
941792	AE2-182 E	0.8084	50/50	0.8084
942451	AE2-258	1.1281	Adder	1.33
942461	AE2-259 C O1	15.0438	50/50	15.0438

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942462	AE2-259 E O1	10.0292	50/50	10.0292
946291	AF1-293 C O1	39.5291	50/50	39.5291
946292	AF1-293 E O1	7.1109	50/50	7.1109
946301	AF1-294 C	4.8812	50/50	4.8812
946302	AF1-294 E	3.2541	50/50	3.2541
946591	AF1-323 C	9.4218	50/50	9.4218
946592	AF1-323 E	6.2812	50/50	6.2812
958131	AF2-107 C	4.3708	50/50	4.3708
958132	AF2-107 E	2.3952	50/50	2.3952
958211	AF2-115 C	2.8713	50/50	2.8713
958212	AF2-115 E	1.9142	50/50	1.9142
958501	AF2-144 C	7.4840	50/50	7.4840
958502	AF2-144 E	4.9894	50/50	4.9894
958801	AF2-171 C	17.1486	50/50	17.1486
958802	AF2-171 E	11.4324	50/50	11.4324
959311	AF2-222 C	15.2960	50/50	15.2960
959312	AF2-222 E	10.2483	50/50	10.2483
959531	AF2-244 C (Withdrawn : 01/06/2021)	6.8971	50/50	6.8971
959532	AF2-244 E (Withdrawn : 01/06/2021)	4.1089	50/50	4.1089
960111	AF2-302 C	3.4261	50/50	3.4261
960112	AF2-302 E	2.2841	50/50	2.2841
961061	AF2-397 C	36.6436	50/50	36.6436
961062	AF2-397 E	24.4291	50/50	24.4291
961791	AG1-021 C	2.2970	50/50	2.2970
961792	AG1-021 E	1.5314	50/50	1.5314
961801	AG1-022 C	3.4261	50/50	3.4261
961802	AG1-022 E	2.2841	50/50	2.2841
961891	AG1-030 C	15.8193	50/50	15.8193
961892	AG1-030 E	10.5462	50/50	10.5462
962041	AG1-048 C	14.3565	50/50	14.3565
962042	AG1-048 E	9.5710	50/50	9.5710
962491	AG1-098 C O1	8.1525	50/50	8.1525
962492	AG1-098 E O1	5.4350	50/50	5.4350
963171	AG1-166 C	2.2970	50/50	2.2970
963172	AG1-166 E	1.5314	50/50	1.5314
963181	AG1-167 C	2.2970	50/50	2.2970
963182	AG1-167 E	1.5314	50/50	1.5314
963191	AG1-168 C	2.2970	50/50	2.2970
963192	AG1-168 E	1.5314	50/50	1.5314
963201	AG1-169 C	2.2970	50/50	2.2970
963202	AG1-169 E	1.5314	50/50	1.5314
963211	AG1-170 C	2.2970	50/50	2.2970
963212	AG1-170 E	1.5314	50/50	1.5314
963271	AG1-176 C O1	14.5511	50/50	14.5511
963272	AG1-176 E O1	9.7008	50/50	9.7008
963321	AG1-181 C O1	14.0444	50/50	14.0444
963361	AG1-185 O1	6.7951	50/50	6.7951
963641	AG1-215 C	1.0720	50/50	1.0720
963642	AG1-215 E	1.6079	50/50	1.6079
964111	AG1-272 C	2.2600	50/50	2.2600
964112	AG1-272 E	0.6712	50/50	0.6712

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964121	AG1-273 C	2.2600	50/50	2.2600
964122	AG1-273 E	0.6712	50/50	0.6712
964131	AG1-274 C	2.2600	50/50	2.2600
964132	AG1-274 E	0.6712	50/50	0.6712
964231	AG1-284 C O1	16.9953	50/50	16.9953
964232	AG1-284 E O1	11.3302	50/50	11.3302
964241	AG1-285 C O1	8.1345	50/50	8.1345
964242	AG1-285 E O1	5.4230	50/50	5.4230
964821	AG1-345 C	0.9162	50/50	0.9162
964822	AG1-345 E	0.6108	50/50	0.6108
964841	AG1-347 C	9.1280	50/50	9.1280
964842	AG1-347 E	7.1720	50/50	7.1720
965191	AG1-384 C	2.2600	50/50	2.2600
965192	AG1-384 E	0.6712	50/50	0.6712
965281	AG1-393 C	2.2970	50/50	2.2970
965282	AG1-393 E	1.5314	50/50	1.5314
965581	AG1-426	6.3974	50/50	6.3974
965591	AG1-427 C	7.7812	50/50	7.7812
965592	AG1-427 E	5.1984	50/50	5.1984
965641	AG1-432 C O1	30.0876	50/50	30.0876
965642	AG1-432 E O1	20.0584	50/50	20.0584
965831	AG1-451	5.0146	50/50	5.0146
966791	AG1-550 O1	16.4427	50/50	16.4427
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.0088	50/50	3.0088
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	2.0058	50/50	2.0058
WEC	WEC	0.1947	Confirmed LTF	0.1947
LGEE	LGEE	0.4166	Confirmed LTF	0.4166
CPLE	CPLE	1.0770	Confirmed LTF	1.0770
CBM-W2	CBM-W2	7.1949	Confirmed LTF	7.1949
NY	NY	0.3583	Confirmed LTF	0.3583
TVA	TVA	1.2922	Confirmed LTF	1.2922
O-066	O-066	5.0812	Confirmed LTF	5.0812
SIGE	SIGE	0.1503	Confirmed LTF	0.1503
CBM-S2	CBM-S2	14.3550	Confirmed LTF	14.3550
CBM-S1	CBM-S1	0.3325	Confirmed LTF	0.3325
G-007	G-007	0.8001	Confirmed LTF	0.8001
MEC	MEC	1.0869	Confirmed LTF	1.0869
LAGN	LAGN	1.5715	Confirmed LTF	1.5715
CBM-W1	CBM-W1	8.1596	Confirmed LTF	8.1596

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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
169211455	314677	6BUCKING	DVP	314747	6BREMO	DVP	1	DVP_P1-2: LN 556-B	single	571.52	202.77	206.92	DC	23.68

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 (Withdrawn : 01/26/2021)	0.6064	80/20	0.6064
936161	AD2-022 C O1	4.1004	80/20	4.1004
936171	AD2-023 C O1	2.3919	80/20	2.3919
936265	AD2-033 C	23.6348	80/20	23.6348
936361	AD2-046 C O1	9.3324	80/20	9.3324
936485	AD2-063 C	23.7834	80/20	23.7834
937481	AD2-202 C O1	3.8360	80/20	3.8360
938371	AE1-056 C	16.5711	80/20	16.5711
939181	AE1-148 C	9.3242	80/20	9.3242
939941	AE1-230 C	0.3727	80/20	0.3727
940661	AE2-053 O1	3.4534	80/20	3.4534
941791	AE2-182 C	4.7192	80/20	4.7192
941801	AE2-185 C	1.8637	80/20	1.8637
941821	AE2-187 C	1.8637	80/20	1.8637
942451	AE2-258	3.2276	80/20	3.2276
942461	AE2-259 C O1	30.1788	80/20	30.1788
942671	AE2-283 C	2.0501	80/20	2.0501
942751	AE2-291 C	6.7081	80/20	6.7081
942761	AE2-292 C O1	8.3523	80/20	8.3523
943901	AF1-058 C	2.3154	80/20	2.3154
943911	AF1-059	15.5565	80/20	15.5565
945081	AF1-173	0.7222	80/20	0.7222
945811	AF1-246 C O1	12.6239	80/20	12.6239
946281	AF1-292 C	0.6035	80/20	0.6035
946301	AF1-294 C	10.1788	80/20	10.1788
957481	AF2-042 C	90.1710	80/20	90.1710
958211	AF2-115 C	5.9876	80/20	5.9876
958801	AF2-171 C	35.7867	80/20	35.7867
959311	AF2-222 C	33.1870	80/20	33.1870
959751	AF2-266	15.0290	80/20	15.0290
960061	AF2-297 C	9.2616	80/20	9.2616
960081	AF2-299 C	1.0172	80/20	1.0172
961121	AF2-403	0.4142	80/20	0.4142
961791	AG1-021 C	4.7900	80/20	4.7900
961891	AG1-030 C	33.4611	80/20	33.4611
962041	AG1-048 C	29.9378	80/20	29.9378
962441	AG1-093 C O1	18.4350	80/20	18.4350
962491	AG1-098 C O1	26.7862	80/20	26.7862
962561	AG1-105 C O1	16.8312	80/20	16.8312
963171	AG1-166 C	4.7900	80/20	4.7900
963181	AG1-167 C	4.7900	80/20	4.7900
963191	AG1-168 C	4.7900	80/20	4.7900

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

11.6.12 Index 12

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169211529	314686	6CLOVER	DVP	314690	6BLACK WALNU	DVP	1	DVP_P1-2: LN 556-C	single	814.98	128.7	132.17	DC	28.24

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
934625	AD1-088 C	37.5628	80/20	37.5628
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2184	80/20	0.2184
936265	AD2-033 C	4.4156	80/20	4.4156
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
960111	AF2-302 C	0.7429	80/20	0.7429
961061	AF2-397 C	7.7259	80/20	7.7259

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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

11.6.13 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
169211525	314690	6BLACK WALNU	DVP	962560	AG1-105 TAP	DVP	1	DVP_P1-2: LN 556-C	single	814.98	137.31	140.78	DC	28.24

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 (Withdrawn : 01/26/2021)	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959751	AF2-266	33.5085	80/20	33.5085
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
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

11.6.14 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
169211434	314692	6FARMVIL	DVP	314677	6BUCKING	DVP	1	DVP_P1-2: LN 556-B	single	559.3	203.95	208.19	DC	23.69

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 (Withdrawn : 01/26/2021)	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
169211461	314697	6SEGE HILL	DVP	927250	AC1-221 TAP	DVP	1	DVP_P1-2: LN 556-C	single	674.92	180.98	184.31	DC	22.47

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 (Withdrawn : 01/26/2021)	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1048	80/20	0.1048
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8236	80/20	4.8236
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7132	80/20	14.7132
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5649	80/20	0.5649
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5206	80/20	0.5206
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1206	80/20	7.1206
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O1	39.1883	80/20	39.1883
962491	AG1-098 C O1	34.5765	80/20	34.5765
962561	AG1-105 C O1	31.8432	80/20	31.8432
963171	AG1-166 C	2.8618	80/20	2.8618
963181	AG1-167 C	2.8618	80/20	2.8618
963191	AG1-168 C	2.8618	80/20	2.8618

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

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168474785	314747	6BREMO	DVP	313868	6CARTERV	DVP	1	314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	single	800.88	111.05	112.19	DC	9.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.2811	80/20	0.2811
314429	3JTRSVLE	0.4835	80/20	0.4835
314677	6BUCKING	0.8051	80/20	0.8051
315153	1CLOVER1	4.3284	80/20	4.3284
315154	1CLOVER2	4.2852	80/20	4.2852
315158	1KERR 1	0.1411	80/20	0.1411
315159	1KERR 2	0.3952	80/20	0.3952
315160	1KERR 3	0.3952	80/20	0.3952
315161	1KERR 4	0.3952	80/20	0.3952
315162	1KERR 5	0.3952	80/20	0.3952
315163	1KERR 6	0.3952	80/20	0.3952
315164	1KERR 7	0.3952	80/20	0.3952
315191	1BEARGRDN G1	14.2615	80/20	14.2615
315192	1BEARGRDN G2	14.2615	80/20	14.2615
315193	1BEARGRDN S1	18.4429	80/20	18.4429
315266	1PLYWOOD A	0.4253	80/20	0.4253
316118	AC1-105 C	2.1876	80/20	2.1876
316131	AB2-060 C	0.8407	80/20	0.8407
924301	AB2-077 C O1 (Suspended)	1.0994	80/20	1.0994
924311	AB2-078 C O1 (Suspended)	1.0994	80/20	1.0994
924321	AB2-079 C O1 (Suspended)	1.0994	80/20	1.0994
925611	AC1-036 C	0.1990	80/20	0.1990
927261	AC1-222 C	1.2313	80/20	1.2313
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.7932	80/20	0.7932
934311	AD1-055 C	0.8549	80/20	0.8549
934615	AD1-087 C	2.7103	80/20	2.7103
934625	AD1-088 C	10.6986	80/20	10.6986
935171	AD1-152 C O1	2.9770	80/20	2.9770
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2946	80/20	0.2946
936265	AD2-033 C	10.6548	80/20	10.6548
936361	AD2-046 C O1	3.5828	80/20	3.5828
936485	AD2-063 C	10.3014	80/20	10.3014
937481	AD2-202 C O1	0.7939	80/20	0.7939
938371	AE1-056 C	8.0514	80/20	8.0514
938821	AE1-108 C O1	29.3769	80/20	29.3769

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939181	AE1-148 C	3.5932	80/20	3.5932
940661	AE2-053 O1	1.3308	80/20	1.3308
941011	AE2-092 C	25.2830	80/20	25.2830
941791	AE2-182 C	1.7381	80/20	1.7381
942451	AE2-258	1.3292	80/20	1.3292
942461	AE2-259 C O1	15.0522	80/20	15.0522
943901	AF1-058 C	0.6646	80/20	0.6646
943911	AF1-059	5.9093	80/20	5.9093
946291	AF1-293 C O1	39.5443	80/20	39.5443
946301	AF1-294 C	4.8845	80/20	4.8845
946591	AF1-323 C	9.4261	80/20	9.4261
958131	AF2-107 C	4.3750	80/20	4.3750
958211	AF2-115 C	2.8733	80/20	2.8733
958801	AF2-171 C	17.1603	80/20	17.1603
959311	AF2-222 C	15.3100	80/20	15.3100
959751	AF2-266	3.1070	80/20	3.1070
960061	AF2-297 C	2.6582	80/20	2.6582
960111	AF2-302 C	3.4277	80/20	3.4277
961061	AF2-397 C	36.6545	80/20	36.6545
961791	AG1-021 C	2.2986	80/20	2.2986
961801	AG1-022 C	3.4277	80/20	3.4277
961891	AG1-030 C	15.8319	80/20	15.8319
962041	AG1-048 C	14.3663	80/20	14.3663
962441	AG1-093 C O1	5.8337	80/20	5.8337
962491	AG1-098 C O1	8.1622	80/20	8.1622
962561	AG1-105 C O1	3.5664	80/20	3.5664
962741	AG1-123 C O1	3.1842	80/20	3.1842
962751	AG1-124 C O1	3.5741	80/20	3.5741
963171	AG1-166 C	2.2986	80/20	2.2986
963181	AG1-167 C	2.2986	80/20	2.2986
963191	AG1-168 C	2.2986	80/20	2.2986
963201	AG1-169 C	2.2986	80/20	2.2986
963211	AG1-170 C	2.2986	80/20	2.2986
963271	AG1-176 C O1	14.5637	80/20	14.5637
963321	AG1-181 C O1	14.0576	80/20	14.0576
963361	AG1-185 O1	6.8014	80/20	6.8014
963641	AG1-215 C	1.0727	80/20	1.0727
964111	AG1-272 C	2.2621	80/20	2.2621
964121	AG1-273 C	2.2621	80/20	2.2621
964131	AG1-274 C	2.2621	80/20	2.2621
964231	AG1-284 C O1	17.0012	80/20	17.0012
964241	AG1-285 C O1	8.1450	80/20	8.1450
964261	AG1-287 C	0.4984	80/20	0.4984
964471	AG1-310 C	0.7118	80/20	0.7118
964791	AG1-342 C	1.8023	80/20	1.8023
964821	AG1-345 C	0.9169	80/20	0.9169
964841	AG1-347 C	9.1358	80/20	9.1358
965191	AG1-384 C	2.2621	80/20	2.2621
965281	AG1-393 C	2.2986	80/20	2.2986
965451	AG1-413 C O1	2.4841	80/20	2.4841
965581	AG1-426	6.4002	80/20	6.4002
965591	AG1-427 C	7.7911	80/20	7.7911

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965641	AG1-432 C O1	30.1044	80/20	30.1044
965721	AG1-440 C	2.3620	80/20	2.3620
965731	AG1-441 C	2.3620	80/20	2.3620
965771	AG1-445	1.3647	80/20	1.3647
965781	AG1-446	1.3647	80/20	1.3647
965831	AG1-451	5.0174	80/20	5.0174
966251	AG1-494 C	1.6494	80/20	1.6494
966791	AG1-550 O1	16.4475	80/20	16.4475
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.0104	80/20	3.0104
WEC	WEC	0.1988	Confirmed LTF	0.1988
LGEE	LGEE	0.4247	Confirmed LTF	0.4247
CPL	CPL	1.0859	Confirmed LTF	1.0859
CBM-W2	CBM-W2	7.3114	Confirmed LTF	7.3114
NY	NY	0.3512	Confirmed LTF	0.3512
TVA	TVA	1.3104	Confirmed LTF	1.3104
SIGE	SIGE	0.1503	Confirmed LTF	0.1503
CBM-S2	CBM-S2	14.4907	Confirmed LTF	14.4907
CBM-S1	CBM-S1	0.3374	Confirmed LTF	0.3374
MEC	MEC	1.1075	Confirmed LTF	1.1075
LAGN	LAGN	1.5942	Confirmed LTF	1.5942
CBM-W1	CBM-W1	8.3419	Confirmed LTF	8.3419

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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
169428022	314747	6BREMO	DVP	313867	6BREMODIST	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	150.12	152.08	DC	12.99

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933501	AC2-165 C	34.9923	80/20	34.9923
934311	AD1-055 C	1.3084	80/20	1.3084
934341	AD1-058 C	1.9921	80/20	1.9921
934615	AD1-087 C	4.7030	80/20	4.7030
934625	AD1-088 C	15.3924	80/20	15.3924
934991	AD1-131 C	0.6532	80/20	0.6532
935171	AD1-152 C O1	5.1658	80/20	5.1658
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.4035	80/20	0.4035
936265	AD2-033 C	15.2365	80/20	15.2365
936361	AD2-046 C O1	5.8230	80/20	5.8230
936485	AD2-063 C	15.0849	80/20	15.0849
937481	AD2-202 C O1	1.3775	80/20	1.3775
938371	AE1-056 C	11.0262	80/20	11.0262
938821	AE1-108 C O1	11.0132	80/20	11.0132
939181	AE1-148 C	5.8169	80/20	5.8169
940661	AE2-053 O1	2.1544	80/20	2.1544
941791	AE2-182 C	2.5007	80/20	2.5007
942451	AE2-258	2.0064	80/20	2.0064
942461	AE2-259 C O1	20.3100	80/20	20.3100
942751	AE2-291 C	3.2791	80/20	3.2791
942761	AE2-292 C O1	4.0828	80/20	4.0828
943901	AF1-058 C	1.0548	80/20	1.0548
943911	AF1-059	10.2781	80/20	10.2781
945811	AF1-246 C O1	3.6616	80/20	3.6616
946281	AF1-292 C	0.4969	80/20	0.4969
946291	AF1-293 C O1	6.2287	80/20	6.2287
946301	AF1-294 C	6.7368	80/20	6.7368
946591	AF1-323 C	3.5356	80/20	3.5356
957481	AF2-042 C	26.1540	80/20	26.1540
958131	AF2-107 C	1.6496	80/20	1.6496
958211	AF2-115 C	3.9629	80/20	3.9629
958801	AF2-171 C	23.6781	80/20	23.6781
959311	AF2-222 C	21.6010	80/20	21.6010
959751	AF2-266	5.3920	80/20	5.3920
960061	AF2-297 C	4.2192	80/20	4.2192
960081	AF2-299 C	0.8375	80/20	0.8375
960111	AF2-302 C	1.2857	80/20	1.2857
961791	AG1-021 C	3.1703	80/20	3.1703
961801	AG1-022 C	1.2857	80/20	1.2857
961891	AG1-030 C	22.0131	80/20	22.0131
962041	AG1-048 C	19.8142	80/20	19.8142
962441	AG1-093 C O1	9.1200	80/20	9.1200
962491	AG1-098 C O1	12.3900	80/20	12.3900
962561	AG1-105 C O1	6.1674	80/20	6.1674
963171	AG1-166 C	3.1703	80/20	3.1703
963181	AG1-167 C	3.1703	80/20	3.1703
963191	AG1-168 C	3.1703	80/20	3.1703
963201	AG1-169 C	3.1703	80/20	3.1703
963211	AG1-170 C	3.1703	80/20	3.1703
963271	AG1-176 C O1	20.7171	80/20	20.7171
963301	AG1-179 C	2.9803	80/20	2.9803
963311	AG1-180	1.4521	80/20	1.4521

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169428039	314747	6BREMO	DVP	314744	3BREMO	DVP	1	DVP_P1-2: LN 2193	single	269.78	139.93	142.11	DC	5.88

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 (Withdrawn : 01/26/2021)	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
958801	AF2-171 C	10.4355	80/20	10.4355
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

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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
169428012	314765	6MTEAGLE	DVP	314749	6CHARLVL	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	152.16	153.95	DC	11.82

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934625	AD1-088 C	14.0087	80/20	14.0087
934991	AD1-131 C	0.6208	80/20	0.6208
935171	AD1-152 C O1	4.7150	80/20	4.7150
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.3677	80/20	0.3677
936265	AD2-033 C	13.9363	80/20	13.9363
936361	AD2-046 C O1	5.3660	80/20	5.3660
936485	AD2-063 C	13.8249	80/20	13.8249
937481	AD2-202 C O1	1.2573	80/20	1.2573
938371	AE1-056 C	10.0469	80/20	10.0469
938821	AE1-108 C O1	34.7022	80/20	34.7022
939181	AE1-148 C	5.3595	80/20	5.3595
940661	AE2-053 O1	1.9850	80/20	1.9850
941011	AE2-092 C	28.7092	80/20	28.7092
941791	AE2-182 C	2.2759	80/20	2.2759
942451	AE2-258	1.8436	80/20	1.8436
942461	AE2-259 C O1	18.4818	80/20	18.4818
942751	AE2-291 C	3.6916	80/20	3.6916
942761	AE2-292 C O1	4.5964	80/20	4.5964
943901	AF1-058 C	0.9986	80/20	0.9986
943911	AF1-059	9.4111	80/20	9.4111
945811	AF1-246 C O1	3.3281	80/20	3.3281
946281	AF1-292 C	0.4501	80/20	0.4501
946291	AF1-293 C O1	46.3226	80/20	46.3226
946301	AF1-294 C	6.1424	80/20	6.1424
946591	AF1-323 C	11.1045	80/20	11.1045
957481	AF2-042 C	23.7720	80/20	23.7720
958131	AF2-107 C	5.0062	80/20	5.0062
958211	AF2-115 C	3.6132	80/20	3.6132
958801	AF2-171 C	21.5901	80/20	21.5901
959311	AF2-222 C	19.7350	80/20	19.7350
959751	AF2-266	4.9210	80/20	4.9210
960061	AF2-297 C	3.9946	80/20	3.9946
960081	AF2-299 C	0.7586	80/20	0.7586
960111	AF2-302 C	4.0380	80/20	4.0380
961061	AF2-397 C	49.3795	80/20	49.3795
961791	AG1-021 C	2.8906	80/20	2.8906
961801	AG1-022 C	4.0380	80/20	4.0380
961891	AG1-030 C	20.0853	80/20	20.0853
962041	AG1-048 C	18.0660	80/20	18.0660
962441	AG1-093 C O1	8.5588	80/20	8.5588
962491	AG1-098 C O1	11.2860	80/20	11.2860
962561	AG1-105 C O1	5.6484	80/20	5.6484
962741	AG1-123 C O1	3.4609	80/20	3.4609
962751	AG1-124 C O1	3.7955	80/20	3.7955
963171	AG1-166 C	2.8906	80/20	2.8906
963181	AG1-167 C	2.8906	80/20	2.8906
963191	AG1-168 C	2.8906	80/20	2.8906
963201	AG1-169 C	2.8906	80/20	2.8906
963211	AG1-170 C	2.8906	80/20	2.8906
963271	AG1-176 C O1	18.8522	80/20	18.8522
963301	AG1-179 C	2.7231	80/20	2.7231
963311	AG1-180	1.3268	80/20	1.3268

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163749527	927250	AC1-221 TAP	DVP	304070	6PERSON230 T	CPL	1	DVP_P1-2: LN 556-C	single	718.0	182.09	185.22	DC	22.47

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 (Withdrawn : 01/26/2021)	0.3412	80/20	0.3412
936265	AD2-033 C	18.1139	80/20	18.1139
936361	AD2-046 C O1	8.4650	80/20	8.4650
936485	AD2-063 C	20.6649	80/20	20.6649
937481	AD2-202 C O1	6.5700	80/20	6.5700
938371	AE1-056 C	9.3221	80/20	9.3221
938561	AE1-075 C	0.1048	80/20	0.1048
938821	AE1-108 C O1	7.2807	80/20	7.2807
939181	AE1-148 C	8.5007	80/20	8.5007
939941	AE1-230 C	0.7209	80/20	0.7209
940661	AE2-053 O1	3.1484	80/20	3.1484
941011	AE2-092 C	6.3234	80/20	6.3234
941791	AE2-182 C	4.8236	80/20	4.8236
941801	AE2-185 C	3.6043	80/20	3.6043
941821	AE2-187 C	3.6043	80/20	3.6043
942451	AE2-258	3.2048	80/20	3.2048
942461	AE2-259 C O1	14.7132	80/20	14.7132
942671	AE2-283 C	3.9648	80/20	3.9648
942751	AE2-291 C	15.6354	80/20	15.6354
942761	AE2-292 C O1	19.4676	80/20	19.4676
943901	AF1-058 C	5.7308	80/20	5.7308
943911	AF1-059	14.4227	80/20	14.4227
945081	AF1-173	1.3967	80/20	1.3967
945811	AF1-246 C O1	21.5242	80/20	21.5242
946291	AF1-293 C O1	9.4568	80/20	9.4568
946301	AF1-294 C	6.0812	80/20	6.0812
946591	AF1-323 C	2.4073	80/20	2.4073
957481	AF2-042 C	153.7440	80/20	153.7440
958211	AF2-115 C	3.5772	80/20	3.5772
958501	AF2-144 C	0.5649	80/20	0.5649
958801	AF2-171 C	21.4497	80/20	21.4497
959311	AF2-222 C	23.4030	80/20	23.4030
959531	AF2-244 C (Withdrawn : 01/06/2021)	0.5206	80/20	0.5206
959751	AF2-266	25.6235	80/20	25.6235
960061	AF2-297 C	22.9234	80/20	22.9234
960111	AF2-302 C	0.8754	80/20	0.8754
961061	AF2-397 C	7.1206	80/20	7.1206
961121	AF2-403	0.8010	80/20	0.8010
961791	AG1-021 C	2.8618	80/20	2.8618
961801	AG1-022 C	0.8754	80/20	0.8754
961891	AG1-030 C	21.3030	80/20	21.3030
962041	AG1-048 C	17.8860	80/20	17.8860
962441	AG1-093 C O1	39.1883	80/20	39.1883
962491	AG1-098 C O1	34.5765	80/20	34.5765
962561	AG1-105 C O1	31.8432	80/20	31.8432
963171	AG1-166 C	2.8618	80/20	2.8618

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

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

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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
169700867	933500	AC2-165 TAP	DVP	314333	6POWHATN	DVP	1	314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	single	800.88	114.46	115.6	DC	9.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.2811	80/20	0.2811
314429	3JTRSVLE	0.4835	80/20	0.4835
314677	6BUCKING	0.8051	80/20	0.8051
315153	1CLOVER1	4.3284	80/20	4.3284
315154	1CLOVER2	4.2852	80/20	4.2852
315158	1KERR 1	0.1411	80/20	0.1411
315159	1KERR 2	0.3952	80/20	0.3952
315160	1KERR 3	0.3952	80/20	0.3952
315161	1KERR 4	0.3952	80/20	0.3952
315162	1KERR 5	0.3952	80/20	0.3952
315163	1KERR 6	0.3952	80/20	0.3952
315164	1KERR 7	0.3952	80/20	0.3952
315191	1BEARGRDN G1	14.2615	80/20	14.2615
315192	1BEARGRDN G2	14.2615	80/20	14.2615
315193	1BEARGRDN S1	18.4429	80/20	18.4429
315266	1PLYWOOD A	0.4253	80/20	0.4253
316118	AC1-105 C	2.1876	80/20	2.1876
316131	AB2-060 C	0.8407	80/20	0.8407
924301	AB2-077 C O1 (Suspended)	1.0994	80/20	1.0994
924311	AB2-078 C O1 (Suspended)	1.0994	80/20	1.0994
924321	AB2-079 C O1 (Suspended)	1.0994	80/20	1.0994
925611	AC1-036 C	0.1990	80/20	0.1990
927261	AC1-222 C	1.2313	80/20	1.2313
932511	AC2-071 C (Withdrawn : 01/22/2021)	0.7932	80/20	0.7932
933501	AC2-165 C	39.2445	80/20	39.2445
934311	AD1-055 C	0.8549	80/20	0.8549
934615	AD1-087 C	2.7103	80/20	2.7103
934625	AD1-088 C	10.6986	80/20	10.6986
935171	AD1-152 C O1	2.9770	80/20	2.9770
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.2946	80/20	0.2946
936265	AD2-033 C	10.6548	80/20	10.6548
936361	AD2-046 C O1	3.5828	80/20	3.5828
936485	AD2-063 C	10.3014	80/20	10.3014
937481	AD2-202 C O1	0.7939	80/20	0.7939
938371	AE1-056 C	8.0514	80/20	8.0514

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938821	AE1-108 C O1	29.3769	80/20	29.3769
939181	AE1-148 C	3.5932	80/20	3.5932
940661	AE2-053 O1	1.3308	80/20	1.3308
941011	AE2-092 C	25.2830	80/20	25.2830
941791	AE2-182 C	1.7381	80/20	1.7381
942451	AE2-258	1.3292	80/20	1.3292
942461	AE2-259 C O1	15.0522	80/20	15.0522
943901	AF1-058 C	0.6646	80/20	0.6646
943911	AF1-059	5.9093	80/20	5.9093
946291	AF1-293 C O1	39.5443	80/20	39.5443
946301	AF1-294 C	4.8845	80/20	4.8845
946591	AF1-323 C	9.4261	80/20	9.4261
958131	AF2-107 C	4.3750	80/20	4.3750
958211	AF2-115 C	2.8733	80/20	2.8733
958801	AF2-171 C	17.1603	80/20	17.1603
959311	AF2-222 C	15.3100	80/20	15.3100
959751	AF2-266	3.1070	80/20	3.1070
960061	AF2-297 C	2.6582	80/20	2.6582
960111	AF2-302 C	3.4277	80/20	3.4277
961061	AF2-397 C	36.6545	80/20	36.6545
961791	AG1-021 C	2.2986	80/20	2.2986
961801	AG1-022 C	3.4277	80/20	3.4277
961891	AG1-030 C	15.8319	80/20	15.8319
962041	AG1-048 C	14.3663	80/20	14.3663
962441	AG1-093 C O1	5.8337	80/20	5.8337
962491	AG1-098 C O1	8.1622	80/20	8.1622
962561	AG1-105 C O1	3.5664	80/20	3.5664
962741	AG1-123 C O1	3.1842	80/20	3.1842
962751	AG1-124 C O1	3.5741	80/20	3.5741
963171	AG1-166 C	2.2986	80/20	2.2986
963181	AG1-167 C	2.2986	80/20	2.2986
963191	AG1-168 C	2.2986	80/20	2.2986
963201	AG1-169 C	2.2986	80/20	2.2986
963211	AG1-170 C	2.2986	80/20	2.2986
963271	AG1-176 C O1	14.5637	80/20	14.5637
963321	AG1-181 C O1	14.0576	80/20	14.0576
963361	AG1-185 O1	6.8014	80/20	6.8014
963641	AG1-215 C	1.0727	80/20	1.0727
964111	AG1-272 C	2.2621	80/20	2.2621
964121	AG1-273 C	2.2621	80/20	2.2621
964131	AG1-274 C	2.2621	80/20	2.2621
964231	AG1-284 C O1	17.0012	80/20	17.0012
964241	AG1-285 C O1	8.1450	80/20	8.1450
964261	AG1-287 C	0.4984	80/20	0.4984
964471	AG1-310 C	0.7118	80/20	0.7118
964791	AG1-342 C	1.8023	80/20	1.8023
964821	AG1-345 C	0.9169	80/20	0.9169
964841	AG1-347 C	9.1358	80/20	9.1358
965191	AG1-384 C	2.2621	80/20	2.2621
965281	AG1-393 C	2.2986	80/20	2.2986
965451	AG1-413 C O1	2.4841	80/20	2.4841
965581	AG1-426	6.4002	80/20	6.4002

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965591	AG1-427 C	7.7911	80/20	7.7911
965641	AG1-432 C O1	30.1044	80/20	30.1044
965721	AG1-440 C	2.3620	80/20	2.3620
965731	AG1-441 C	2.3620	80/20	2.3620
965771	AG1-445	1.3647	80/20	1.3647
965781	AG1-446	1.3647	80/20	1.3647
965831	AG1-451	5.0174	80/20	5.0174
966251	AG1-494 C	1.6494	80/20	1.6494
966791	AG1-550 O1	16.4475	80/20	16.4475
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	3.0104	80/20	3.0104
WEC	WEC	0.1988	Confirmed LTF	0.1988
LGEE	LGEE	0.4247	Confirmed LTF	0.4247
CPL	CPL	1.0859	Confirmed LTF	1.0859
CBM-W2	CBM-W2	7.3114	Confirmed LTF	7.3114
NY	NY	0.3512	Confirmed LTF	0.3512
TVA	TVA	1.3104	Confirmed LTF	1.3104
SIGE	SIGE	0.1503	Confirmed LTF	0.1503
CBM-S2	CBM-S2	14.4907	Confirmed LTF	14.4907
CBM-S1	CBM-S1	0.3374	Confirmed LTF	0.3374
MEC	MEC	1.1075	Confirmed LTF	1.1075
LAGN	LAGN	1.5942	Confirmed LTF	1.5942
CBM-W1	CBM-W1	8.3419	Confirmed LTF	8.3419

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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
163284575	934620	AD1-088 TAP	DVP	962490	AG1-098 TAP	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	118.49	130.97	DC	87.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5789	50/50	0.5789
313853	3PONTONDP	1.8407	50/50	1.8407
314429	3JTRSVLE	1.1616	50/50	1.1616
314677	6BUCKING	1.6095	50/50	1.6095
314713	3PAMPLIN	4.9032	50/50	4.9032
315161	1KERR 4	0.7452	50/50	0.7452
315162	1KERR 5	0.7452	50/50	0.7452
315163	1KERR 6	0.7452	50/50	0.7452
315164	1KERR 7	0.7452	50/50	0.7452
316131	AB2-060 C	1.7524	50/50	1.7524
924022	AB2-043 E O1	3.2808	50/50	3.2808
924032	AB2-045 E	4.7608	50/50	4.7608
924162	AB2-060 E OP	5.2270	50/50	5.2270
924301	AB2-077 C O1 (Suspended)	2.2313	50/50	2.2313
924302	AB2-077 E O1 (Suspended)	1.4875	50/50	1.4875
924311	AB2-078 C O1 (Suspended)	2.2313	50/50	2.2313
924312	AB2-078 E O1 (Suspended)	1.4875	50/50	1.4875
924321	AB2-079 C O1 (Suspended)	2.2313	50/50	2.2313
924322	AB2-079 E O1 (Suspended)	1.4875	50/50	1.4875
925611	AC1-036 C	0.4580	50/50	0.4580
925612	AC1-036 E	1.7382	50/50	1.7382
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.5857	50/50	1.5857
932512	AC2-071 E (Withdrawn : 01/22/2021)	5.0631	50/50	5.0631
934625	AD1-088 C	63.1640	50/50	63.1640
934626	AD1-088 E	16.5430	50/50	16.5430
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.7154	50/50	0.7154
935222	AD1-157 E (Withdrawn : 01/26/2021)	3.0229	50/50	3.0229
936265	AD2-033 C	24.1714	50/50	24.1714
936266	AD2-033 E	16.1143	50/50	16.1143
936361	AD2-046 C O1	6.9048	50/50	6.9048
936362	AD2-046 E O1	3.1752	50/50	3.1752
936485	AD2-063 C	22.4433	50/50	22.4433

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936486	AD2-063 E	14.9622	50/50	14.9622
938371	AE1-056 C	19.5482	50/50	19.5482
938372	AE1-056 E	10.6810	50/50	10.6810
939181	AE1-148 C	6.9525	50/50	6.9525
939182	AE1-148 E	4.6350	50/50	4.6350
940661	AE2-053 O1	2.5750	50/50	2.5750
941791	AE2-182 C	10.2619	50/50	10.2619
941792	AE2-182 E	4.7771	50/50	4.7771
942451	AE2-258	2.7372	50/50	2.7372
942461	AE2-259 C O1	37.3440	50/50	37.3440
942462	AE2-259 E O1	24.8960	50/50	24.8960
943911	AF1-059	12.7036	50/50	12.7036
946301	AF1-294 C	11.7343	50/50	11.7343
946302	AF1-294 E	7.8229	50/50	7.8229
958211	AF2-115 C	6.9026	50/50	6.9026
958212	AF2-115 E	4.6017	50/50	4.6017
958801	AF2-171 C	41.2002	50/50	41.2002
958802	AF2-171 E	27.4668	50/50	27.4668
959311	AF2-222 C	35.5030	50/50	35.5030
959312	AF2-222 E	23.7870	50/50	23.7870
961791	AG1-021 C	5.5220	50/50	5.5220
961792	AG1-021 E	3.6814	50/50	3.6814
961891	AG1-030 C	37.5642	50/50	37.5642
961892	AG1-030 E	25.0428	50/50	25.0428
962041	AG1-048 C	34.5128	50/50	34.5128
962042	AG1-048 E	23.0085	50/50	23.0085
963171	AG1-166 C	5.5220	50/50	5.5220
963172	AG1-166 E	3.6814	50/50	3.6814
963181	AG1-167 C	5.5220	50/50	5.5220
963182	AG1-167 E	3.6814	50/50	3.6814
963191	AG1-168 C	5.5220	50/50	5.5220
963192	AG1-168 E	3.6814	50/50	3.6814
963201	AG1-169 C	5.5220	50/50	5.5220
963202	AG1-169 E	3.6814	50/50	3.6814
963211	AG1-170 C	5.5220	50/50	5.5220
963212	AG1-170 E	3.6814	50/50	3.6814
963271	AG1-176 C O1	78.3861	50/50	78.3861
963272	AG1-176 E O1	52.2574	50/50	52.2574
963321	AG1-181 C O1	32.0091	50/50	32.0091
963361	AG1-185 O1	15.4869	50/50	15.4869
963641	AG1-215 C	2.5770	50/50	2.5770
963642	AG1-215 E	3.8654	50/50	3.8654
964111	AG1-272 C	5.2046	50/50	5.2046
964112	AG1-272 E	1.5458	50/50	1.5458
964121	AG1-273 C	5.2046	50/50	5.2046
964122	AG1-273 E	1.5458	50/50	1.5458
964131	AG1-274 C	5.2046	50/50	5.2046
964132	AG1-274 E	1.5458	50/50	1.5458
964241	AG1-285 C O1	17.4997	50/50	17.4997
964242	AG1-285 E O1	11.6665	50/50	11.6665
964821	AG1-345 C	2.2018	50/50	2.2018
964822	AG1-345 E	1.4679	50/50	1.4679

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964841	AG1-347 C	48.8992	50/50	48.8992
964842	AG1-347 E	38.4208	50/50	38.4208
965191	AG1-384 C	5.2046	50/50	5.2046
965192	AG1-384 E	1.5458	50/50	1.5458
965281	AG1-393 C	5.5220	50/50	5.5220
965282	AG1-393 E	3.6814	50/50	3.6814
965451	AG1-413 C O1	5.3401	50/50	5.3401
965452	AG1-413 E O1	3.5601	50/50	3.5601
965591	AG1-427 C	16.7803	50/50	16.7803
965592	AG1-427 E	11.2105	50/50	11.2105
965641	AG1-432 C O1	74.6880	50/50	74.6880
965642	AG1-432 E O1	49.7920	50/50	49.7920
965831	AG1-451	12.4480	50/50	12.4480
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	7.4688	50/50	7.4688
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	4.9792	50/50	4.9792
WEC	WEC	0.0233	Confirmed LTF	0.0233
LGEE	LGEE	0.0496	Confirmed LTF	0.0496
CPLE	CPLE	0.2539	Confirmed LTF	0.2539
CBM-W2	CBM-W2	0.9677	Confirmed LTF	0.9677
NY	NY	0.0420	Confirmed LTF	0.0420
TVA	TVA	0.1806	Confirmed LTF	0.1806
O-066	O-066	0.5855	Confirmed LTF	0.5855
SIGE	SIGE	0.0177	Confirmed LTF	0.0177
CBM-S2	CBM-S2	2.6726	Confirmed LTF	2.6726
CBM-S1	CBM-S1	0.0456	Confirmed LTF	0.0456
G-007	G-007	0.0924	Confirmed LTF	0.0924
MEC	MEC	0.1367	Confirmed LTF	0.1367
LAGN	LAGN	0.2223	Confirmed LTF	0.2223
CBM-W1	CBM-W1	0.9814	Confirmed LTF	0.9814

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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
169989164	961060	AF2-397 TAP	DVP	966790	AG1-550 TAP	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	155.73	157.52	DC	11.82

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961061	AF2-397 C	49.3810	80/20	49.3810
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458

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

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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
169211505	962560	AG1-105 TAP	DVP	314697	6SEGE HILL	DVP	1	DVP_P1-2: LN 556-C	single	814.98	142.45	145.91	DC	28.24

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 (Withdrawn : 01/26/2021)	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959751	AF2-266	33.5085	80/20	33.5085
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

11.6.25 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
163284596	963270	AG1-176 TAP	DVP	934620	AD1-088 TAP	DVP	1	DVP_P2-2: BREMO B1	bus	699.0	104.99	117.47	DC	87.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5789	50/50	0.5789
313853	3PONTONDP	1.8407	50/50	1.8407
314429	3JTRSVLE	1.1616	50/50	1.1616
314677	6BUCKING	1.6095	50/50	1.6095
314713	3PAMPLIN	4.9032	50/50	4.9032
315161	1KERR 4	0.7452	50/50	0.7452
315162	1KERR 5	0.7452	50/50	0.7452
315163	1KERR 6	0.7452	50/50	0.7452
315164	1KERR 7	0.7452	50/50	0.7452
316131	AB2-060 C	1.7524	50/50	1.7524
924022	AB2-043 E O1	3.2808	50/50	3.2808
924032	AB2-045 E	4.7608	50/50	4.7608
924162	AB2-060 E OP	5.2270	50/50	5.2270
924301	AB2-077 C O1 (Suspended)	2.2313	50/50	2.2313
924302	AB2-077 E O1 (Suspended)	1.4875	50/50	1.4875
924311	AB2-078 C O1 (Suspended)	2.2313	50/50	2.2313
924312	AB2-078 E O1 (Suspended)	1.4875	50/50	1.4875
924321	AB2-079 C O1 (Suspended)	2.2313	50/50	2.2313
924322	AB2-079 E O1 (Suspended)	1.4875	50/50	1.4875
925611	AC1-036 C	0.4580	50/50	0.4580
925612	AC1-036 E	1.7382	50/50	1.7382
932511	AC2-071 C (Withdrawn : 01/22/2021)	1.5857	50/50	1.5857
932512	AC2-071 E (Withdrawn : 01/22/2021)	5.0631	50/50	5.0631
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.7154	50/50	0.7154
935222	AD1-157 E (Withdrawn : 01/26/2021)	3.0229	50/50	3.0229
936265	AD2-033 C	24.1714	50/50	24.1714
936266	AD2-033 E	16.1143	50/50	16.1143
936361	AD2-046 C O1	6.9048	50/50	6.9048
936362	AD2-046 E O1	3.1752	50/50	3.1752
936485	AD2-063 C	22.4433	50/50	22.4433
936486	AD2-063 E	14.9622	50/50	14.9622
938371	AE1-056 C	19.5482	50/50	19.5482

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938372	AE1-056 E	10.6810	50/50	10.6810
939181	AE1-148 C	6.9525	50/50	6.9525
939182	AE1-148 E	4.6350	50/50	4.6350
940661	AE2-053 O1	2.5750	50/50	2.5750
942451	AE2-258	2.7372	50/50	2.7372
942461	AE2-259 C O1	37.3440	50/50	37.3440
942462	AE2-259 E O1	24.8960	50/50	24.8960
943911	AF1-059	12.7036	50/50	12.7036
946301	AF1-294 C	11.7343	50/50	11.7343
946302	AF1-294 E	7.8229	50/50	7.8229
958211	AF2-115 C	6.9026	50/50	6.9026
958212	AF2-115 E	4.6017	50/50	4.6017
958801	AF2-171 C	41.2002	50/50	41.2002
958802	AF2-171 E	27.4668	50/50	27.4668
959311	AF2-222 C	35.5030	50/50	35.5030
959312	AF2-222 E	23.7870	50/50	23.7870
961791	AG1-021 C	5.5220	50/50	5.5220
961792	AG1-021 E	3.6814	50/50	3.6814
961891	AG1-030 C	37.5642	50/50	37.5642
961892	AG1-030 E	25.0428	50/50	25.0428
962041	AG1-048 C	34.5128	50/50	34.5128
962042	AG1-048 E	23.0085	50/50	23.0085
963171	AG1-166 C	5.5220	50/50	5.5220
963172	AG1-166 E	3.6814	50/50	3.6814
963181	AG1-167 C	5.5220	50/50	5.5220
963182	AG1-167 E	3.6814	50/50	3.6814
963191	AG1-168 C	5.5220	50/50	5.5220
963192	AG1-168 E	3.6814	50/50	3.6814
963201	AG1-169 C	5.5220	50/50	5.5220
963202	AG1-169 E	3.6814	50/50	3.6814
963211	AG1-170 C	5.5220	50/50	5.5220
963212	AG1-170 E	3.6814	50/50	3.6814
963271	AG1-176 C O1	78.3861	50/50	78.3861
963272	AG1-176 E O1	52.2574	50/50	52.2574
963321	AG1-181 C O1	32.0091	50/50	32.0091
963361	AG1-185 O1	15.4869	50/50	15.4869
963641	AG1-215 C	2.5770	50/50	2.5770
963642	AG1-215 E	3.8654	50/50	3.8654
964111	AG1-272 C	5.2046	50/50	5.2046
964112	AG1-272 E	1.5458	50/50	1.5458
964121	AG1-273 C	5.2046	50/50	5.2046
964122	AG1-273 E	1.5458	50/50	1.5458
964131	AG1-274 C	5.2046	50/50	5.2046
964132	AG1-274 E	1.5458	50/50	1.5458
964241	AG1-285 C O1	17.4997	50/50	17.4997
964242	AG1-285 E O1	11.6665	50/50	11.6665
964821	AG1-345 C	2.2018	50/50	2.2018
964822	AG1-345 E	1.4679	50/50	1.4679
964841	AG1-347 C	48.8992	50/50	48.8992
964842	AG1-347 E	38.4208	50/50	38.4208
965191	AG1-384 C	5.2046	50/50	5.2046
965192	AG1-384 E	1.5458	50/50	1.5458

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965281	AG1-393 C	5.5220	50/50	5.5220
965282	AG1-393 E	3.6814	50/50	3.6814
965451	AG1-413 C O1	5.3401	50/50	5.3401
965452	AG1-413 E O1	3.5601	50/50	3.5601
965591	AG1-427 C	16.7803	50/50	16.7803
965592	AG1-427 E	11.2105	50/50	11.2105
965641	AG1-432 C O1	74.6880	50/50	74.6880
965642	AG1-432 E O1	49.7920	50/50	49.7920
965831	AG1-451	12.4480	50/50	12.4480
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	7.4688	50/50	7.4688
966862	AG1-557 E O1 (Withdrawn : 12/14/2020)	4.9792	50/50	4.9792
WEC	WEC	0.0233	Confirmed LTF	0.0233
LGEE	LGEE	0.0496	Confirmed LTF	0.0496
CPLE	CPLE	0.2539	Confirmed LTF	0.2539
CBM-W2	CBM-W2	0.9677	Confirmed LTF	0.9677
NY	NY	0.0420	Confirmed LTF	0.0420
TVA	TVA	0.1806	Confirmed LTF	0.1806
O-066	O-066	0.5855	Confirmed LTF	0.5855
SIGE	SIGE	0.0177	Confirmed LTF	0.0177
CBM-S2	CBM-S2	2.6726	Confirmed LTF	2.6726
CBM-S1	CBM-S1	0.0456	Confirmed LTF	0.0456
G-007	G-007	0.0924	Confirmed LTF	0.0924
MEC	MEC	0.1367	Confirmed LTF	0.1367
LAGN	LAGN	0.2223	Confirmed LTF	0.2223
CBM-W1	CBM-W1	0.9814	Confirmed LTF	0.9814

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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
168778746	964840	AG1-347 TAP	DVP	314268	6BRIERY	DVP	1	DVP_P1-2: LN 556-B	single	571.52	140.05	144.87	DC	27.5

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

11.6.27 Index 27

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
169989174	966790	AG1-550 TAP	DVP	314765	6MTEAGLE	DVP	1	314333 6POWHATN 230 933500 AC2-165 TAP 230 1	single	661.76	155.7	157.49	DC	11.82

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934991	AD1-131 C	0.6211	80/20	0.6211
935171	AD1-152 C O1	4.7160	80/20	4.7160
935221	AD1-157 C (Withdrawn : 01/26/2021)	0.3677	80/20	0.3677
936265	AD2-033 C	13.9386	80/20	13.9386
936361	AD2-046 C O1	5.3677	80/20	5.3677
936485	AD2-063 C	13.8276	80/20	13.8276
937481	AD2-202 C O1	1.2576	80/20	1.2576
938371	AE1-056 C	10.0480	80/20	10.0480
938821	AE1-108 C O1	34.7050	80/20	34.7050
939181	AE1-148 C	5.3606	80/20	5.3606
940661	AE2-053 O1	1.9854	80/20	1.9854
941011	AE2-092 C	28.7117	80/20	28.7117
941791	AE2-182 C	2.2763	80/20	2.2763
942451	AE2-258	1.8439	80/20	1.8439
942461	AE2-259 C O1	18.4836	80/20	18.4836
942751	AE2-291 C	3.6928	80/20	3.6928
942761	AE2-292 C O1	4.5979	80/20	4.5979
943901	AF1-058 C	0.9989	80/20	0.9989
943911	AF1-059	9.4131	80/20	9.4131
945811	AF1-246 C O1	3.3289	80/20	3.3289
946281	AF1-292 C	0.4503	80/20	0.4503
946291	AF1-293 C O1	46.3247	80/20	46.3247
946301	AF1-294 C	6.1432	80/20	6.1432
946591	AF1-323 C	11.1052	80/20	11.1052
957481	AF2-042 C	23.7780	80/20	23.7780
958131	AF2-107 C	5.0071	80/20	5.0071
958211	AF2-115 C	3.6137	80/20	3.6137
958801	AF2-171 C	21.5919	80/20	21.5919
959311	AF2-222 C	19.7380	80/20	19.7380
959751	AF2-266	4.9220	80/20	4.9220
960061	AF2-297 C	3.9955	80/20	3.9955
960081	AF2-299 C	0.7590	80/20	0.7590
960111	AF2-302 C	4.0382	80/20	4.0382
961061	AF2-397 C	49.3810	80/20	49.3810
961791	AG1-021 C	2.8909	80/20	2.8909
961801	AG1-022 C	4.0382	80/20	4.0382
961891	AG1-030 C	20.0871	80/20	20.0871
962041	AG1-048 C	18.0682	80/20	18.0682
962441	AG1-093 C O1	8.5606	80/20	8.5606
962491	AG1-098 C O1	11.2875	80/20	11.2875
962561	AG1-105 C O1	5.6502	80/20	5.6502
962741	AG1-123 C O1	3.4622	80/20	3.4622
962751	AG1-124 C O1	3.7973	80/20	3.7973
963171	AG1-166 C	2.8909	80/20	2.8909
963181	AG1-167 C	2.8909	80/20	2.8909
963191	AG1-168 C	2.8909	80/20	2.8909
963201	AG1-169 C	2.8909	80/20	2.8909
963211	AG1-170 C	2.8909	80/20	2.8909
963271	AG1-176 C O1	18.8540	80/20	18.8540
963301	AG1-179 C	2.7241	80/20	2.7241
963311	AG1-180	1.3273	80/20	1.3273
963321	AG1-181 C O1	18.3458	80/20	18.3458

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

11.7 Queue Dependencies

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

Queue Number	Project Name	Status
AA1-063	Huntsville (Cabin Creek) 69kV	Withdrawn
AA1-139	Hickory-Shawboro 230kV	In Service
AA2-053	Carolina-Jackson 115kV	In Service
AA2-074	CPL- PJM	Confirmed
AA2-165	Hornertown-Whitakers 115kV	In Service
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB2-026	Powhatan 34.5kV	In Service
AB2-040	Brink 115kV	Engineering and Procurement
AB2-043	Chase City 115kV	Under Construction
AB2-045	Buckingham 34.5kV	In Service
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
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Engineering and Procurement
AC1-036	Twittys Creek 34.5kV	Partially in Service - Under Construction
AC1-042	Altavista-Mt. Airy 69kV	Engineering and Procurement
AC1-054	Kerr Dam–Eatons Ferry 115 kV	Engineering and Procurement
AC1-075	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-080	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-086	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
AC1-147	Grassfield 34.5kV	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
AC2-012	Grassfield-Great Bridge 115kV	Active
AC2-071	Buckingham 35kV	Withdrawn
AC2-084	Dawson-South Justice 115kV	Active

Queue Number	Project Name	Status
AC2-100	Halifax-Person 230kV	Engineering and Procurement
AC2-112	Stuarts Draft-Waynesboro 115kV	Engineering and Procurement
AC2-141	Septa 500kV	Active
AC2-165	Bremo-Powhatan 230kV	Engineering and Procurement
AC2-196	Fentress 34.5kV	Engineering and Procurement
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-033	Fentress-Landstown 230 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
AD1-076	Trowbridge 230 kV	Active
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	Withdrawn
AD2-022	East Danville-Roxborough 230 kV	Active
AD2-023	E. Danville-Roxborough 230 kV	Active
AD2-033	Chase City-Lunenburg 115 kV	Active
AD2-046	Boydton DP-Kerr Dam 115 kV	Active
AD2-051	Earleys – Northampton 230kV	Active
AD2-063	Central-Chase City 115kV	Active
AD2-160	Hickory-Moyock 230kV	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
AE1-072	Shawboro-Sligo 230 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
AE1-173	Carson-Suffolk 500 kV	Active
AE1-175	Light Foot 34.5 kV	Engineering and Procurement
AE1-230	Shockoe 69 kV	Active
AE2-007	Chesapeake 230 kV	Withdrawn
AE2-031	Carson-Rawlings 500 kV	Active
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-034	Mackeys 230 kV	Active
AE2-040	Sapony 34.5 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-051	Carson-Septa 500 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-092	Kidds Store-Sherwood 115 kV	Active
AE2-094	Carson-Rogers Road 500 kV	Active
AE2-122	Birdneck-Landstown 230 kV	Active
AE2-123	Birdneck-Landstown 230 kV	Active
AE2-124	Landstown 230 kV	Active
AE2-147	Swamp 230 kV	Active
AE2-156	Yadkin 115 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

Queue Number	Project Name	Status
AE2-253	Hickory-Moyock 230 kV	Active
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active
AE2-260	Clubhouse 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
AF1-058	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
AF1-123	Fentress 500 kV	Active
AF1-124	Fentress 500 kV	Active
AF1-125	Fentress 500 kV	Active
AF1-152	Swamp 230 kV	Active
AF1-173	Gretna DP-Shockoe DP 69 kV	Active
AF1-236	Mackeys 230 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
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-047	Creswell-Riders Creek 115 kV	Active
AF2-057	Grassfield 34.5 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-081	Moyock 230 kV	Active
AF2-085	Midlothian 34.5 kV	Engineering and Procurement
AF2-107	Clifford 138 kV	Active
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
AF2-403	Shockoe DP-Chatham 69 kV	Active
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-022	Scottsville-Colleen 138 kV	Active
AG1-030	Victoria DP-Martin DP 115 kV	Active
AG1-036	Tunis 34.5 kV	Active
AG1-037	Ahoskie 34.5 kV	Active

Queue Number	Project Name	Status
AG1-048	Jetersville-Ponton 115 kV	Active
AG1-082	Ahoskie 34.5 kV	Active
AG1-083	Ahoskie 34.5 kV	Active
AG1-084	Earlys 34.5 kV	Active
AG1-085	Earlys 34.5	Active
AG1-093	Halifax-Chase City 115 kV	Active
AG1-098	Briery-Clover 230 kV	Active
AG1-105	Clover-Sedge Hill 230 kV	Active
AG1-106	Thelma 230 kV	Active
AG1-123	Amherst-Riverville138 kV	Active
AG1-124	Gladstone 138 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
AG1-178	Carson-Septa 500 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
AG1-215	Fort Pickett 13.2 kV	Active
AG1-235	Fentress-Sligo 230 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-Oconechee 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

Queue Number	Project Name	Status
AG1-426	Bremo-Scottsville 138 kV	Active
AG1-427	Chase City-Drakes Branch 115 kV	Active
AG1-428	Danielstown 69 kV	Active
AG1-431	Mackeys 230 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
AG1-494	Boxwood-Riverville 138 kV	Active
AG1-505	Rawlings-Clover 500 kV	Active
AG1-506	Rawlings-Clover 500 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-539	Grit DP-Perth 115 kV	Active
AG1-546	Ebony-Elams Road 115 kV	Active
AG1-547	Mount Airy-Chatham 69 kV	Active
AG1-550	Mount Eagle-Fork Union 230 kV	Active
AG1-551	Parmeles 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

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
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_P1-2: LN 2028-B	CONTINGENCY 'DVP_P1-2: LN 2028-B' OPEN BRANCH FROM BUS 966790 TO BUS 314765 CKT 1 /* AF2-397 TAP 230.00 - 6MTEAGLE 230.00 OPEN BRANCH FROM BUS 314749 TO BUS 314765 CKT 1 /* 6CHARLVL 230.00 - 6MTEAGLE 230.00 OPEN BUS 314765 /* ISLAND: 6MTEAGLE 230.00 OPEN BUS 926451 /* ISLAND: AC1-116 C 230.00 OPEN BUS 926452 /* ISLAND: AC1-116 E 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 298	CONTINGENCY 'DVP_P1-2: LN 298' OPEN BRANCH FROM BUS 314677 TO BUS 314692 CKT 1 /* 6BUCKING 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 2 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 314677 /* ISLAND: 6BUCKING 230.00 OPEN BUS 924032 /* ISLAND: AB2-045 E 230.00 OPEN BUS 932511 /* ISLAND: AC2-071 C 230.00 OPEN BUS 932512 /* ISLAND: AC2-071 E 230.00 END
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

Contingency Name	Contingency Definition
DVP_P1-2: LN 2027	CONTINGENCY 'DVP_P1-2: LN 2027' OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 933500 CKT 1 /* 6CARTERV 230.00 - AC2-165 TAP 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314322 CKT 1 /* 6JUDES F 230.00 - 6MDLTHAN 230.00 OPEN BRANCH FROM BUS 314310 TO BUS 314333 CKT 1 /* 6JUDES F 230.00 - 6POWHATN 230.00 OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 /* 6POWHATN 230.00 - AC2-165 TAP 230.00 OPEN BUS 313868 /* ISLAND: 6CARTERV 230.00 OPEN BUS 314310 /* ISLAND: 6JUDES F 230.00 OPEN BUS 314333 /* ISLAND: 6POWHATN 230.00 OPEN BUS 923862 /* ISLAND: AB2-026 E 230.00 OPEN BUS 938561 /* ISLAND: AE1-075 C 230.00 OPEN BUS 938562 /* ISLAND: AE1-075 E 230.00 OPEN BUS 933500 /* ISLAND: AC2-165 TAP 230.00 OPEN BUS 933501 /* ISLAND: AC2-165 C 230.00 OPEN BUS 933502 /* ISLAND: AC2-165 E 230.00 END
Base Case	
DVP_P7-1: LN 5-2028-C	CONTINGENCY 'DVP_P7-1: LN 5-2028-C' /* . OPEN BRANCH FROM BUS 314744 TO BUS 314754 CKT 1 /* 3BREMO 115.00 - 3CUNNING 115.00 OPEN BUS 314754 /* ISLAND: 3CUNNING 115.00 OPEN BRANCH FROM BUS 966790 TO BUS 314765 CKT 1 /* AG1-550 TAP 230.00 - 6MTEAGLE 230.00 OPEN BRANCH FROM BUS 314749 TO BUS 314765 CKT 1 /* 6CHARLVL 230.00 - 6MTEAGLE 230.00 OPEN BUS 314765 /* ISLAND: 6MTEAGLE 230.00 OPEN BUS 926451 /* ISLAND: AC1-116 C 230.00 OPEN BUS 926452 /* ISLAND: AC1-116 E 230.00 END
314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1	CONTINGENCY '314765 6MTEAGLE 230 966790 AG1-550 TAP 230 1' OPEN BRANCH FROM BUS 314765 TO BUS 966790 CKT 1 END
314333 6POWHATN 230 933500 AC2-165 TAP 230 1	CONTINGENCY '314333 6POWHATN 230 933500 AC2-165 TAP 230 1' OPEN BRANCH FROM BUS 314333 TO BUS 933500 CKT 1 END

12 Short Circuit Analysis

The following Breakers are overdutied:

None.

12.1 System Reinforcements - Short Circuit

None.

13 Affected Systems

13.1 TVA

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

13.2 Duke Energy Progress

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

14 Attachment 1: One Line Diagram