



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-179
BRUNSWICK 69 KV
33.66 MW Capacity / 50 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.

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

3 General

The Interconnection Customer (IC), has proposed a Solar generating facility located in Sussex County, Virginia. The installed facilities will have a total capability of 50 MW with 33.66 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is June 30, 2023. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-179
Project Name	BRUNSWICK 69 KV
State	Virginia
County	Sussex
Transmission Owner	Dominion
MFO	50
MWE	50
MWC	33.66
Fuel	Solar
Basecase Study Year	2024

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

4 Point of Interconnection

AG1-179 will interconnect with the Dominion transmission system. The POI will be a newly constructed 69 kV three breaker ring bus located on the line between the Brunswick substation and Gasburg 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.

5 Cost Summary

The AG1-179 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 8,800,000
Total System Network Upgrade Costs	\$ 232,528,000 ¹
Total Costs	\$ 241,328,000

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

AG1-179 "Brunswick-Gasburg 69 kV" will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 69 kV three breaker ring bus located on the line between the Brunswick substation and Gasburg substation.

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

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

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

Description	Total Cost
Attachment Facilities	\$ 1,700,000
69 kV Three Breaker Ring-Bus Substation	\$ 5,500,000
Re-arrange line and tie-in new substation	\$ 1,600,000
Total Physical Interconnection Costs	\$ 8,800,000

7 Schedule

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

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

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

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-179 for compliance with NERC Reliability Criteria on the Dominion Transmission System. The system was assessed using the summer 2024 AG1 case provided to Dominion by PJM.

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

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

8.1 Power Flow Analysis

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

9 Interconnection Customer Requirements

9.1 System Protection

The IC must design its Customer Facilities in accordance with all applicable standards, including the standards in Dominion's "Dominion Energy Electric Transmission Generator Interconnection Requirements" documented in Dominion's Facility Interconnection Requirements "Exhibit C" located at:

<https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>. Preliminary Protection requirements will be provided as part of the Facilities Study. Detailed Protection Requirements will be provided once the project enters the construction phase.

9.2 Compliance Issues and Interconnection Customer Requirements

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

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

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

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

9.3 Power Factor Requirements

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

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

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

10.2 Meteorological Data Reporting Requirements

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

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

10.3 Interconnected Transmission Owner Requirements

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

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

11 Summer Peak - Load Flow Analysis

The Queue Project AG1-179 was evaluated as a 50.0 MW (Capacity 33.7 MW) injection tapping the Brunswick to Gasburg 69 kV line in the Dominion area. Project AG1-179 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-179 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 LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169365401	314782	2BRUNWICK	69.0	DVP	314676	3BRUNWICK	115.0	DVP	1	DVP_P1-2: LN 132-B	single	31.3960018158	0.0	107.21	DC	33.66

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 LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168386700	313755	3FLAT CREEK	115.0	DVP	314707	3MORAN	115.0	DVP	1	Base Case	single	203.979995728	101.15	102.35	DC	2.45
163176115	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P7-1: LN 54-2012-B	tower	830.0	145.76	147.16	DC	11.6
163176116	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P7-1: LN 54-2012-A	tower	830.0	145.68	147.08	DC	11.6
168689040	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 2012-B	single	678.679992676	131.14	132.8	DC	11.3
168689041	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	314266 6NORTHAMP TON 230 936400 AD2-051 TAP 230 1	single	678.679992676	128.12	129.78	DC	11.3
168689042	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	single	678.679992676	112.28	113.8	DC	10.29
168955380	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	single	239.888000488	110.18	111.41	DC	2.96
168955381	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 140	single	239.888000488	104.59	105.83	DC	2.96
168955484	314561	6CAROLNA	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	DVP_P1-2: LN 238-A	single	548.020019531	101.02	102.21	DC	6.5
168955485	314561	6CAROLNA	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	548.020019531	101.0	102.19	DC	6.5
168955325	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	175.74	182.84	DC	12.97
168955326	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 130	single	182.641998291	121.99	132.11	DC	18.47
168955327	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	113.07	121.04	DC	14.1
163175861	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	130.9	132.17	DC	10.5
163176120	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	135.86	137.16	DC	10.76

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
1631761 21	3145 63	6CLUBH SE	230. 0	DVP	9404 80	AE2-033 TAP	230. 0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	830.0	124.04	125.31	DC	10.47
1689554 24	3145 63	6CLUBH SE	230. 0	DVP	9404 80	AE2-033 TAP	230. 0	DVP	1	DVP_P1-2: LN 2056-A	single	678.679992 676	117.5	118.87	DC	11.33
1689554 25	3145 63	6CLUBH SE	230. 0	DVP	9404 80	AE2-033 TAP	230. 0	DVP	1	DVP_P1-2: LN 2012-B	single	678.679992 676	113.55	115.15	DC	11.3
1689554 26	3145 63	6CLUBH SE	230. 0	DVP	9404 80	AE2-033 TAP	230. 0	DVP	1	Base Case	single	678.679992 676	100.68	102.1	DC	10.3
1689554 40	3145 79	6HORN TN	230. 0	DVP	9343 30	AD1-057 TAP	230. 0	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	441.799987 793	112.51	113.96	DC	6.41
1689554 41	3145 79	6HORN TN	230. 0	DVP	9343 30	AD1-057 TAP	230. 0	DVP	1	DVP_P1-2: LN 238-A	single	441.799987 793	112.49	113.94	DC	6.41
1686891 75	3145 99	6ROA VAL	230. 0	DVP	3142 66	6NORTHAMP TON	230. 0	DVP	1	DVP_P1-2: LN 238-A	single	548.020019 531	100.97	102.15	DC	6.5
1686891 76	3145 99	6ROA VAL	230. 0	DVP	3142 66	6NORTHAMP TON	230. 0	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	548.020019 531	100.95	102.13	DC	6.5
1691469 35	3146 91	3FARMV IL	115. 0	DVP	3146 92	6FARMVIL	230. 0	DVP	2	DVP_P1-2: LN 235-A	single	182.641998 291	201.1	203.21	DC	3.87
1691469 38	3146 91	3FARMV IL	115. 0	DVP	3146 92	6FARMVIL	230. 0	DVP	2	Base Case	single	176.814010 62	116.48	117.84	DC	2.4
1691469 46	3146 91	3FARMV IL	115. 0	DVP	3146 92	6FARMVIL	230. 0	DVP	1	DVP_P1-2: LN 298	single	198.057998 657	124.75	126.31	DC	3.09
1691470 05	3146 96	3SEEDGE HILL	115. 0	DVP	3146 97	6SEEDGE HILL	230. 0	DVP	1	DVP_P1-3: 6SEEDGE HILL-TX#2	single	226.727996 826	114.6	116.27	DC	3.77
1691470 21	3146 96	3SEEDGE HILL	115. 0	DVP	3146 97	6SEEDGE HILL	230. 0	DVP	2	DVP_P1-3: 6SEEDGE HILL-TX#1	single	256.055999 756	101.17	102.64	DC	3.76
1683866 95	3147 01	3LONEP N	115. 0	DVP	3137 55	3FLAT CREEK	115. 0	DVP	1	Base Case	single	203.979995 728	101.15	102.35	DC	2.45
1635956 41	3147 02	3KERR	115. 0	DVP	3041 02	3GW KING TAP	115. 0	CPL E	1	DVP_P4-6: CAROLIN T122	break er	199.0	151.37	152.13	DC	3.44
1635956 42	3147 02	3KERR	115. 0	DVP	3041 02	3GW KING TAP	115. 0	CPL E	1	DVP_P4-2: 13002	break er	199.0	129.86	130.55	DC	3.06
1635956 43	3147 02	3KERR	115. 0	DVP	3041 02	3GW KING TAP	115. 0	CPL E	1	DVP_P4-2: 102802	break er	199.0	129.86	130.55	DC	3.06
1635965 16	3147 02	3KERR	115. 0	DVP	3041 02	3GW KING TAP	115. 0	CPL E	1	DVP_P7-1: LN 22-90	tower	199.0	148.63	149.34	DC	3.17
1691469 43	3147 26	3WILLIS	115. 0	DVP	3146 91	3FARMVIL	115. 0	DVP	1	Base Case	single	186.119995 117	102.63	103.64	DC	1.88
1689554 76	9364 00	AD2-051 TAP	230. 0	DVP	3145 69	6EARLEYS	230. 0	DVP	1	DVP_P1-2: LN 238-A	single	571.520019 531	105.68	106.82	DC	6.5
1689554 77	9364 00	AD2-051 TAP	230. 0	DVP	3145 69	6EARLEYS	230. 0	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	571.520019 531	105.66	106.8	DC	6.5
1631761 00	9404 80	AE2-033 TAP	230. 0	DVP	3144 35	6SAPONY	230. 0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	146.51	147.81	DC	10.76
1631761 01	9404 80	AE2-033 TAP	230. 0	DVP	3144 35	6SAPONY	230. 0	DVP	1	DVP_P7-1: LN 54-2012-B	tower	830.0	144.07	145.48	DC	11.6
1696098 26	9404 80	AE2-033 TAP	230. 0	DVP	3144 35	6SAPONY	230. 0	DVP	1	DVP_P1-2: LN 2012-B	single	678.679992 676	129.38	130.96	DC	11.3
1696098 27	9404 80	AE2-033 TAP	230. 0	DVP	3144 35	6SAPONY	230. 0	DVP	1	314266 6NORTHAMP TON 230 936400 AD2-051 TAP 230 1	single	678.679992 676	126.37	127.94	DC	11.3

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
169609828	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	single	678.679992676	111.47	112.98	DC	10.3

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
168386896	313725	6DRY BREAD	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	375.059997559	131.87	134.95	DC	11.57
168386897	313725	6DRY BREAD	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	375.059997559	131.87	134.95	DC	11.57
168386911	313825	3PLYWOOD	115.0	DVP	314696	3SEGE HILL	115.0	DVP	1	DVP_P 1-2: LN 33	operati on	141.0	99.69	100.64	DC	2.96
168689209	314266	6NORTHAMP TON	230.0	DVP	936400	AD2-051 TAP	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	571.520019531	127.95	129.09	DC	6.5
168689037	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P 1-2: LN 2012-B	operati on	678.679992676	176.78	178.45	DC	11.3
168689039	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	operati on	678.679992676	158.43	159.95	DC	10.29
168955377	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P 1-2: LN 68-A	operati on	239.888000488	156.7	157.25	DC	2.96
168955379	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operati on	226.539993286	113.95	114.47	DC	2.6
168955482	314561	6CAROLNA	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	548.020019531	132.09	133.28	DC	6.5
168955323	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P 1-2: LN 2201	operati on	182.641998291	219.46	226.57	DC	12.97
168955324	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operati on	176.81401062	153.62	161.59	DC	14.1

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 PROJE CT LOADING %	POST PROJE CT LOADING %	AC/DC	MW IMPACT
168386974	314563	6CLUBHSE	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	375.059997559	113.35	116.44	DC	11.59
168955421	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P 1-2: LN 2056-A	operation	678.679992676	157.17	158.85	DC	11.33
168955423	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	Base Case	operation	678.679992676	150.68	152.2	DC	10.3
168955438	314579	6HORNRTN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	441.799987793	155.18	156.64	DC	6.41
168955517	314583	6LAKEVEW	230.0	DVP	314579	6HORNRTN	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	441.799987793	112.02	113.48	DC	6.44
168689173	314599	6ROA VAL	230.0	DVP	314266	6NORTHAMPTON	230.0	DVP	1	DVP_P 1-2: LN 238-A	operation	548.020019531	132.03	133.22	DC	6.5
169146933	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P 1-2: LN 235-A	operation	182.641998291	314.55	315.5	DC	3.87
169146936	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	operation	176.81401062	194.27	194.88	DC	2.4
169146944	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P 1-2: LN 298	operation	198.057998657	224.46	225.16	DC	3.09
169147003	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	1	DVP_P 1-3: 6SEEDGE HILL-TX#2	operation	226.727996826	183.54	184.29	DC	3.77
169147019	314696	3SEEDGE HILL	115.0	DVP	314697	6SEEDGE HILL	230.0	DVP	2	DVP_P 1-3: 6SEEDGE HILL-TX#1	operation	256.055999756	162.03	162.69	DC	3.76
163595849	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	DVP_P 1-2: LN 90	operation	199.0	120.58	121.25	DC	2.98
163595850	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	Base Case	operation	191.0	115.03	115.71	DC	2.87
169365402	314782	2BRUNWICK	69.0	DVP	314676	3BRUNWICK	115.0	DVP	1	DVP_P 1-2: LN 132-B	operation	31.3960018158	0.0	107.21	DC	33.66
168955474	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P 1-2: LN 238-A	operation	571.520019531	136.96	138.1	DC	6.5
169609823	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P 1-2: LN 2012-B	operation	678.679992676	177.22	178.89	DC	11.3
169609825	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	operation	678.679992676	160.69	162.21	DC	10.3

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
169146946	11	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 1	<u>DVP</u> dom-089 (1275) : Add additional 230/115 kV transformer at Farmville substation Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
169146935,169146938	10	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 2		
169147021	13	3SEEDGE HILL 115.0 kV - 6SEEDGE HILL 230.0 kV Ckt 2	<u>DVP</u> dom-046 (1225) : Add additional 230/115 kV transformer at Sedge Hill substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
169147005	12	3SEEDGE HILL 115.0 kV - 6SEEDGE HILL 230.0 kV Ckt 1		
169365401	1	2BRUNWICK 69.0 kV - 3BRUNWICK 115.0 kV Ckt 1	<u>DVP</u> dom-371 (1598) : Add additional 115/69 kV transformer at Brunswick substation. Project Type : CON Cost : \$7,000,000 Time Estimate : 16-18 Months	\$7,000,000
168955380,168955381	4	3CAROLNA 115.0 kV - 6CAROLNA 230.0 kV Ckt 1	<u>DVP</u> n6113 (1383) : Add additional 230/115 kV transformer at Carolina substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
169609827,163176100,163176101,169609828,169609826	18	AE2-033 TAP 230.0 kV - 6SAPONY 230.0 kV Ckt 1	<u>DVP</u> n6452 (1231) : Rebuild 2.47 miles of 230 kV Line 238 from AE2-033 TAP to Sapony with 2-795 150C ACSR. Project Type : FAC Cost : \$3,705,000 Time Estimate : 30-36 Months	\$3,705,000
168955326,168955327,168955325	6	3CLUBHSE 115.0 kV - 6CLUBHSE 230.0 kV Ckt 1	<u>DVP</u> n6114 (1384) : Add additional 230/115 kV transformer at Clubhouse substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000

ID	Idx	Facility	Upgrade Description	Cost
168955485,168955484	5	6CAROLNA 230.0 kV - 6ROA VAL 230.0 kV Ckt 1	<u>DVP</u> dom-107 (1300) : Rebuild 4.06 miles of 230 kV Line 2060 from Carolina to Roanoke Valley with 2-636 ACSR. Project Type : FAC Cost : \$10,150,000 Time Estimate : 30-36 Months	\$10,150,000
163176120,163176121,163175861,168955425,168955424,168955426	7	6CLUBHSE 230.0 kV - AE2-033 TAP 230.0 kV Ckt 1	<u>DVP</u> n6872 (1227) : Rebuild 14.28 miles of 230 kV Line 238 from Clubhouse to AE2-033 Tap with 2-795 150C ACSR. Project Type : FAC Cost : \$21,420,000 Time Estimate : 30-36 Months	\$21,420,000
168689042,168689041,168689040,163176115,163176116	3	6SAPONY 230.0 kV - 6CARSON 230.0 kV Ckt 1	<u>DVP</u> n6221 (1420) : Rebuild 11.79 miles of 230 kV Line 238 from Sapony to Carson with 2-795 150C ACSR. Project Type : FAC Cost : \$17,685,000 Time Estimate : 30-36 Months	\$17,685,000
168386695	14	3LONEPN 115.0 kV - 3FLAT CREEK 115.0 kV Ckt 1	<u>DVP</u> dom-271 (1498) : Rebuild 70 miles of 115 kV lines (158, 84, 154, 1012) from Chase City to Lone Pine with 2-636 ACSR 150 C.	\$109,470,000
168386700	2	3FLAT CREEK 115.0 kV - 3MORAN 115.0 kV Ckt 1	Line 84: - Willis Mountain terminal: Replace Line Switch - Farmville terminal: Replace Breaker Switch, Breaker Lead, Line Lead, Wave Trap - Pamplin terminal: Replace Wave Trap, Line Lead and Relay (Secondary CT)	
169146943	16	3WILLIS 115.0 kV - 3FARMVIL 115.0 kV Ckt 1	Line 154: - Twitty's Creek terminal: Replace Wave Trap and Line Lead - Madisonville terminal: Replace Line Switch - Pamplin terminal: Replace Wave Trap and Line Lead Line 158: - Farmville terminal: Replace Breaker Switch, Breaker Lead - Moran DP terminal: Replace Line Switch - Lone Pine terminal: Replace Wave Trap Line 1012: - Chase City terminal: Replace Breaker, Breaker switch, Breaker Lead and Wave Trap - Central terminal: Replace Line Switch - Twitty's Creek terminal: Replace Wave Trap Project Type : FAC Cost : \$109,470,000 Time Estimate : 60-72 Months	

ID	Idx	Facility	Upgrade Description	Cost
168689176,168689175	9	6ROA VAL 230.0 kV - 6NORTHAMPTON 230.0 kV Ckt 1	<u>DVP</u> dom-106 (1299) : Rebuild 2.87 miles of 230 kV Line 2012 from Roanoke Valley to Northampton with 2-636 ACSR. Project Type : FAC Cost : \$7,175,000 Time Estimate : 30-36 Months	\$7,175,000
168955441,168955440	8	6HORNRTN 230.0 kV - AD1-057 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-077 (1262) : Rebuild 16 miles of 230 kV Line 2056 from Hornertown to AD1-057 TAP with 2-636 ACSR. Project Type : FAC Cost : \$24,000,000 Time Estimate : 36-40 Months	\$24,000,000
168955476,168955477	17	AD2-051 TAP 230.0 kV - 6EARLEYS 230.0 kV Ckt 1	<u>DVP</u> dom-236 (1463) : Rebuild 1.2 miles of 230 kV line 2012 from AD2-051 Tap to Earleys with 2-636 ACSR. Project Type : FAC Cost : \$1,800,000 Time Estimate : 30-36 Months	\$1,800,000
163595642,163595643,163595641,163596516	15	3KERR 115.0 kV - 3GW KING TAP 115.0 kV Ckt 1	<u>DVP</u> n6115 (1172) : For DEV portion, rebuild 4.7 miles of 115 kV Line 45 from Kerr Dam to GW King Tap with 768 ACSS. Project Type : FAC Cost : \$6,123,000 Time Estimate : 30-36 Months	\$6,123,000
			TOTAL COST	\$232,528,000

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
169365401	314782	2BRUNWICK	DVP	314676	3BRUNWICK	DVP	1	DVP_P1-2: LN 132-B	single	31.4	0.0	107.21	DC	33.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963301	AG1-179 C	33.6600	80/20	33.6600
963311	AG1-180	16.4000	80/20	16.4000

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
168386700	313755	3FLAT CREEK	DVP	314707	3MORAN	DVP	1	Base Case	single	203.98	101.15	102.35	DC	2.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4009	80/20	0.4009
314429	3JTRSVLE	1.3977	80/20	1.3977
314704	3LAWRENC	0.1117	80/20	0.1117
315158	1KERR 1	0.1906	80/20	0.1906
315159	1KERR 2	0.5337	80/20	0.5337
315160	1KERR 3	0.5337	80/20	0.5337
315161	1KERR 4	0.5337	80/20	0.5337
315162	1KERR 5	0.5337	80/20	0.5337
315163	1KERR 6	0.5337	80/20	0.5337
315164	1KERR 7	0.5337	80/20	0.5337
316118	AC1-105 C	1.8185	80/20	1.8185
316129	AC1-054 C	2.5725	80/20	2.5725
316131	AB2-060 C	1.2911	80/20	1.2911
924301	AB2-077 C O1 (Suspended)	1.5502	80/20	1.5502
924311	AB2-078 C O1 (Suspended)	1.5502	80/20	1.5502
924321	AB2-079 C O1 (Suspended)	1.5502	80/20	1.5502
925611	AC1-036 C	0.0731	80/20	0.0731
936265	AD2-033 C	24.7221	80/20	24.7221
936361	AD2-046 C O1	4.9041	80/20	4.9041
936485	AD2-063 C	9.3060	80/20	9.3060
939181	AE1-148 C	4.9324	80/20	4.9324
940661	AE2-053 O1	1.8268	80/20	1.8268
942451	AE2-258	1.8956	80/20	1.8956
943911	AF1-059	8.9330	80/20	8.9330
946301	AF1-294 C	14.1193	80/20	14.1193
958211	AF2-115 C	8.3055	80/20	8.3055
961791	AG1-021 C	6.6444	80/20	6.6444
961891	AG1-030 C	43.7661	80/20	43.7661
962041	AG1-048 C	41.5275	80/20	41.5275
962441	AG1-093 C O1	4.8493	80/20	4.8493
963171	AG1-166 C	6.6444	80/20	6.6444
963181	AG1-167 C	6.6444	80/20	6.6444
963191	AG1-168 C	6.6444	80/20	6.6444
963201	AG1-169 C	6.6444	80/20	6.6444
963211	AG1-170 C	6.6444	80/20	6.6444
963301	AG1-179 C	2.4494	80/20	2.4494
963311	AG1-180	1.1934	80/20	1.1934
963321	AG1-181 C O1	6.6325	80/20	6.6325
963361	AG1-185 O1	3.2090	80/20	3.2090

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963641	AG1-215 C	3.1007	80/20	3.1007
964111	AG1-272 C	0.8308	80/20	0.8308
964121	AG1-273 C	0.8308	80/20	0.8308
964131	AG1-274 C	0.8308	80/20	0.8308
964241	AG1-285 C O1	8.4308	80/20	8.4308
964791	AG1-342 C	1.8711	80/20	1.8711
964821	AG1-345 C	2.6467	80/20	2.6467
965191	AG1-384 C	0.8308	80/20	0.8308
965281	AG1-393 C	6.6444	80/20	6.6444
965451	AG1-413 C O1	3.7551	80/20	3.7551
965591	AG1-427 C	7.8857	80/20	7.8857
965601	AG1-428 C O1	2.0448	80/20	2.0448
965721	AG1-440 C	3.2508	80/20	3.2508
965731	AG1-441 C	3.2508	80/20	3.2508
965771	AG1-445	1.8782	80/20	1.8782
965781	AG1-446	1.8782	80/20	1.8782
966751	AG1-546 C	5.3496	80/20	5.3496
WEC	WEC	0.0372	Confirmed LTF	0.0372
LGEE	LGEE	0.0760	Confirmed LTF	0.0760
CPL	CPL	0.5255	Confirmed LTF	0.5255
CBM-W2	CBM-W2	1.7830	Confirmed LTF	1.7830
NY	NY	0.0553	Confirmed LTF	0.0553
TVA	TVA	0.3458	Confirmed LTF	0.3458
SIGE	SIGE	0.0256	Confirmed LTF	0.0256
CBM-S2	CBM-S2	5.8255	Confirmed LTF	5.8255
CBM-S1	CBM-S1	0.0851	Confirmed LTF	0.0851
MEC	MEC	0.2320	Confirmed LTF	0.2320
LAGN	LAGN	0.4305	Confirmed LTF	0.4305
CBM-W1	CBM-W1	1.5422	Confirmed LTF	1.5422

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
163176116	314435	6SAPONY	DVP	314282	6CARSON	DVP	1	DVP_P7-1: LN 54-2012-A	tower	830.0	145.68	147.08	DC	11.6

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	15.9455	50/50	15.9455
313719	3CHESTNUT	1.3128	50/50	1.3128
314435	6SAPONY	1.6670	50/50	1.6670
314572	3EMPORIA	1.1087	50/50	1.1087
314623	3WITAKRS	0.2342	50/50	0.2342
314704	3LAWRENC	0.6439	50/50	0.6439
315126	1ROARAP2	2.4418	50/50	2.4418
315128	1ROARAP4	2.3301	50/50	2.3301
315131	1EDGECEMA (Deactivation : 22/04/2019)	8.3731	Adder	9.85
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.8507	50/50	9.8507
315136	1ROSEMG1	4.5526	50/50	4.5526
315137	1ROSEMS1	2.8231	50/50	2.8231
315138	1ROSEMG2	2.1337	50/50	2.1337
315139	1GASTONA	7.0342	50/50	7.0342
315141	1GASTONB	7.0342	50/50	7.0342
315606	3AA2-053SOLA	2.6601	50/50	2.6601
315607	3AA1-063SOLA	1.9920	50/50	1.9920
316087	AB2-174 C	2.7335	50/50	2.7335
316088	AB2-174 E	15.6758	50/50	15.6758
316096	AB2-100 C1	3.0147	50/50	3.0147
316097	AB2-100 E1	9.4114	50/50	9.4114
316098	AB2-100 C2	3.0147	50/50	3.0147
316099	AB2-100 E2	9.4114	50/50	9.4114
316129	AC1-054 C	10.1945	50/50	10.1945
900672	V4-068 E	0.1993	Adder	0.23
917332	Z2-043 E	0.6197	Adder	0.73
917342	Z2-044 E	0.6361	50/50	0.6361
917512	Z2-088 E OP1	5.4041	Adder	6.36
918492	AA1-063AE OP	5.9534	50/50	5.9534
919692	AA2-053 E OP	6.9228	50/50	6.9228
919702	AA2-057 E OP	3.9278	50/50	3.9278
920042	AA2-088 E OP	7.8586	Adder	9.25
920591	AA2-165 C	0.1762	50/50	0.1762
920592	AA2-165 E	0.5398	50/50	0.5398
922923	AB1-081 E OP	3.4203	Adder	4.02
923262	AB1-132 C OP (Suspended)	34.0469	50/50	34.0469
923263	AB1-132 E OP (Suspended)	14.5915	50/50	14.5915

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923573	AB1-173 E OP	2.4865	50/50	2.4865
923852	AB2-025 E	4.7471	50/50	4.7471
923991	AB2-040 C O1	17.3664	50/50	17.3664
923992	AB2-040 E O1	14.2088	50/50	14.2088
924022	AB2-043 E O1	2.1548	Adder	2.54
924152	AB2-059 E OP	4.8454	Adder	5.7
924162	AB2-060 E OP	3.2111	Adder	3.78
924301	AB2-077 C O1 (Suspended)	1.5117	Adder	1.78
924302	AB2-077 E O1 (Suspended)	1.0078	Adder	1.19
924311	AB2-078 C O1 (Suspended)	1.5117	Adder	1.78
924312	AB2-078 E O1 (Suspended)	1.0078	Adder	1.19
924321	AB2-079 C O1 (Suspended)	1.5117	Adder	1.78
924322	AB2-079 E O1 (Suspended)	1.0078	Adder	1.19
925591	AC1-034 C	6.0923	Adder	7.17
925592	AC1-034 E	4.5960	Adder	5.41
925612	AC1-036 E	0.5109	Adder	0.6
925785	AC1-054 E	4.6963	50/50	4.6963
926070	AC1-086 C	50.1381	50/50	50.1381
926071	AC1-086 E	22.8195	50/50	22.8195
926201	AC1-098 C	6.5680	50/50	6.5680
926202	AC1-098 E	3.9128	50/50	3.9128
926211	AC1-099 C	2.2010	50/50	2.2010
926212	AC1-099 E	1.2926	50/50	1.2926
927024	AC1-189 C	5.1940	Adder	6.11
927025	AC1-189 E	2.5873	Adder	3.04
927145	AC1-208 C	11.7132	50/50	11.7132
927146	AC1-208 E	5.1800	50/50	5.1800
932631	AC2-084 C	9.3628	50/50	9.3628
932632	AC2-084 E	4.6116	50/50	4.6116
934331	AD1-057 C O1	16.7913	50/50	16.7913
934332	AD1-057 E O1	8.9572	50/50	8.9572
936265	AD2-033 C	8.1576	Adder	9.6
936266	AD2-033 E	5.4384	Adder	6.4
936361	AD2-046 C O1	7.6307	Adder	8.98
936362	AD2-046 E O1	3.5090	Adder	4.13
936485	AD2-063 C	10.4935	Adder	12.35
936486	AD2-063 E	6.9957	Adder	8.23
939181	AE1-148 C	7.4927	Adder	8.81
939182	AE1-148 E	4.9951	Adder	5.88
940481	AE2-033 C	65.8511	50/50	65.8511
940482	AE2-033 E	44.3940	50/50	44.3940
940541	AE2-040	12.0209	50/50	12.0209
940571	AE2-044 C	3.9903	Adder	4.69
940572	AE2-044 E	1.7101	Adder	2.01
940661	AE2-053 O1	2.7751	Adder	3.26
942451	AE2-258	1.7978	Adder	2.12
942471	AE2-260 C O1	48.8774	50/50	48.8774

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942472	AE2-260 E O1	69.3266	50/50	69.3266
943911	AF1-059	28.7720	50/50	28.7720
944141	AF1-082	2.5652	Adder	3.02
946011	AF1-266	55.1225	50/50	55.1225
946281	AF1-292 C	4.1202	50/50	4.1202
946282	AF1-292 E	2.7776	50/50	2.7776
957521	AF2-046 C	10.5987	Adder	12.47
957522	AF2-046 E	5.3312	Adder	6.27
957861	AF2-080 C	4.7174	Adder	5.55
957862	AF2-080 E	2.0912	Adder	2.46
959311	AF2-222 C	9.5736	Adder	11.26
959312	AF2-222 E	6.4143	Adder	7.55
960081	AF2-299 C	6.9441	50/50	6.9441
960082	AF2-299 E	4.6294	50/50	4.6294
961671	AG1-007 C	0.4819	Adder	1.07
961672	AG1-007 E	0.2691	Adder	0.6
961681	AG1-008 C	5.6285	Adder	12.49
961682	AG1-008 E	2.8143	Adder	6.25
962571	AG1-106 C	13.9430	50/50	13.9430
962572	AG1-106 E	6.3230	50/50	6.3230
963301	AG1-179 C	11.5979	50/50	11.5979
963311	AG1-180	5.6508	50/50	5.6508
963321	AG1-181 C O1	5.5351	Adder	12.29
963361	AG1-185 O1	2.6780	Adder	5.94
964111	AG1-272 C	0.8107	Adder	1.8
964112	AG1-272 E	0.2408	Adder	0.53
964121	AG1-273 C	0.8107	Adder	1.8
964122	AG1-273 E	0.2408	Adder	0.53
964131	AG1-274 C	0.8107	Adder	1.8
964132	AG1-274 E	0.2408	Adder	0.53
964241	AG1-285 C O1	4.7603	Adder	10.57
964242	AG1-285 E O1	3.1735	Adder	7.04
964501	AG1-313 C O1	8.4920	50/50	8.4920
964502	AG1-313 E O1	5.6613	50/50	5.6613
964801	AG1-343 C	2.4025	Adder	5.33
964802	AG1-343 E	1.8877	Adder	4.19
965191	AG1-384 C	0.8107	Adder	1.8
965192	AG1-384 E	0.2408	Adder	0.53
965291	AG1-394 C	0.8460	Adder	1.88
965292	AG1-394 E	0.5640	Adder	1.25
965451	AG1-413 C O1	12.0947	50/50	12.0947
965452	AG1-413 E O1	8.0631	50/50	8.0631
965591	AG1-427 C	4.4929	Adder	9.97
965592	AG1-427 E	3.0016	Adder	6.66
965601	AG1-428 C O1	9.6821	50/50	9.6821
965602	AG1-428 E O1	6.4433	50/50	6.4433
965711	AG1-439 C O1	8.6618	Adder	19.23
965712	AG1-439 E O1	5.7745	Adder	12.82
965721	AG1-440 C	8.5239	50/50	8.5239
965722	AG1-440 E	5.6826	50/50	5.6826
965731	AG1-441 C	8.5239	50/50	8.5239
965732	AG1-441 E	5.6826	50/50	5.6826

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965761	AG1-444 O1	4.6196	Adder	10.25
965771	AG1-445	4.9249	50/50	4.9249
965781	AG1-446	4.9249	50/50	4.9249
966621	AG1-532 C	3.7498	50/50	3.7498
966622	AG1-532 E	2.4999	50/50	2.4999
966751	AG1-546 C	23.1721	50/50	23.1721
966752	AG1-546 E	12.4334	50/50	12.4334
966811	AG1-552 C	3.8769	50/50	3.8769
966812	AG1-552 E	1.6615	50/50	1.6615
WEC	WEC	0.2731	Confirmed LTF	0.2731
LGEE	LGEE	0.5617	Confirmed LTF	0.5617
CPL	CPL	3.0965	Confirmed LTF	3.0965
CBM-W2	CBM-W2	11.8362	Confirmed LTF	11.8362
NY	NY	0.3583	Confirmed LTF	0.3583
TVA	TVA	2.2232	Confirmed LTF	2.2232
O-066	O-066	5.0744	Confirmed LTF	5.0744
SIGE	SIGE	0.1791	Confirmed LTF	0.1791
CBM-S2	CBM-S2	34.3163	Confirmed LTF	34.3163
CBM-S1	CBM-S1	0.5556	Confirmed LTF	0.5556
G-007	G-007	0.7991	Confirmed LTF	0.7991
MEC	MEC	1.6271	Confirmed LTF	1.6271
LAGN	LAGN	2.7650	Confirmed LTF	2.7650
AA2-074	AA2-074	2.0452	LTF	2.0452
CBM-W1	CBM-W1	11.4403	Confirmed LTF	11.4403

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
168955380	314559	3CAROLNA	DVP	314561	6CAROLNA	DVP	1	DVP_P1-2: LN 68-A	single	239.89	110.18	111.41	DC	2.96

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936361	AD2-046 C O1	7.8298	80/20	7.8298
936485	AD2-063 C	7.6716	80/20	7.6716
938371	AE1-056 C	1.9594	80/20	1.9594
938771	AE1-103 C	6.1020	80/20	6.1020
939181	AE1-148 C	7.6064	80/20	7.6064
940661	AE2-053 O1	2.8172	80/20	2.8172
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0703	80/20	0.0703
942451	AE2-258	1.3082	80/20	1.3082
943171	AE2-346 C	0.8941	80/20	0.8941
943911	AF1-059	8.8526	80/20	8.8526
946281	AF1-292 C	0.7553	80/20	0.7553
946301	AF1-294 C	1.4395	80/20	1.4395
957521	AF2-046 C	19.9560	80/20	19.9560
958211	AF2-115 C	0.8468	80/20	0.8468
958801	AF2-171 C	5.1111	80/20	5.1111
959311	AF2-222 C	7.0820	80/20	7.0820
960081	AF2-299 C	1.2731	80/20	1.2731
961091	AF2-400 C	0.7845	80/20	0.7845
961681	AG1-008 C	19.9960	80/20	19.9960
961791	AG1-021 C	0.6774	80/20	0.6774
961891	AG1-030 C	5.6061	80/20	5.6061
961931	AG1-036 C	1.2171	80/20	1.2171
961941	AG1-037 C	0.3193	80/20	0.3193
962041	AG1-048 C	4.2337	80/20	4.2337
962331	AG1-082 C	1.2773	80/20	1.2773
962341	AG1-083 C	1.2773	80/20	1.2773
962351	AG1-084 C	0.7200	80/20	0.7200
962361	AG1-085 C	0.7200	80/20	0.7200
963171	AG1-166 C	0.6774	80/20	0.6774
963181	AG1-167 C	0.6774	80/20	0.6774
963191	AG1-168 C	0.6774	80/20	0.6774
963201	AG1-169 C	0.6774	80/20	0.6774
963211	AG1-170 C	0.6774	80/20	0.6774
963301	AG1-179 C	2.9574	80/20	2.9574
963311	AG1-180	1.4409	80/20	1.4409
963321	AG1-181 C O1	7.6889	80/20	7.6889
963361	AG1-185 O1	3.7201	80/20	3.7201
963641	AG1-215 C	0.3161	80/20	0.3161
964111	AG1-272 C	1.1289	80/20	1.1289
964121	AG1-273 C	1.1289	80/20	1.1289
964131	AG1-274 C	1.1289	80/20	1.1289
964241	AG1-285 C O1	6.5573	80/20	6.5573
964501	AG1-313 C O1	7.6739	80/20	7.6739
964791	AG1-342 C	1.4230	80/20	1.4230
964801	AG1-343 C	9.7545	80/20	9.7545
964821	AG1-345 C	0.2719	80/20	0.2719
965191	AG1-384 C	1.1289	80/20	1.1289
965281	AG1-393 C	0.6774	80/20	0.6774
965291	AG1-394 C	3.4868	80/20	3.4868
965451	AG1-413 C O1	3.7213	80/20	3.7213
965591	AG1-427 C	6.1907	80/20	6.1907
965601	AG1-428 C O1	2.4689	80/20	2.4689

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

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
168955485	314561	6CAROLNA	DVP	314599	6ROA VAL	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	548.02	101.0	102.19	DC	6.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.3482	80/20	9.3482
313527	AB2-043 C	0.2635	80/20	0.2635
313719	3CHESTNUT	0.6800	80/20	0.6800
314429	3JTRSVLE	0.1333	80/20	0.1333
314572	3EMPORIA	0.6240	80/20	0.6240
314623	3WITAKRS	0.1261	80/20	0.1261
314704	3LAWRENC	0.3599	80/20	0.3599
315126	1ROARAP2	1.5784	80/20	1.5784
315128	1ROARAP4	1.5063	80/20	1.5063
315131	1EDGECEMA (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315132	1EDGECEMB (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315136	1ROSEMG1	3.8526	80/20	3.8526
315137	1ROSEMS1	2.3890	80/20	2.3890
315138	1ROSEMG2	1.8056	80/20	1.8056
315139	1GASTONA	6.0576	80/20	6.0576
315141	1GASTONB	6.0576	80/20	6.0576
315158	1KERR 1	0.2406	80/20	0.2406
315159	1KERR 2	0.6736	80/20	0.6736
315160	1KERR 3	0.6736	80/20	0.6736
315161	1KERR 4	0.6736	80/20	0.6736
315162	1KERR 5	0.6736	80/20	0.6736
315163	1KERR 6	0.6736	80/20	0.6736
315164	1KERR 7	0.6736	80/20	0.6736
315293	1DOMTR9	-3.2350	Adder	-3.81
315294	1DOMTR10	-3.9644	Adder	-4.66
315606	3AA2-053SOLA	1.2789	80/20	1.2789
315607	3AA1-063SOLA	1.1578	80/20	1.1578
315608	3AA2-088SOLA	0.3358	80/20	0.3358
316020	AB2-059 C OP	0.9918	80/20	0.9918
316087	AB2-174 C	1.5774	80/20	1.5774
316096	AB2-100 C1	1.6877	80/20	1.6877
316098	AB2-100 C2	1.6877	80/20	1.6877
316129	AC1-054 C	6.4409	80/20	6.4409
316131	AB2-060 C	0.7464	80/20	0.7464
920591	AA2-165 C	0.0913	80/20	0.0913
922922	AB1-081 C OP	0.8415	80/20	0.8415
923991	AB2-040 C O1	10.1812	80/20	10.1812

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	1.0495	80/20	1.0495
924311	AB2-078 C O1 (Suspended)	1.0495	80/20	1.0495
924321	AB2-079 C O1 (Suspended)	1.0495	80/20	1.0495
925591	AC1-034 C	4.0719	80/20	4.0719
925611	AC1-036 C	0.0939	80/20	0.0939
926070	AC1-086 C	43.1775	80/20	43.1775
926201	AC1-098 C	2.2605	80/20	2.2605
926211	AC1-099 C	0.7575	80/20	0.7575
927145	AC1-208 C	6.0536	80/20	6.0536
932631	AC2-084 C	3.2224	80/20	3.2224
934331	AD1-057 C O1	12.8767	80/20	12.8767
936265	AD2-033 C	5.6831	80/20	5.6831
936361	AD2-046 C O1	5.4499	80/20	5.4499
936485	AD2-063 C	7.2891	80/20	7.2891
939181	AE1-148 C	5.3455	80/20	5.3455
940481	AE2-033 C	28.0875	80/20	28.0875
940571	AE2-044 C	2.6670	80/20	2.6670
940661	AE2-053 O1	1.9798	80/20	1.9798
942451	AE2-258	1.2459	80/20	1.2459
942471	AE2-260 C O1	26.1001	80/20	26.1001
943911	AF1-059	16.2460	80/20	16.2460
944141	AF1-082	1.7145	80/20	1.7145
946011	AF1-266	23.5115	80/20	23.5115
946281	AF1-292 C	2.2861	80/20	2.2861
946301	AF1-294 C	1.3464	80/20	1.3464
958211	AF2-115 C	0.7920	80/20	0.7920
958801	AF2-171 C	4.7826	80/20	4.7826
959311	AF2-222 C	6.6870	80/20	6.6870
960081	AF2-299 C	3.8531	80/20	3.8531
961791	AG1-021 C	0.6336	80/20	0.6336
961891	AG1-030 C	5.2659	80/20	5.2659
962041	AG1-048 C	3.9600	80/20	3.9600
962571	AG1-106 C	12.0073	80/20	12.0073
963171	AG1-166 C	0.6336	80/20	0.6336
963181	AG1-167 C	0.6336	80/20	0.6336
963191	AG1-168 C	0.6336	80/20	0.6336
963201	AG1-169 C	0.6336	80/20	0.6336
963211	AG1-170 C	0.6336	80/20	0.6336
963301	AG1-179 C	6.5008	80/20	6.5008
963311	AG1-180	3.1673	80/20	3.1673
963321	AG1-181 C O1	7.2785	80/20	7.2785
963361	AG1-185 O1	3.5215	80/20	3.5215
963641	AG1-215 C	0.2957	80/20	0.2957
964111	AG1-272 C	1.0672	80/20	1.0672
964121	AG1-273 C	1.0672	80/20	1.0672
964131	AG1-274 C	1.0672	80/20	1.0672
964241	AG1-285 C O1	6.2348	80/20	6.2348
964501	AG1-313 C O1	2.4851	80/20	2.4851
964791	AG1-342 C	1.3863	80/20	1.3863
964801	AG1-343 C	1.8312	80/20	1.8312

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964821	AG1-345 C	0.2544	80/20	0.2544
965191	AG1-384 C	1.0672	80/20	1.0672
965281	AG1-393 C	0.6336	80/20	0.6336
965291	AG1-394 C	0.7217	80/20	0.7217
965451	AG1-413 C O1	6.8292	80/20	6.8292
965591	AG1-427 C	5.8849	80/20	5.8849
965601	AG1-428 C O1	5.4270	80/20	5.4270
965721	AG1-440 C	5.2830	80/20	5.2830
965731	AG1-441 C	5.2830	80/20	5.2830
965771	AG1-445	3.0524	80/20	3.0524
965781	AG1-446	3.0524	80/20	3.0524
966621	AG1-532 C	2.0806	80/20	2.0806
966751	AG1-546 C	14.6869	80/20	14.6869
966811	AG1-552 C	2.5061	80/20	2.5061
WEC	WEC	0.1200	Confirmed LTF	0.1200
LGEE	LGEE	0.2482	Confirmed LTF	0.2482
CPL	CPL	1.2381	Confirmed LTF	1.2381
CBM-W2	CBM-W2	5.1251	Confirmed LTF	5.1251
NY	NY	0.1637	Confirmed LTF	0.1637
TVA	TVA	0.9604	Confirmed LTF	0.9604
SIGE	SIGE	0.0801	Confirmed LTF	0.0801
CBM-S2	CBM-S2	14.3654	Confirmed LTF	14.3654
CBM-S1	CBM-S1	0.2405	Confirmed LTF	0.2405
MEC	MEC	0.7103	Confirmed LTF	0.7103
LAGN	LAGN	1.1900	Confirmed LTF	1.1900
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

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
168955325	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	175.74	182.84	DC	12.97

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

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

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163176120	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	135.86	137.16	DC	10.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	14.5739	50/50	14.5739
313719	3CHESTNUT	1.3547	50/50	1.3547
314541	3WATKINS	0.3968	Adder	0.47
314572	3EMPORIA	1.0296	50/50	1.0296
314582	3KELFORD	0.3886	50/50	0.3886
314589	3MURPHYS	0.0859	50/50	0.0859
314594	6PLYMOTH	0.0480	Adder	0.06
314623	3WITAKRS	0.2420	50/50	0.2420
314704	3LAWRENC	0.5984	50/50	0.5984
315126	1ROARAP2	2.1390	50/50	2.1390
315128	1ROARAP4	2.0412	50/50	2.0412
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315136	1ROSEMG1	4.0488	50/50	4.0488
315137	1ROSEMS1	2.5107	50/50	2.5107
315138	1ROSEMG2	1.8975	50/50	1.8975
315139	1GASTONA	6.0660	50/50	6.0660
315141	1GASTONB	6.0660	50/50	6.0660
315293	1DOMTR9	4.0274	Adder	4.74
315294	1DOMTR10	4.9355	Adder	5.81
315601	1CONETOESOL	1.5563	50/50	1.5563
315602	1HOLLOMANSOL	1.3084	50/50	1.3084
315606	3AA2-053SOLA	2.1783	50/50	2.1783
315607	3AA1-063SOLA	1.8411	50/50	1.8411
315608	3AA2-088SOLA	0.9619	50/50	0.9619
316020	AB2-059 C OP	1.8615	50/50	1.8615
316087	AB2-174 C	2.5142	50/50	2.5142
316088	AB2-174 E	14.4183	50/50	14.4183
316096	AB2-100 C1	2.8368	50/50	2.8368
316097	AB2-100 E1	8.8562	50/50	8.8562
316098	AB2-100 C2	2.8368	50/50	2.8368
316099	AB2-100 E2	8.8562	50/50	8.8562
316103	AB2-015 C	4.5989	Adder	5.41
316104	AB2-015 E	3.7711	Adder	4.44
316129	AC1-054 C	8.9401	50/50	8.9401
316140	AB2-099 C (Suspended)	0.5970	50/50	0.5970
316141	AB2-099 E (Suspended)	0.2558	50/50	0.2558
900672	V4-068 E	0.2984	50/50	0.2984
917332	Z2-043 E	1.1590	50/50	1.1590

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
917342	Z2-044 E	0.6574	50/50	0.6574
917512	Z2-088 E OP1	9.2316	50/50	9.2316
918492	AA1-063AE OP	5.5022	50/50	5.5022
918512	AA1-065 E OP	3.7133	50/50	3.7133
918532	AA1-067 E	0.5438	Adder	0.64
919692	AA2-053 E OP	5.6689	50/50	5.6689
919702	AA2-057 E OP	4.0531	50/50	4.0531
920042	AA2-088 E OP	9.9473	50/50	9.9473
920591	AA2-165 C	0.1819	50/50	0.1819
920592	AA2-165 E	0.5571	50/50	0.5571
922922	AB1-081 C OP	1.5794	50/50	1.5794
922923	AB1-081 E OP	4.2905	50/50	4.2905
923262	AB1-132 C OP (Suspended)	29.3605	50/50	29.3605
923263	AB1-132 E OP (Suspended)	12.5831	50/50	12.5831
923573	AB1-173 E OP	2.2727	50/50	2.2727
923991	AB2-040 C O1	15.8726	50/50	15.8726
923992	AB2-040 E O1	12.9866	50/50	12.9866
924022	AB2-043 E O1	1.9315	Adder	2.27
924152	AB2-059 E OP	6.0782	50/50	6.0782
924162	AB2-060 E OP	2.8784	Adder	3.39
924301	AB2-077 C O1 (Suspended)	1.3530	Adder	1.59
924302	AB2-077 E O1 (Suspended)	0.9020	Adder	1.06
924311	AB2-078 C O1 (Suspended)	1.3530	Adder	1.59
924312	AB2-078 E O1 (Suspended)	0.9020	Adder	1.06
924321	AB2-079 C O1 (Suspended)	1.3530	Adder	1.59
924322	AB2-079 E O1 (Suspended)	0.9020	Adder	1.06
925122	AB2-169 E	3.7190	Adder	4.38
925591	AC1-034 C	7.6424	50/50	7.6424
925592	AC1-034 E	5.7653	50/50	5.7653
925612	AC1-036 E	0.4578	Adder	0.54
925785	AC1-054 E	4.1185	50/50	4.1185
926070	AC1-086 C	43.2369	50/50	43.2369
926071	AC1-086 E	19.6785	50/50	19.6785
926201	AC1-098 C	7.4602	50/50	7.4602
926202	AC1-098 E	4.4444	50/50	4.4444
926211	AC1-099 C	2.5000	50/50	2.5000
926212	AC1-099 E	1.4682	50/50	1.4682
927024	AC1-189 C	9.1752	50/50	9.1752
927025	AC1-189 E	4.5704	50/50	4.5704
927145	AC1-208 C	11.7742	50/50	11.7742
927146	AC1-208 E	5.2070	50/50	5.2070
932631	AC2-084 C	10.6348	50/50	10.6348
932632	AC2-084 E	5.2380	50/50	5.2380
933991	AD1-023 C	7.9657	Adder	9.37
933992	AD1-023 E	4.3365	Adder	5.1

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934331	AD1-057 C O1	17.3418	50/50	17.3418
934332	AD1-057 E O1	9.2508	50/50	9.2508
934521	AD1-076 C	29.5902	Adder	34.81
934522	AD1-076 E	15.0673	Adder	17.73
936265	AD2-033 C	7.3116	Adder	8.6
936266	AD2-033 E	4.8744	Adder	5.73
936361	AD2-046 C O1	6.7224	Adder	7.91
936362	AD2-046 E O1	3.0913	Adder	3.64
936401	AD2-051 C O1	8.3819	50/50	8.3819
936402	AD2-051 E O1	3.5991	50/50	3.5991
936485	AD2-063 C	9.4057	Adder	11.07
936486	AD2-063 E	6.2705	Adder	7.38
938221	AE1-035 C	0.3271	50/50	0.3271
938222	AE1-035 E	1.0212	50/50	1.0212
939181	AE1-148 C	6.6055	Adder	7.77
939182	AE1-148 E	4.4036	Adder	5.18
940542	AE2-040 BAT	3.9010	50/50	3.9010
940571	AE2-044 C	5.0056	50/50	5.0056
940572	AE2-044 E	2.1452	50/50	2.1452
940661	AE2-053 O1	2.4465	Adder	2.88
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1756	50/50	0.1756
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5992	50/50	0.5992
942451	AE2-258	1.6115	Adder	1.9
942471	AE2-260 C O1	46.3236	50/50	46.3236
942472	AE2-260 E O1	65.7044	50/50	65.7044
943171	AE2-346 C	1.4327	50/50	1.4327
943172	AE2-346 E	0.6140	50/50	0.6140
943911	AF1-059	26.5588	50/50	26.5588
944141	AF1-082	3.2179	50/50	3.2179
946012	AF1-266 BAT	20.6141	50/50	20.6141
946281	AF1-292 C	3.8472	50/50	3.8472
946282	AF1-292 E	2.5936	50/50	2.5936
957521	AF2-046 C	16.8612	50/50	16.8612
957522	AF2-046 E	8.4813	50/50	8.4813
957861	AF2-080 C	8.3333	50/50	8.3333
957862	AF2-080 E	3.6941	50/50	3.6941
959311	AF2-222 C	8.5799	Adder	10.09
959312	AF2-222 E	5.7485	Adder	6.76
959511	AF2-242 C	5.0088	Adder	5.89
959512	AF2-242 E	3.8958	Adder	4.58
960081	AF2-299 C	6.4841	50/50	6.4841
960082	AF2-299 E	4.3227	50/50	4.3227
961091	AF2-400 C	0.2483	Adder	0.29
961092	AF2-400 E	0.4075	Adder	0.48
961671	AG1-007 C	1.5192	50/50	1.5192
961672	AG1-007 E	0.8484	50/50	0.8484
961681	AG1-008 C	16.8950	50/50	16.8950
961682	AG1-008 E	8.4475	50/50	8.4475
961931	AG1-036 C	1.3755	50/50	1.3755
961932	AG1-036 E	0.9170	50/50	0.9170
961941	AG1-037 C	0.5117	50/50	0.5117

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961942	AG1-037 E	0.3411	50/50	0.3411
962331	AG1-082 C	2.0467	50/50	2.0467
962332	AG1-082 E	1.3645	50/50	1.3645
962341	AG1-083 C	2.0467	50/50	2.0467
962342	AG1-083 E	1.3645	50/50	1.3645
962351	AG1-084 C	1.7977	50/50	1.7977
962352	AG1-084 E	1.1985	50/50	1.1985
962361	AG1-085 C	1.7977	50/50	1.7977
962362	AG1-085 E	1.1985	50/50	1.1985
962571	AG1-106 C	12.0238	50/50	12.0238
962572	AG1-106 E	5.4527	50/50	5.4527
963301	AG1-179 C	10.7581	50/50	10.7581
963311	AG1-180	5.2416	50/50	5.2416
963321	AG1-181 C O1	4.9612	Adder	11.01
963361	AG1-185 O1	2.4004	Adder	5.33
964111	AG1-272 C	0.7266	Adder	1.61
964112	AG1-272 E	0.2158	Adder	0.48
964121	AG1-273 C	0.7266	Adder	1.61
964122	AG1-273 E	0.2158	Adder	0.48
964131	AG1-274 C	0.7266	Adder	1.61
964132	AG1-274 E	0.2158	Adder	0.48
964241	AG1-285 C O1	4.2670	Adder	9.47
964242	AG1-285 E O1	2.8447	Adder	6.31
964491	AG1-312 C O1	16.8134	50/50	16.8134
964492	AG1-312 E O1	4.2034	50/50	4.2034
964501	AG1-313 C O1	6.4026	50/50	6.4026
964502	AG1-313 E O1	4.2684	50/50	4.2684
964801	AG1-343 C	5.8664	50/50	5.8664
964802	AG1-343 E	4.6093	50/50	4.6093
965191	AG1-384 C	0.7266	Adder	1.61
965192	AG1-384 E	0.2158	Adder	0.48
965291	AG1-394 C	2.0088	50/50	2.0088
965292	AG1-394 E	1.3392	50/50	1.3392
965451	AG1-413 C O1	11.1643	50/50	11.1643
965452	AG1-413 E O1	7.4429	50/50	7.4429
965591	AG1-427 C	4.0275	Adder	8.94
965592	AG1-427 E	2.6907	Adder	5.97
965601	AG1-428 C O1	8.9810	50/50	8.9810
965602	AG1-428 E O1	5.9767	50/50	5.9767
965691	AG1-437 C O1	3.5190	Adder	7.81
965692	AG1-437 E O1	2.3460	Adder	5.21
965701	AG1-438 C O1	3.5190	Adder	7.81
965702	AG1-438 E O1	2.3460	Adder	5.21
965711	AG1-439 C O1	27.9180	50/50	27.9180
965712	AG1-439 E O1	18.6120	50/50	18.6120
965721	AG1-440 C	7.4813	50/50	7.4813
965722	AG1-440 E	4.9875	50/50	4.9875
965731	AG1-441 C	7.4813	50/50	7.4813
965732	AG1-441 E	4.9875	50/50	4.9875
965741	AG1-442 O1	2.0528	Adder	4.56
965751	AG1-443 O1	2.0528	Adder	4.56
965761	AG1-444 O1	14.8896	50/50	14.8896

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965771	AG1-445	4.3225	50/50	4.3225
965781	AG1-446	4.3225	50/50	4.3225
966621	AG1-532 C	3.5014	50/50	3.5014
966622	AG1-532 E	2.3343	50/50	2.3343
966751	AG1-546 C	20.3177	50/50	20.3177
966752	AG1-546 E	10.9018	50/50	10.9018
966801	AG1-551 C	0.8593	Adder	1.91
966802	AG1-551 E	0.3683	Adder	0.82
966811	AG1-552 C	3.3962	50/50	3.3962
966812	AG1-552 E	1.4555	50/50	1.4555
WEC	WEC	0.2003	Confirmed LTF	0.2003
LGEE	LGEE	0.4128	Confirmed LTF	0.4128
CPL	CPL	2.4679	Confirmed LTF	2.4679
CBM-W2	CBM-W2	8.9152	Confirmed LTF	8.9152
NY	NY	0.3069	Confirmed LTF	0.3069
TVA	TVA	1.6884	Confirmed LTF	1.6884
O-066	O-066	4.3005	Confirmed LTF	4.3005
SIGE	SIGE	0.1410	Confirmed LTF	0.1410
CBM-S2	CBM-S2	26.7473	Confirmed LTF	26.7473
CBM-S1	CBM-S1	0.4203	Confirmed LTF	0.4203
G-007	G-007	0.6762	Confirmed LTF	0.6762
MEC	MEC	1.2076	Confirmed LTF	1.2076
LAGN	LAGN	2.1000	Confirmed LTF	2.1000
AA2-074	AA2-074	1.6299	LTF	1.6299
CBM-W1	CBM-W1	8.3699	Confirmed LTF	8.3699

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
168955441	314579	6HORNRTN	DVP	934330	AD1-057 TAP	DVP	1	DVP_P1-2: LN 238-A	single	441.8	112.49	113.94	DC	6.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.4310	80/20	9.4310
313527	AB2-043 C	0.2306	80/20	0.2306
314572	3EMPORIA	0.6295	80/20	0.6295
314582	3KELFORD	0.1655	80/20	0.1655
314589	3MURPHYS	0.0598	80/20	0.0598
314704	3LAWRENC	0.3570	80/20	0.3570
315115	1S HAMPT1	0.8023	80/20	0.8023
315126	1ROARAP2	1.5926	80/20	1.5926
315128	1ROARAP4	1.5198	80/20	1.5198
315136	1ROSEMG1	4.9736	80/20	4.9736
315137	1ROSEMS1	3.0842	80/20	3.0842
315138	1ROSEMG2	2.3310	80/20	2.3310
315139	1GASTONA	6.1774	80/20	6.1774
315141	1GASTONB	6.1774	80/20	6.1774
315158	1KERR 1	0.2031	80/20	0.2031
315159	1KERR 2	0.5688	80/20	0.5688
315160	1KERR 3	0.5688	80/20	0.5688
315161	1KERR 4	0.5688	80/20	0.5688
315162	1KERR 5	0.5688	80/20	0.5688
315163	1KERR 6	0.5688	80/20	0.5688
315164	1KERR 7	0.5688	80/20	0.5688
315602	1HOLLOMANSOL	0.7974	80/20	0.7974
315606	3AA2-053SOLA	1.5807	80/20	1.5807
315607	3AA1-063SOLA	1.3712	80/20	1.3712
315608	3AA2-088SOLA	0.7227	80/20	0.7227
316087	AB2-174 C	1.5913	80/20	1.5913
316096	AB2-100 C1	1.7163	80/20	1.7163
316098	AB2-100 C2	1.7163	80/20	1.7163
316103	AB2-015 C	4.4390	80/20	4.4390
316129	AC1-054 C	6.0845	80/20	6.0845
316131	AB2-060 C	0.6539	80/20	0.6539
316140	AB2-099 C (Suspended)	0.3673	80/20	0.3673
923991	AB2-040 C O1	10.2714	80/20	10.2714
924301	AB2-077 C O1 (Suspended)	0.9127	80/20	0.9127
924311	AB2-078 C O1 (Suspended)	0.9127	80/20	0.9127
924321	AB2-079 C O1 (Suspended)	0.9127	80/20	0.9127
925591	AC1-034 C	-5.3987	Adder	-6.35
925611	AC1-036 C	0.0835	80/20	0.0835
926070	AC1-086 C	44.0310	80/20	44.0310

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933991	AD1-023 C	5.1111	80/20	5.1111
934521	AD1-076 C	17.8598	80/20	17.8598
936265	AD2-033 C	5.0333	80/20	5.0333
936361	AD2-046 C O1	4.6268	80/20	4.6268
936401	AD2-051 C O1	5.3076	80/20	5.3076
936485	AD2-063 C	6.4125	80/20	6.4125
938221	AE1-035 C	0.1994	80/20	0.1994
938771	AE1-103 C	1.5408	80/20	1.5408
939181	AE1-148 C	4.5436	80/20	4.5436
940481	AE2-033 C	28.5557	80/20	28.5557
940661	AE2-053 O1	1.6828	80/20	1.6828
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1034	80/20	0.1034
942451	AE2-258	1.0906	80/20	1.0906
942471	AE2-260 C O1	26.5335	80/20	26.5335
943171	AE2-346 C	0.8815	80/20	0.8815
943911	AF1-059	15.7430	80/20	15.7430
946011	AF1-266	23.9033	80/20	23.9033
946281	AF1-292 C	2.3063	80/20	2.3063
957521	AF2-046 C	11.4780	80/20	11.4780
959311	AF2-222 C	5.9580	80/20	5.9580
960081	AF2-299 C	3.8870	80/20	3.8870
961091	AF2-400 C	0.2397	80/20	0.2397
961681	AG1-008 C	11.5010	80/20	11.5010
961891	AG1-030 C	4.7403	80/20	4.7403
961931	AG1-036 C	0.8882	80/20	0.8882
961941	AG1-037 C	0.3148	80/20	0.3148
962331	AG1-082 C	1.2593	80/20	1.2593
962341	AG1-083 C	1.2593	80/20	1.2593
962351	AG1-084 C	1.0590	80/20	1.0590
962361	AG1-085 C	1.0590	80/20	1.0590
962571	AG1-106 C	12.2447	80/20	12.2447
963301	AG1-179 C	6.4075	80/20	6.4075
963311	AG1-180	3.1219	80/20	3.1219
963321	AG1-181 C O1	6.4516	80/20	6.4516
963361	AG1-185 O1	3.1214	80/20	3.1214
964111	AG1-272 C	0.9486	80/20	0.9486
964121	AG1-273 C	0.9486	80/20	0.9486
964131	AG1-274 C	0.9486	80/20	0.9486
964241	AG1-285 C O1	5.4765	80/20	5.4765
964491	AG1-312 C O1	10.1315	80/20	10.1315
964501	AG1-313 C O1	4.4867	80/20	4.4867
964801	AG1-343 C	4.3221	80/20	4.3221
965191	AG1-384 C	0.9486	80/20	0.9486
965291	AG1-394 C	1.4972	80/20	1.4972
965451	AG1-413 C O1	6.6178	80/20	6.6178
965591	AG1-427 C	5.1711	80/20	5.1711
965601	AG1-428 C O1	5.3491	80/20	5.3491
965691	AG1-437 C O1	4.4274	80/20	4.4274
965701	AG1-438 C O1	4.4274	80/20	4.4274
965721	AG1-440 C	4.6998	80/20	4.6998
965731	AG1-441 C	4.6998	80/20	4.6998
965741	AG1-442 O1	2.5826	80/20	2.5826

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965751	AG1-443 O1	2.5826	80/20	2.5826
965771	AG1-445	2.7154	80/20	2.7154
965781	AG1-446	2.7154	80/20	2.7154
966621	AG1-532 C	2.0990	80/20	2.0990
966751	AG1-546 C	14.0055	80/20	14.0055
966811	AG1-552 C	2.5287	80/20	2.5287
G-007A	G-007A	0.2973	Confirmed LTF	0.2973
VFT	VFT	0.7869	Confirmed LTF	0.7869
CALDERWOOD	CALDERWOOD	0.6541	Confirmed LTF	0.6541
PRAIRIE	PRAIRIE	2.2911	Confirmed LTF	2.2911
CHEOAH	CHEOAH	0.6702	Confirmed LTF	0.6702
CBM-N	CBM-N	0.1404	Confirmed LTF	0.1404
COTTONWOOD	COTTONWOOD	2.4423	Confirmed LTF	2.4423
HAMLET	HAMLET	1.4414	Confirmed LTF	1.4414
GIBSON	GIBSON	0.4062	Confirmed LTF	0.4062
BLUEG	BLUEG	1.2534	Confirmed LTF	1.2534
TRIMBLE	TRIMBLE	0.3979	Confirmed LTF	0.3979
CATAWBA	CATAWBA	0.6983	Confirmed LTF	0.6983

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
168689176	314599	6ROA VAL	DVP	314266	6NORTHAMPTON	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	548.02	100.95	102.13	DC	6.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.3482	80/20	9.3482
313527	AB2-043 C	0.2635	80/20	0.2635
313719	3CHESTNUT	0.6800	80/20	0.6800
314429	3JTRSVLE	0.1333	80/20	0.1333
314572	3EMPORIA	0.6240	80/20	0.6240
314623	3WITAKRS	0.1261	80/20	0.1261
314704	3LAWRENC	0.3599	80/20	0.3599
315126	1ROARAP2	1.5784	80/20	1.5784
315128	1ROARAP4	1.5063	80/20	1.5063
315131	1EDGECEMA (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315132	1EDGECEMB (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315136	1ROSEMG1	3.8526	80/20	3.8526
315137	1ROSEMS1	2.3890	80/20	2.3890
315138	1ROSEMG2	1.8056	80/20	1.8056
315139	1GASTONA	6.0576	80/20	6.0576
315141	1GASTONB	6.0576	80/20	6.0576
315158	1KERR 1	0.2406	80/20	0.2406
315159	1KERR 2	0.6736	80/20	0.6736
315160	1KERR 3	0.6736	80/20	0.6736
315161	1KERR 4	0.6736	80/20	0.6736
315162	1KERR 5	0.6736	80/20	0.6736
315163	1KERR 6	0.6736	80/20	0.6736
315164	1KERR 7	0.6736	80/20	0.6736
315293	1DOMTR9	-3.2350	Adder	-3.81
315294	1DOMTR10	-3.9644	Adder	-4.66
315606	3AA2-053SOLA	1.2789	80/20	1.2789
315607	3AA1-063SOLA	1.1578	80/20	1.1578
315608	3AA2-088SOLA	0.3358	80/20	0.3358
316020	AB2-059 C OP	0.9918	80/20	0.9918
316087	AB2-174 C	1.5774	80/20	1.5774
316096	AB2-100 C1	1.6877	80/20	1.6877
316098	AB2-100 C2	1.6877	80/20	1.6877
316129	AC1-054 C	6.4409	80/20	6.4409
316131	AB2-060 C	0.7464	80/20	0.7464
920591	AA2-165 C	0.0913	80/20	0.0913
922922	AB1-081 C OP	0.8415	80/20	0.8415
923991	AB2-040 C O1	10.1812	80/20	10.1812

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	1.0495	80/20	1.0495
924311	AB2-078 C O1 (Suspended)	1.0495	80/20	1.0495
924321	AB2-079 C O1 (Suspended)	1.0495	80/20	1.0495
925591	AC1-034 C	4.0719	80/20	4.0719
925611	AC1-036 C	0.0939	80/20	0.0939
926070	AC1-086 C	43.1775	80/20	43.1775
926201	AC1-098 C	2.2605	80/20	2.2605
926211	AC1-099 C	0.7575	80/20	0.7575
927145	AC1-208 C	6.0536	80/20	6.0536
932631	AC2-084 C	3.2224	80/20	3.2224
934331	AD1-057 C O1	12.8767	80/20	12.8767
936265	AD2-033 C	5.6831	80/20	5.6831
936361	AD2-046 C O1	5.4499	80/20	5.4499
936485	AD2-063 C	7.2891	80/20	7.2891
939181	AE1-148 C	5.3455	80/20	5.3455
940481	AE2-033 C	28.0875	80/20	28.0875
940571	AE2-044 C	2.6670	80/20	2.6670
940661	AE2-053 O1	1.9798	80/20	1.9798
942451	AE2-258	1.2459	80/20	1.2459
942471	AE2-260 C O1	26.1001	80/20	26.1001
943911	AF1-059	16.2460	80/20	16.2460
944141	AF1-082	1.7145	80/20	1.7145
946011	AF1-266	23.5115	80/20	23.5115
946281	AF1-292 C	2.2861	80/20	2.2861
946301	AF1-294 C	1.3464	80/20	1.3464
958211	AF2-115 C	0.7920	80/20	0.7920
958801	AF2-171 C	4.7826	80/20	4.7826
959311	AF2-222 C	6.6870	80/20	6.6870
960081	AF2-299 C	3.8531	80/20	3.8531
961791	AG1-021 C	0.6336	80/20	0.6336
961891	AG1-030 C	5.2659	80/20	5.2659
962041	AG1-048 C	3.9600	80/20	3.9600
962571	AG1-106 C	12.0073	80/20	12.0073
963171	AG1-166 C	0.6336	80/20	0.6336
963181	AG1-167 C	0.6336	80/20	0.6336
963191	AG1-168 C	0.6336	80/20	0.6336
963201	AG1-169 C	0.6336	80/20	0.6336
963211	AG1-170 C	0.6336	80/20	0.6336
963301	AG1-179 C	6.5008	80/20	6.5008
963311	AG1-180	3.1673	80/20	3.1673
963321	AG1-181 C O1	7.2785	80/20	7.2785
963361	AG1-185 O1	3.5215	80/20	3.5215
963641	AG1-215 C	0.2957	80/20	0.2957
964111	AG1-272 C	1.0672	80/20	1.0672
964121	AG1-273 C	1.0672	80/20	1.0672
964131	AG1-274 C	1.0672	80/20	1.0672
964241	AG1-285 C O1	6.2348	80/20	6.2348
964501	AG1-313 C O1	2.4851	80/20	2.4851
964791	AG1-342 C	1.3863	80/20	1.3863
964801	AG1-343 C	1.8312	80/20	1.8312

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964821	AG1-345 C	0.2544	80/20	0.2544
965191	AG1-384 C	1.0672	80/20	1.0672
965281	AG1-393 C	0.6336	80/20	0.6336
965291	AG1-394 C	0.7217	80/20	0.7217
965451	AG1-413 C O1	6.8292	80/20	6.8292
965591	AG1-427 C	5.8849	80/20	5.8849
965601	AG1-428 C O1	5.4270	80/20	5.4270
965721	AG1-440 C	5.2830	80/20	5.2830
965731	AG1-441 C	5.2830	80/20	5.2830
965771	AG1-445	3.0524	80/20	3.0524
965781	AG1-446	3.0524	80/20	3.0524
966621	AG1-532 C	2.0806	80/20	2.0806
966751	AG1-546 C	14.6869	80/20	14.6869
966811	AG1-552 C	2.5061	80/20	2.5061
WEC	WEC	0.1200	Confirmed LTF	0.1200
LGEE	LGEE	0.2482	Confirmed LTF	0.2482
CPL	CPL	1.2381	Confirmed LTF	1.2381
CBM-W2	CBM-W2	5.1251	Confirmed LTF	5.1251
NY	NY	0.1637	Confirmed LTF	0.1637
TVA	TVA	0.9604	Confirmed LTF	0.9604
SIGE	SIGE	0.0801	Confirmed LTF	0.0801
CBM-S2	CBM-S2	14.3654	Confirmed LTF	14.3654
CBM-S1	CBM-S1	0.2405	Confirmed LTF	0.2405
MEC	MEC	0.7103	Confirmed LTF	0.7103
LAGN	LAGN	1.1900	Confirmed LTF	1.1900
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

11.6.10 Index 10

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169146935	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	2	DVP_P1-2: LN 235-A	single	182.64	201.1	203.21	DC	3.87

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

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

11.6.11 Index 11

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169146946	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 298	single	198.06	124.75	126.31	DC	3.09

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

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

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
169147005	314696	3SEEDGE HILL	DVP	314697	6SEEDGE HILL	DVP	1	DVP_P1-3: 6SEEDGE HILL-TX#2	single	226.73	114.6	116.27	DC	3.77

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

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

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

11.6.13 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
169147021	314696	3SEEDGE HILL	DVP	314697	6SEEDGE HILL	DVP	2	DVP_P1-3: 6SEEDGE HILL-TX#1	single	256.06	101.17	102.64	DC	3.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	0.5788	80/20	0.5788
246844	05SMG2	1.5733	80/20	1.5733
246845	05SMG3	0.9864	80/20	0.9864
246846	05SMG4	1.5489	80/20	1.5489
246847	05SMG5	0.6032	80/20	0.6032
247284	05LEESVG	0.7274	80/20	0.7274
313527	AB2-043 C	0.6441	80/20	0.6441
314429	3JTRSVLE	0.2972	80/20	0.2972
314704	3LAWRENC	0.1691	80/20	0.1691
315156	1HALLBR1	1.3508	80/20	1.3508
315158	1KERR 1	0.3688	80/20	0.3688
315159	1KERR 2	1.0326	80/20	1.0326
315160	1KERR 3	1.0326	80/20	1.0326
315161	1KERR 4	1.0326	80/20	1.0326
315162	1KERR 5	1.0326	80/20	1.0326
315163	1KERR 6	1.0326	80/20	1.0326
315164	1KERR 7	1.0326	80/20	1.0326
315266	1PLYWOOD A	3.5951	80/20	3.5951
316118	AC1-105 C	17.1420	80/20	17.1420
316123	AC1-075 C	2.2897	80/20	2.2897
316129	AC1-054 C	4.6689	80/20	4.6689
316131	AB2-060 C	1.8231	80/20	1.8231
924301	AB2-077 C O1 (Suspended)	2.6719	80/20	2.6719
924311	AB2-078 C O1 (Suspended)	2.6719	80/20	2.6719
924321	AB2-079 C O1 (Suspended)	2.6719	80/20	2.6719
925611	AC1-036 C	0.2212	80/20	0.2212
925661	AC1-042 C	2.1663	80/20	2.1663
926023	AC1-080 C	0.7652	80/20	0.7652
926645	AC1-145 C	0.4069	80/20	0.4069
927261	AC1-222 C	12.0926	80/20	12.0926
934311	AD1-055 C	8.3962	80/20	8.3962
935221	AD1-157 C	0.1442	80/20	0.1442
936265	AD2-033 C	13.5182	80/20	13.5182
936361	AD2-046 C O1	9.0864	80/20	9.0864
936485	AD2-063 C	17.6022	80/20	17.6022
938371	AE1-056 C	3.9394	80/20	3.9394
939181	AE1-148 C	9.0639	80/20	9.0639

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939941	AE1-230 C	0.9773	80/20	0.9773
940661	AE2-053 O1	3.3570	80/20	3.3570
941801	AE2-185 C	4.8863	80/20	4.8863
941821	AE2-187 C	4.8863	80/20	4.8863
942451	AE2-258	3.0456	80/20	3.0456
942461	AE2-259 C O1	3.4614	80/20	3.4614
942671	AE2-283 C	5.3749	80/20	5.3749
942751	AE2-291 C	19.2303	80/20	19.2303
942761	AE2-292 C O1	23.9436	80/20	23.9436
943901	AF1-058 C	6.8382	80/20	6.8382
943911	AF1-059	13.9753	80/20	13.9753
945081	AF1-173	1.8934	80/20	1.8934
946301	AF1-294 C	3.0019	80/20	3.0019
958211	AF2-115 C	1.7658	80/20	1.7658
958801	AF2-171 C	10.6686	80/20	10.6686
959311	AF2-222 C	15.6530	80/20	15.6530
960061	AF2-297 C	27.3528	80/20	27.3528
961121	AF2-403	1.0858	80/20	1.0858
961791	AG1-021 C	1.4126	80/20	1.4126
961891	AG1-030 C	12.0195	80/20	12.0195
962041	AG1-048 C	8.8290	80/20	8.8290
962441	AG1-093 C O1	45.7120	80/20	45.7120
963171	AG1-166 C	1.4126	80/20	1.4126
963181	AG1-167 C	1.4126	80/20	1.4126
963191	AG1-168 C	1.4126	80/20	1.4126
963201	AG1-169 C	1.4126	80/20	1.4126
963211	AG1-170 C	1.4126	80/20	1.4126
963301	AG1-179 C	3.7578	80/20	3.7578
963311	AG1-180	1.8309	80/20	1.8309
963321	AG1-181 C O1	17.2581	80/20	17.2581
963361	AG1-185 O1	8.3499	80/20	8.3499
963601	AG1-209 C	0.3800	80/20	0.3800
963641	AG1-215 C	0.6592	80/20	0.6592
964111	AG1-272 C	2.5135	80/20	2.5135
964121	AG1-273 C	2.5135	80/20	2.5135
964131	AG1-274 C	2.5135	80/20	2.5135
964141	AG1-275 C	1.6288	80/20	1.6288
964151	AG1-276 C	1.6288	80/20	1.6288
964241	AG1-285 C O1	15.1132	80/20	15.1132
964251	AG1-286 C	0.6204	80/20	0.6204
964261	AG1-287 C	5.1287	80/20	5.1287
964471	AG1-310 C	6.8479	80/20	6.8479
964791	AG1-342 C	10.6614	80/20	10.6614
964821	AG1-345 C	0.5676	80/20	0.5676
965191	AG1-384 C	2.5135	80/20	2.5135
965281	AG1-393 C	1.4126	80/20	1.4126
965451	AG1-413 C O1	5.8747	80/20	5.8747
965591	AG1-427 C	14.2570	80/20	14.2570
965601	AG1-428 C O1	3.1371	80/20	3.1371
965641	AG1-432 C O1	6.9228	80/20	6.9228
965721	AG1-440 C	6.1749	80/20	6.1749
965731	AG1-441 C	6.1749	80/20	6.1749

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965771	AG1-445	3.5677	80/20	3.5677
965781	AG1-446	3.5677	80/20	3.5677
965831	AG1-451	1.1538	80/20	1.1538
966691	AG1-539 C	10.0550	80/20	10.0550
966751	AG1-546 C	9.5834	80/20	9.5834
966761	AG1-547 C	4.4167	80/20	4.4167
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	0.6923	80/20	0.6923
WEC	WEC	0.0161	Confirmed LTF	0.0161
LGEE	LGEE	0.0503	Confirmed LTF	0.0503
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
NY	NY	0.0553	Confirmed LTF	0.0553
PRAIRIE	PRAIRIE	0.0827	Confirmed LTF	0.0827
SIGE	SIGE	0.0180	Confirmed LTF	0.0180
CHEOAH	CHEOAH	0.1496	Confirmed LTF	0.1496
COTTONWOOD	COTTONWOOD	0.4284	Confirmed LTF	0.4284
HAMLET	HAMLET	0.6791	Confirmed LTF	0.6791
CATAWBA	CATAWBA	0.3035	Confirmed LTF	0.3035
CBM-W1	CBM-W1	0.7150	Confirmed LTF	0.7150

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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
168386695	314701	3LONEPN	DVP	313755	3FLAT CREEK	DVP	1	Base Case	single	203.98	101.15	102.35	DC	2.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4009	80/20	0.4009
314429	3JTRSVLE	1.3977	80/20	1.3977
314704	3LAWRENC	0.1117	80/20	0.1117
315158	1KERR 1	0.1906	80/20	0.1906
315159	1KERR 2	0.5337	80/20	0.5337
315160	1KERR 3	0.5337	80/20	0.5337
315161	1KERR 4	0.5337	80/20	0.5337
315162	1KERR 5	0.5337	80/20	0.5337
315163	1KERR 6	0.5337	80/20	0.5337
315164	1KERR 7	0.5337	80/20	0.5337
316118	AC1-105 C	1.8185	80/20	1.8185
316129	AC1-054 C	2.5725	80/20	2.5725
316131	AB2-060 C	1.2911	80/20	1.2911
924301	AB2-077 C O1 (Suspended)	1.5502	80/20	1.5502
924311	AB2-078 C O1 (Suspended)	1.5502	80/20	1.5502
924321	AB2-079 C O1 (Suspended)	1.5502	80/20	1.5502
925611	AC1-036 C	0.0731	80/20	0.0731
936265	AD2-033 C	24.7221	80/20	24.7221
936361	AD2-046 C O1	4.9041	80/20	4.9041
936485	AD2-063 C	9.3060	80/20	9.3060
939181	AE1-148 C	4.9324	80/20	4.9324
940661	AE2-053 O1	1.8268	80/20	1.8268
942451	AE2-258	1.8956	80/20	1.8956
943911	AF1-059	8.9330	80/20	8.9330
946301	AF1-294 C	14.1193	80/20	14.1193
958211	AF2-115 C	8.3055	80/20	8.3055
961791	AG1-021 C	6.6444	80/20	6.6444
961891	AG1-030 C	43.7661	80/20	43.7661
962041	AG1-048 C	41.5275	80/20	41.5275
962441	AG1-093 C O1	4.8493	80/20	4.8493
963171	AG1-166 C	6.6444	80/20	6.6444
963181	AG1-167 C	6.6444	80/20	6.6444
963191	AG1-168 C	6.6444	80/20	6.6444
963201	AG1-169 C	6.6444	80/20	6.6444
963211	AG1-170 C	6.6444	80/20	6.6444
963301	AG1-179 C	2.4494	80/20	2.4494
963311	AG1-180	1.1934	80/20	1.1934
963321	AG1-181 C O1	6.6325	80/20	6.6325
963361	AG1-185 O1	3.2090	80/20	3.2090

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963641	AG1-215 C	3.1007	80/20	3.1007
964111	AG1-272 C	0.8308	80/20	0.8308
964121	AG1-273 C	0.8308	80/20	0.8308
964131	AG1-274 C	0.8308	80/20	0.8308
964241	AG1-285 C O1	8.4308	80/20	8.4308
964791	AG1-342 C	1.8711	80/20	1.8711
964821	AG1-345 C	2.6467	80/20	2.6467
965191	AG1-384 C	0.8308	80/20	0.8308
965281	AG1-393 C	6.6444	80/20	6.6444
965451	AG1-413 C O1	3.7551	80/20	3.7551
965591	AG1-427 C	7.8857	80/20	7.8857
965601	AG1-428 C O1	2.0448	80/20	2.0448
965721	AG1-440 C	3.2508	80/20	3.2508
965731	AG1-441 C	3.2508	80/20	3.2508
965771	AG1-445	1.8782	80/20	1.8782
965781	AG1-446	1.8782	80/20	1.8782
966751	AG1-546 C	5.3496	80/20	5.3496
WEC	WEC	0.0372	Confirmed LTF	0.0372
LGEE	LGEE	0.0760	Confirmed LTF	0.0760
CPL	CPL	0.5255	Confirmed LTF	0.5255
CBM-W2	CBM-W2	1.7830	Confirmed LTF	1.7830
NY	NY	0.0553	Confirmed LTF	0.0553
TVA	TVA	0.3458	Confirmed LTF	0.3458
SIGE	SIGE	0.0256	Confirmed LTF	0.0256
CBM-S2	CBM-S2	5.8255	Confirmed LTF	5.8255
CBM-S1	CBM-S1	0.0851	Confirmed LTF	0.0851
MEC	MEC	0.2320	Confirmed LTF	0.2320
LAGN	LAGN	0.4305	Confirmed LTF	0.4305
CBM-W1	CBM-W1	1.5422	Confirmed LTF	1.5422

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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
163595641	314702	3KERR	DVP	304102	3GW KING TAP	CPL	1	DVP_P4-6: CAROLIN T122	breaker	199.0	151.37	152.13	DC	3.44

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

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

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
169146943	314726	3WILLIS	DVP	314691	3FARMVIL	DVP	1	Base Case	single	186.12	102.63	103.64	DC	1.88

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.3073	80/20	0.3073
315158	1KERR 1	0.1459	80/20	0.1459
315159	1KERR 2	0.4086	80/20	0.4086
315160	1KERR 3	0.4086	80/20	0.4086
315161	1KERR 4	0.4086	80/20	0.4086
315162	1KERR 5	0.4086	80/20	0.4086
315163	1KERR 6	0.4086	80/20	0.4086
315164	1KERR 7	0.4086	80/20	0.4086
316131	AB2-060 C	0.8460	80/20	0.8460
924301	AB2-077 C O1 (Suspended)	1.1882	80/20	1.1882
924311	AB2-078 C O1 (Suspended)	1.1882	80/20	1.1882
924321	AB2-079 C O1 (Suspended)	1.1882	80/20	1.1882
925611	AC1-036 C	0.4720	80/20	0.4720
935221	AD1-157 C	0.8970	80/20	0.8970
936265	AD2-033 C	4.1426	80/20	4.1426
936361	AD2-046 C O1	3.7549	80/20	3.7549
936485	AD2-063 C	17.7615	80/20	17.7615
938371	AE1-056 C	24.5107	80/20	24.5107
939181	AE1-148 C	3.7735	80/20	3.7735
940661	AE2-053 O1	1.3976	80/20	1.3976
942451	AE2-258	1.4531	80/20	1.4531
942461	AE2-259 C O1	50.0496	80/20	50.0496
943911	AF1-059	6.8468	80/20	6.8468
958801	AF2-171 C	49.7817	80/20	49.7817
959311	AF2-222 C	37.7730	80/20	37.7730
963301	AG1-179 C	1.8776	80/20	1.8776
963311	AG1-180	0.9148	80/20	0.9148
963321	AG1-181 C O1	31.5593	80/20	31.5593
963361	AG1-185 O1	15.2692	80/20	15.2692
964111	AG1-272 C	5.3637	80/20	5.3637
964121	AG1-273 C	5.3637	80/20	5.3637
964131	AG1-274 C	5.3637	80/20	5.3637
964241	AG1-285 C O1	12.7485	80/20	12.7485
964791	AG1-342 C	1.4298	80/20	1.4298
965191	AG1-384 C	5.3637	80/20	5.3637
965451	AG1-413 C O1	2.8781	80/20	2.8781
965591	AG1-427 C	12.4098	80/20	12.4098
965601	AG1-428 C O1	1.5674	80/20	1.5674
965641	AG1-432 C O1	100.0992	80/20	100.0992

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965721	AG1-440 C	2.4885	80/20	2.4885
965731	AG1-441 C	2.4885	80/20	2.4885
965771	AG1-445	1.4378	80/20	1.4378
965781	AG1-446	1.4378	80/20	1.4378
965831	AG1-451	16.6832	80/20	16.6832
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	10.0099	80/20	10.0099
WEC	WEC	0.0283	Confirmed LTF	0.0283
LGEE	LGEE	0.0578	Confirmed LTF	0.0578
CPL	CPL	0.4020	Confirmed LTF	0.4020
CBM-W2	CBM-W2	1.3619	Confirmed LTF	1.3619
NY	NY	0.0426	Confirmed LTF	0.0426
TVA	TVA	0.2632	Confirmed LTF	0.2632
SIGE	SIGE	0.0196	Confirmed LTF	0.0196
CBM-S2	CBM-S2	4.4579	Confirmed LTF	4.4579
CBM-S1	CBM-S1	0.0650	Confirmed LTF	0.0650
MEC	MEC	0.1764	Confirmed LTF	0.1764
LAGN	LAGN	0.3290	Confirmed LTF	0.3290
CBM-W1	CBM-W1	1.1777	Confirmed LTF	1.1777

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168955477	936400	AD2-051 TAP	DVP	314569	6EARLEYS	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	571.52	105.66	106.8	DC	6.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.3482	80/20	9.3482
313527	AB2-043 C	0.2635	80/20	0.2635
313719	3CHESTNUT	0.6800	80/20	0.6800
314429	3JTRSVLE	0.1333	80/20	0.1333
314572	3EMPORIA	0.6240	80/20	0.6240
314623	3WITAKRS	0.1261	80/20	0.1261
314704	3LAWRENC	0.3599	80/20	0.3599
315126	1ROARAP2	1.5784	80/20	1.5784
315128	1ROARAP4	1.5063	80/20	1.5063
315131	1EDGECEMA (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315132	1EDGECEMB (Deactivation : 22/04/2019)	5.7466	80/20	5.7466
315136	1ROSEMG1	3.8526	80/20	3.8526
315137	1ROSEMS1	2.3890	80/20	2.3890
315138	1ROSEMG2	1.8056	80/20	1.8056
315139	1GASTONA	6.0576	80/20	6.0576
315141	1GASTONB	6.0576	80/20	6.0576
315158	1KERR 1	0.2406	80/20	0.2406
315159	1KERR 2	0.6736	80/20	0.6736
315160	1KERR 3	0.6736	80/20	0.6736
315161	1KERR 4	0.6736	80/20	0.6736
315162	1KERR 5	0.6736	80/20	0.6736
315163	1KERR 6	0.6736	80/20	0.6736
315164	1KERR 7	0.6736	80/20	0.6736
315293	1DOMTR9	-3.2350	Adder	-3.81
315294	1DOMTR10	-3.9644	Adder	-4.66
315606	3AA2-053SOLA	1.2789	80/20	1.2789
315607	3AA1-063SOLA	1.1578	80/20	1.1578
315608	3AA2-088SOLA	0.3358	80/20	0.3358
316020	AB2-059 C OP	0.9918	80/20	0.9918
316087	AB2-174 C	1.5774	80/20	1.5774
316096	AB2-100 C1	1.6877	80/20	1.6877
316098	AB2-100 C2	1.6877	80/20	1.6877
316129	AC1-054 C	6.4409	80/20	6.4409
316131	AB2-060 C	0.7464	80/20	0.7464
920591	AA2-165 C	0.0913	80/20	0.0913
922922	AB1-081 C OP	0.8415	80/20	0.8415
923991	AB2-040 C O1	10.1812	80/20	10.1812

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	1.0495	80/20	1.0495
924311	AB2-078 C O1 (Suspended)	1.0495	80/20	1.0495
924321	AB2-079 C O1 (Suspended)	1.0495	80/20	1.0495
925591	AC1-034 C	4.0719	80/20	4.0719
925611	AC1-036 C	0.0939	80/20	0.0939
926070	AC1-086 C	43.1775	80/20	43.1775
926201	AC1-098 C	2.2605	80/20	2.2605
926211	AC1-099 C	0.7575	80/20	0.7575
927145	AC1-208 C	6.0536	80/20	6.0536
932631	AC2-084 C	3.2224	80/20	3.2224
934331	AD1-057 C O1	12.8767	80/20	12.8767
936265	AD2-033 C	5.6831	80/20	5.6831
936361	AD2-046 C O1	5.4499	80/20	5.4499
936401	AD2-051 C O1	43.0623	80/20	43.0623
936485	AD2-063 C	7.2891	80/20	7.2891
939181	AE1-148 C	5.3455	80/20	5.3455
940481	AE2-033 C	28.0875	80/20	28.0875
940571	AE2-044 C	2.6670	80/20	2.6670
940661	AE2-053 O1	1.9798	80/20	1.9798
942451	AE2-258	1.2459	80/20	1.2459
942471	AE2-260 C O1	26.1001	80/20	26.1001
943911	AF1-059	16.2460	80/20	16.2460
944141	AF1-082	1.7145	80/20	1.7145
946011	AF1-266	23.5115	80/20	23.5115
946281	AF1-292 C	2.2861	80/20	2.2861
946301	AF1-294 C	1.3464	80/20	1.3464
958211	AF2-115 C	0.7920	80/20	0.7920
958801	AF2-171 C	4.7826	80/20	4.7826
959311	AF2-222 C	6.6870	80/20	6.6870
960081	AF2-299 C	3.8531	80/20	3.8531
961791	AG1-021 C	0.6336	80/20	0.6336
961891	AG1-030 C	5.2659	80/20	5.2659
962041	AG1-048 C	3.9600	80/20	3.9600
962571	AG1-106 C	12.0073	80/20	12.0073
963171	AG1-166 C	0.6336	80/20	0.6336
963181	AG1-167 C	0.6336	80/20	0.6336
963191	AG1-168 C	0.6336	80/20	0.6336
963201	AG1-169 C	0.6336	80/20	0.6336
963211	AG1-170 C	0.6336	80/20	0.6336
963301	AG1-179 C	6.5008	80/20	6.5008
963311	AG1-180	3.1673	80/20	3.1673
963321	AG1-181 C O1	7.2785	80/20	7.2785
963361	AG1-185 O1	3.5215	80/20	3.5215
963641	AG1-215 C	0.2957	80/20	0.2957
964111	AG1-272 C	1.0672	80/20	1.0672
964121	AG1-273 C	1.0672	80/20	1.0672
964131	AG1-274 C	1.0672	80/20	1.0672
964241	AG1-285 C O1	6.2348	80/20	6.2348
964501	AG1-313 C O1	2.4851	80/20	2.4851
964791	AG1-342 C	1.3863	80/20	1.3863

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964801	AG1-343 C	1.8312	80/20	1.8312
964821	AG1-345 C	0.2544	80/20	0.2544
965191	AG1-384 C	1.0672	80/20	1.0672
965281	AG1-393 C	0.6336	80/20	0.6336
965291	AG1-394 C	0.7217	80/20	0.7217
965451	AG1-413 C O1	6.8292	80/20	6.8292
965591	AG1-427 C	5.8849	80/20	5.8849
965601	AG1-428 C O1	5.4270	80/20	5.4270
965721	AG1-440 C	5.2830	80/20	5.2830
965731	AG1-441 C	5.2830	80/20	5.2830
965771	AG1-445	3.0524	80/20	3.0524
965781	AG1-446	3.0524	80/20	3.0524
966621	AG1-532 C	2.0806	80/20	2.0806
966751	AG1-546 C	14.6869	80/20	14.6869
966811	AG1-552 C	2.5061	80/20	2.5061
WEC	WEC	0.1200	Confirmed LTF	0.1200
LGEE	LGEE	0.2482	Confirmed LTF	0.2482
CPL	CPL	1.2381	Confirmed LTF	1.2381
CBM-W2	CBM-W2	5.1251	Confirmed LTF	5.1251
NY	NY	0.1637	Confirmed LTF	0.1637
TVA	TVA	0.9604	Confirmed LTF	0.9604
SIGE	SIGE	0.0801	Confirmed LTF	0.0801
CBM-S2	CBM-S2	14.3654	Confirmed LTF	14.3654
CBM-S1	CBM-S1	0.2405	Confirmed LTF	0.2405
MEC	MEC	0.7103	Confirmed LTF	0.7103
LAGN	LAGN	1.1900	Confirmed LTF	1.1900
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

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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
163176100	940480	AE2-033 TAP	DVP	314435	6SAPONY	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	146.51	147.81	DC	10.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	14.5739	50/50	14.5739
313719	3CHESTNUT	1.3547	50/50	1.3547
314541	3WATKINS	0.3968	Adder	0.47
314572	3EMPORIA	1.0296	50/50	1.0296
314582	3KELFORD	0.3886	50/50	0.3886
314594	6PLYMOTH	0.0480	Adder	0.06
314623	3WITAKRS	0.2420	50/50	0.2420
314704	3LAWRENC	0.5984	50/50	0.5984
315126	1ROARAP2	2.1390	50/50	2.1390
315128	1ROARAP4	2.0412	50/50	2.0412
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315136	1ROSEMG1	4.0488	50/50	4.0488
315137	1ROSEMS1	2.5107	50/50	2.5107
315138	1ROSEMG2	1.8975	50/50	1.8975
315139	1GASTONA	6.0660	50/50	6.0660
315141	1GASTONB	6.0660	50/50	6.0660
315293	1DOMTR9	4.0274	Adder	4.74
315294	1DOMTR10	4.9355	Adder	5.81
315601	1CONETOE2SOL	1.5563	50/50	1.5563
315606	3AA2-053SOLA	2.1783	50/50	2.1783
315607	3AA1-063SOLA	1.8411	50/50	1.8411
316020	AB2-059 C OP	1.8615	50/50	1.8615
316087	AB2-174 C	2.5142	50/50	2.5142
316088	AB2-174 E	14.4183	50/50	14.4183
316096	AB2-100 C1	2.8368	50/50	2.8368
316097	AB2-100 E1	8.8562	50/50	8.8562
316098	AB2-100 C2	2.8368	50/50	2.8368
316099	AB2-100 E2	8.8562	50/50	8.8562
316103	AB2-015 C	4.5989	Adder	5.41
316104	AB2-015 E	3.7711	Adder	4.44
316129	AC1-054 C	8.9401	50/50	8.9401
316140	AB2-099 C (Suspended)	0.5074	Adder	0.6
316141	AB2-099 E (Suspended)	0.2175	Adder	0.26
900672	V4-068 E	0.2536	Adder	0.3
917332	Z2-043 E	1.1590	50/50	1.1590
917342	Z2-044 E	0.6574	50/50	0.6574
917512	Z2-088 E OP1	9.2316	50/50	9.2316
918492	AA1-063AE OP	5.5022	50/50	5.5022

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
918512	AA1-065 E OP	3.1563	Adder	3.71
918532	AA1-067 E	0.5438	Adder	0.64
919692	AA2-053 E OP	5.6689	50/50	5.6689
919702	AA2-057 E OP	4.0531	50/50	4.0531
920042	AA2-088 E OP	8.4552	Adder	9.95
920591	AA2-165 C	0.1819	50/50	0.1819
920592	AA2-165 E	0.5571	50/50	0.5571
922922	AB1-081 C OP	1.5794	50/50	1.5794
922923	AB1-081 E OP	4.2905	50/50	4.2905
923262	AB1-132 C OP (Suspended)	29.3605	50/50	29.3605
923263	AB1-132 E OP (Suspended)	12.5831	50/50	12.5831
923573	AB1-173 E OP	2.2727	50/50	2.2727
923991	AB2-040 C O1	15.8726	50/50	15.8726
923992	AB2-040 E O1	12.9866	50/50	12.9866
924022	AB2-043 E O1	1.9315	Adder	2.27
924152	AB2-059 E OP	6.0782	50/50	6.0782
924162	AB2-060 E OP	2.8784	Adder	3.39
924301	AB2-077 C O1 (Suspended)	1.3530	Adder	1.59
924302	AB2-077 E O1 (Suspended)	0.9020	Adder	1.06
924311	AB2-078 C O1 (Suspended)	1.3530	Adder	1.59
924312	AB2-078 E O1 (Suspended)	0.9020	Adder	1.06
924321	AB2-079 C O1 (Suspended)	1.3530	Adder	1.59
924322	AB2-079 E O1 (Suspended)	0.9020	Adder	1.06
925122	AB2-169 E	3.7190	Adder	4.38
925591	AC1-034 C	7.6424	50/50	7.6424
925592	AC1-034 E	5.7653	50/50	5.7653
925612	AC1-036 E	0.4578	Adder	0.54
925785	AC1-054 E	4.1185	50/50	4.1185
926070	AC1-086 C	43.2369	50/50	43.2369
926071	AC1-086 E	19.6785	50/50	19.6785
926201	AC1-098 C	7.4602	50/50	7.4602
926202	AC1-098 E	4.4444	50/50	4.4444
926211	AC1-099 C	2.5000	50/50	2.5000
926212	AC1-099 E	1.4682	50/50	1.4682
927024	AC1-189 C	7.7989	Adder	9.18
927025	AC1-189 E	3.8849	Adder	4.57
927145	AC1-208 C	11.7742	50/50	11.7742
927146	AC1-208 E	5.2070	50/50	5.2070
932631	AC2-084 C	10.6348	50/50	10.6348
932632	AC2-084 E	5.2380	50/50	5.2380
933991	AD1-023 C	7.9657	Adder	9.37
933992	AD1-023 E	4.3365	Adder	5.1
934331	AD1-057 C O1	17.3418	50/50	17.3418
934332	AD1-057 E O1	9.2508	50/50	9.2508
934521	AD1-076 C	29.5902	Adder	34.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934522	AD1-076 E	15.0673	Adder	17.73
936265	AD2-033 C	7.3116	Adder	8.6
936266	AD2-033 E	4.8744	Adder	5.73
936361	AD2-046 C O1	6.7224	Adder	7.91
936362	AD2-046 E O1	3.0913	Adder	3.64
936401	AD2-051 C O1	7.1246	Adder	8.38
936402	AD2-051 E O1	3.0592	Adder	3.6
936485	AD2-063 C	9.4057	Adder	11.07
936486	AD2-063 E	6.2705	Adder	7.38
938222	AE1-035 E	0.8680	Adder	1.02
939181	AE1-148 C	6.6055	Adder	7.77
939182	AE1-148 E	4.4036	Adder	5.18
940481	AE2-033 C	64.3737	50/50	64.3737
940482	AE2-033 E	43.3980	50/50	43.3980
940542	AE2-040 BAT	3.9010	50/50	3.9010
940571	AE2-044 C	5.0056	50/50	5.0056
940572	AE2-044 E	1.8235	Adder	2.15
940661	AE2-053 O1	2.4465	Adder	2.88
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5093	Adder	0.6
942451	AE2-258	1.6115	Adder	1.9
942471	AE2-260 C O1	46.3236	50/50	46.3236
942472	AE2-260 E O1	65.7044	50/50	65.7044
943171	AE2-346 C	1.2178	Adder	1.43
943172	AE2-346 E	0.5219	Adder	0.61
943911	AF1-059	26.5588	50/50	26.5588
944141	AF1-082	2.7352	Adder	3.22
946011	AF1-266	53.8858	50/50	53.8858
946281	AF1-292 C	3.8472	50/50	3.8472
946282	AF1-292 E	2.5936	50/50	2.5936
957521	AF2-046 C	14.3320	Adder	16.86
957522	AF2-046 E	7.2091	Adder	8.48
957861	AF2-080 C	7.0833	Adder	8.33
957862	AF2-080 E	3.1400	Adder	3.69
959511	AF2-242 C	5.0088	Adder	5.89
959512	AF2-242 E	3.8958	Adder	4.58
960081	AF2-299 C	6.4841	50/50	6.4841
960082	AF2-299 E	4.3227	50/50	4.3227
961091	AF2-400 C	0.2483	Adder	0.29
961092	AF2-400 E	0.4075	Adder	0.48
961671	AG1-007 C	1.5192	50/50	1.5192
961672	AG1-007 E	0.8484	50/50	0.8484
961681	AG1-008 C	7.6112	Adder	16.9
961682	AG1-008 E	3.8056	Adder	8.45
961931	AG1-036 C	0.6196	Adder	1.38
961932	AG1-036 E	0.4131	Adder	0.92
961941	AG1-037 C	0.2305	Adder	0.51
961942	AG1-037 E	0.1537	Adder	0.34
962331	AG1-082 C	0.9220	Adder	2.05
962332	AG1-082 E	0.6147	Adder	1.36
962341	AG1-083 C	0.9220	Adder	2.05
962342	AG1-083 E	0.6147	Adder	1.36
962351	AG1-084 C	0.8099	Adder	1.8

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962352	AG1-084 E	0.5399	Adder	1.2
962361	AG1-085 C	0.8099	Adder	1.8
962362	AG1-085 E	0.5399	Adder	1.2
962571	AG1-106 C	12.0238	50/50	12.0238
962572	AG1-106 E	5.4527	50/50	5.4527
963301	AG1-179 C	10.7581	50/50	10.7581
963311	AG1-180	5.2416	50/50	5.2416
963321	AG1-181 C O1	4.9612	Adder	11.01
963361	AG1-185 O1	2.4004	Adder	5.33
964111	AG1-272 C	0.7266	Adder	1.61
964112	AG1-272 E	0.2158	Adder	0.48
964121	AG1-273 C	0.7266	Adder	1.61
964122	AG1-273 E	0.2158	Adder	0.48
964131	AG1-274 C	0.7266	Adder	1.61
964132	AG1-274 E	0.2158	Adder	0.48
964241	AG1-285 C O1	4.2670	Adder	9.47
964242	AG1-285 E O1	2.8447	Adder	6.31
964491	AG1-312 C O1	7.5745	Adder	16.81
964492	AG1-312 E O1	1.8936	Adder	4.2
964501	AG1-313 C O1	6.4026	50/50	6.4026
964502	AG1-313 E O1	4.2684	50/50	4.2684
964801	AG1-343 C	2.6428	Adder	5.87
964802	AG1-343 E	2.0765	Adder	4.61
965191	AG1-384 C	0.7266	Adder	1.61
965192	AG1-384 E	0.2158	Adder	0.48
965291	AG1-394 C	0.9050	Adder	2.01
965292	AG1-394 E	0.6033	Adder	1.34
965451	AG1-413 C O1	11.1643	50/50	11.1643
965452	AG1-413 E O1	7.4429	50/50	7.4429
965591	AG1-427 C	4.0275	Adder	8.94
965592	AG1-427 E	2.6907	Adder	5.97
965601	AG1-428 C O1	8.9810	50/50	8.9810
965602	AG1-428 E O1	5.9767	50/50	5.9767
965691	AG1-437 C O1	3.5190	Adder	7.81
965692	AG1-437 E O1	2.3460	Adder	5.21
965701	AG1-438 C O1	3.5190	Adder	7.81
965702	AG1-438 E O1	2.3460	Adder	5.21
965711	AG1-439 C O1	27.9180	50/50	27.9180
965712	AG1-439 E O1	18.6120	50/50	18.6120
965721	AG1-440 C	3.3703	Adder	7.48
965722	AG1-440 E	2.2469	Adder	4.99
965731	AG1-441 C	3.3703	Adder	7.48
965732	AG1-441 E	2.2469	Adder	4.99
965741	AG1-442 O1	2.0528	Adder	4.56
965751	AG1-443 O1	2.0528	Adder	4.56
965761	AG1-444 O1	14.8896	50/50	14.8896
965771	AG1-445	1.9473	Adder	4.32
965781	AG1-446	1.9473	Adder	4.32
966621	AG1-532 C	3.5014	50/50	3.5014
966622	AG1-532 E	2.3343	50/50	2.3343
966751	AG1-546 C	20.3177	50/50	20.3177
966752	AG1-546 E	10.9018	50/50	10.9018

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966801	AG1-551 C	0.8593	Adder	1.91
966802	AG1-551 E	0.3683	Adder	0.82
966811	AG1-552 C	3.3962	50/50	3.3962
966812	AG1-552 E	1.4555	50/50	1.4555
WEC	WEC	0.2003	Confirmed LTF	0.2003
LGEE	LGEE	0.4128	Confirmed LTF	0.4128
CPL	CPL	2.4679	Confirmed LTF	2.4679
CBM-W2	CBM-W2	8.9152	Confirmed LTF	8.9152
NY	NY	0.3069	Confirmed LTF	0.3069
TVA	TVA	1.6884	Confirmed LTF	1.6884
O-066	O-066	4.3005	Confirmed LTF	4.3005
SIGE	SIGE	0.1410	Confirmed LTF	0.1410
CBM-S2	CBM-S2	26.7473	Confirmed LTF	26.7473
CBM-S1	CBM-S1	0.4203	Confirmed LTF	0.4203
G-007	G-007	0.6762	Confirmed LTF	0.6762
MEC	MEC	1.2076	Confirmed LTF	1.2076
LAGN	LAGN	2.1000	Confirmed LTF	2.1000
AA2-074	AA2-074	1.6299	LTF	1.6299
CBM-W1	CBM-W1	8.3699	Confirmed LTF	8.3699

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
AA1-063A	Carolina–Seaboard 115kV	In Service
AA1-065	Earleys 230kV	In Service
AA1-067	Everetts 34.5kV	In Service
AA2-053	Carolina-Jackson 115kV	In Service
AA2-057	Hornertown-Whitakers 115kV	In Service
AA2-074	CPL- PJM	Confirmed
AA2-088	Boykins-Handsome 115kV	In Service
AA2-165	Hornertown-Whitakers 115kV	In Service
AB1-081	Anaconda-Mayo Dunbar 115kV	In Service
AB1-132	Thelma 230kV	Suspended
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB2-015	Franklin 115kV	Engineering and Procurement
AB2-025	Sapony 34.5kV	In Service
AB2-040	Brink 115kV	Engineering and Procurement
AB2-043	Chase City 115kV	Under Construction
AB2-059	Benson-Dunbar 115kV	Partially in Service - Under Construction
AB2-060	Chase City-Lunenburg 115kV	In Service
AB2-077	Buggs Island-Chase City 115kV	Suspended
AB2-078	Buggs Island-Chase City 115kV	Suspended
AB2-079	Buggs Island-Chase City 115kV	Suspended
AB2-099	Ahoskie 34.5kV	Suspended
AB2-100	Clubhouse-Lakeview 230kV	Under Construction
AB2-169	Pantago-Five Points 115kV	Partially in Service - Under Construction
AB2-174	Emporia-Trego 115kV	In Service
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Engineering and Procurement
AC1-036	Twittys Creek 34.5kV	Partially in Service - Under Construction
AC1-042	Altavista-Mt. Airy 69kV	Engineering and Procurement
AC1-054	Kerr Dam–Eatons Ferry 115 kV	Engineering and Procurement
AC1-075	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-080	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-086	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
AC1-145	Gretna DP 69 kV	Engineering and Procurement
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-208	Cox-Whitakers 115kV	Engineering and Procurement
AC1-222	Crystal Hill-Halifax 115kV	Engineering and Procurement

Queue Number	Project Name	Status
AC2-084	Dawson-South Justice 115kV	Active
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-055	Crystal Hill-Halifax 115 kV	Engineering and Procurement
AD1-057	Hornertown-Hathaway 230 kV	Active
AD1-076	Trowbridge 230 kV	Active
AD1-157	South Creek 34.5 kV	Engineering and Procurement
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
AE1-035	Earleys 230 kV	Partially in Service - Under Construction
AE1-056	Red House-South Creek 115 kV	Active
AE1-103	Holland-Union Camp 115 kV	Active
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE1-230	Shockoe 69 kV	Active
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-040	Sapony 34.5 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-151	Earleys 34.5kV	Withdrawn
AE2-185	Gladys DP-Stonemill Switching Station 69 kV	Active
AE2-187	Shockoe DP-Chatham 69 kV	Active
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active
AE2-260	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
AE2-346	Ahoskie 34.5 kV	Active
AF1-058	Welco 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-173	Gretna DP-Shockoe DP 69 kV	Active
AF1-266	Clubhouse-Sappony 230 kV	Active
AF1-292	Fields 34.5kV	Active
AF1-294	Jetersville-Ponton 115 kV	Active
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-115	Jetersville-Ponton 115 kV	Active
AF2-171	Madisonville 115 kV	Active
AF2-222	Madisonville DP-Twitty's Creek 115 kV	Active
AF2-242	Wharton 115 kV	Active
AF2-297	Sedge Hill 115 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-400	Franklin 13.2 kV	Engineering and Procurement
AF2-403	Shockoe DP-Chatham 69 kV	Active
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-030	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
AG1-106	Thelma 230 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
AG1-179	Brunswick 69 kV	Active
AG1-180	Brunswick 69 kV	Active
AG1-181	Pamplin-Chase City 115 kV	Active
AG1-185	Pamplin-Chase City 115 kV	Active
AG1-209	Gretna 12.5 kV	Active
AG1-215	Fort Pickett 13.2 kV	Active
AG1-272	Twitty's Creek 115 kV	Active
AG1-273	Twitty's Creek 115 kV	Active
AG1-274	Twitty's Creek 115 kV	Active
AG1-275	Gladys DP-Stone Mill 69 kV	Active
AG1-276	Gladys DP-Stone Mill 69 kV	Active
AG1-285	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-Occoneetchee 115 kV	Active
AG1-342	Dryburg 115 kV	Active
AG1-343	Boykins-Murphy 115 kV	Active
AG1-345	Crewe 12.5 kV	Active
AG1-384	Twitty's Creek 115 kV	Active
AG1-393	Fort Pickett DP 34.5 kV	Active
AG1-394	Boykins 34.5 kV	Active
AG1-413	South Hill-Bordnax 115 kV	Active
AG1-427	Chase City-Drakes Branch 115 kV	Active
AG1-428	Danieltown 69 kV	Active
AG1-432	Curdsville DP-Willis Mt. 115 kV	Active
AG1-437	Cashie-Earleys 230 kV	Active
AG1-438	Cashie-Earleys 230 kV	Active
AG1-439	Chinquapin 230 kV	Active
AG1-440	Palmer Springs 115 kV	Active
AG1-441	Palmer Springs 115 kV	Active
AG1-442	Cashie-Earleys 230 kV	Active
AG1-443	Cashie-Earleys 230 kV	Active
AG1-444	Chinquapin 230 kV	Active
AG1-445	Palmer Spring 115 kV	Active
AG1-446	Palmer Springs 115 kV	Active
AG1-451	Curdsville DP-Willis Mt. 115 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-539	Grit DP-Perth 115 kV	Active

Queue Number	Project Name	Status
AG1-546	Ebony-Elams Road 115 kV	Active
AG1-547	Mount Airy-Chatham 69 kV	Active
AG1-551	Parmele 12.5 kV	Active
AG1-552	Carolina 13.2 kV	Active
AG1-557	Curdsville DP 115 kV	Withdrawn
V4-068	Murphy's 34.5kV	In Service
Z2-043	Kelford 34.5kV	In Service
Z2-044	Whitakers 34.5kV	In Service
Z2-088	Tarboro-Everetts 230kV	In Service

11.8 Contingency Descriptions

Contingency Name	Contingency Definition
DVP_P4-2: 102802	CONTINGENCY 'DVP_P4-2: 102802' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END
DVP_P1-2: LN 90	CONTINGENCY 'DVP_P1-2: LN 90' OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END
DVP_P1-2: LN 130	CONTINGENCY 'DVP_P1-2: LN 130' OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314595 TO BUS 314600 CKT 1 /* 3PL HILL 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314600 TO BUS 314615 CKT 1 /* 3PLHITP 115.00 - 3SKIPPERS 115.00 OPEN BUS 314595 /* ISLAND: 3PL HILL 115.00 OPEN BUS 314600 /* ISLAND: 3PLHITP 115.00 END

Contingency Name	Contingency Definition
DVP_P2-2: BREMO B1	CONTINGENCY 'DVP_P2-2: BREMO B1' /* BREMO 230 KV OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 1 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315191 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G118.000 OPEN BUS 315191 /* ISLAND: 1BEARGRDN G118.000 OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 2 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315192 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G218.000 OPEN BRANCH FROM BUS 314326 TO BUS 315193 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN S122.000 OPEN BUS 315192 /* ISLAND: 1BEARGRDN G218.000 OPEN BUS 315193 /* ISLAND: 1BEARGRDN S122.000 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313867 TO BUS 314747 CKT 1 /* 6BREMODIST 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314744 TO BUS 314747 CKT 1 /* 3BREMO 115.00 - 6BREMO 230.00 OPEN BUS 314747 /* 6BREMO 230.00 KV OPEN BUS 314326 /* ISLAND: 6BEARGRDN 230.00 END
DVP_P7-1: LN 2058-2181	CONTINGENCY 'DVP_P7-1: LN 2058-2181' /* . OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END
314266 6NORTHAMPTON 230 936400 AD2-051 TAP 230 1	CONTINGENCY '314266 6NORTHAMPTON 230 936400 AD2-051 TAP 230 1' OPEN BRANCH FROM BUS 314266 TO BUS 936400 CKT 1 END
DVP_P1-2: LN 2201	CONTINGENCY 'DVP_P1-2: LN 2201' OPEN BRANCH FROM BUS 313725 TO BUS 314563 CKT 1 /* 6DRY BREAD 230.00 - 6CLUBHSE 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 33	CONTINGENCY 'DVP_P1-2: LN 33' OPEN BRANCH FROM BUS 314267 TO BUS 314669 CKT 1 /* 3CHASCTY2 115.00 - 3BARN J 115.00 OPEN BRANCH FROM BUS 314669 TO BUS 314684 CKT 1 /* 3BARN J 115.00 - 3MT LREL 115.00 OPEN BRANCH FROM BUS 314684 TO BUS 316115 CKT 1 /* 3MT LREL 115.00 - AC1-105 TAP 115.00 OPEN BRANCH FROM BUS 314696 TO BUS 316115 CKT 1 /* 3SEEDGE HILL 115.00 - AC1-105 TAP 115.00 OPEN BUS 314669 /* ISLAND: 3BARN J 115.00 OPEN BUS 314684 /* ISLAND: 3MT LREL 115.00 OPEN BUS 316115 /* ISLAND: AC1-105 TAP 115.00 OPEN BUS 316116 /* ISLAND: AC1-105 MAIN115.00 OPEN BUS 316117 /* ISLAND: AC1-105 COL 34.500 OPEN BUS 316118 /* ISLAND: AC1-105 C 0.5750 OPEN BUS 926274 /* ISLAND: AC1-105 E 0.5750 END
DVP_P1-3: 6SEEDGE HILL-TX#1	CONTINGENCY 'DVP_P1-3: 6SEEDGE HILL-TX#1' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 1 /* 3SEEDGE HILL 115.00 - 6SEEDGE HILL 230.00 END
DVP_P1-3: 6SEEDGE HILL-TX#2	CONTINGENCY 'DVP_P1-3: 6SEEDGE HILL-TX#2' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 2 /* 3SEEDGE HILL 115.00 - 6SEEDGE HILL 230.00 END
DVP_P1-2: LN 238-A	CONTINGENCY 'DVP_P1-2: LN 238-A' OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2-033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 END
DVP_P7-1: LN 25-2034-A	CONTINGENCY 'DVP_P7-1: LN 25-2034-A' OPEN BRANCH FROM BUS 314573 TO BUS 314596 CKT 1 /* 3EVERETS 115.00 - 3POPLR C 115.00 OPEN BRANCH FROM BUS 314596 TO BUS 314614 CKT 1 /* 3POPLR C 115.00 - 3TRWBRDG2 115.00 OPEN BUS 314596 /* ISLAND: 3POPLR C 115.00 OPEN BRANCH FROM BUS 314614 TO BUS 314616 CKT 1 /* 3TRWBRDG2 115.00 - 6TRWBRDG 230.00 OPEN BRANCH FROM BUS 314616 TO BUS 933990 CKT 1 /* 6TRWBRDG 230.00 - AD1-023 TAP 230.00 END

Contingency Name	Contingency Definition
DVP_P7-1: LN 54-2012-B	CONTINGENCY 'DVP_P7-1: LN 54-2012-B' /* . OPEN BRANCH FROM BUS 964500 TO BUS 314581 CKT 1 /* AG1-313 TAP115.00 - 3JACKSON 115.00 OPEN BRANCH FROM BUS 314568 TO BUS 314625 CKT 1 /* 3EARLEYS 115.00 - 3AULANDR 115.00 OPEN BRANCH FROM BUS 314581 TO BUS 314626 CKT 1 /* 3JACKSON 115.00 - 3WOODLND 115.00 OPEN BRANCH FROM BUS 314625 TO BUS 314626 CKT 1 /* 3AULANDR 115.00 - 3WOODLND 115.00 OPEN BUS 314581 /* ISLAND: 3JACKSON 115.00 OPEN BUS 314625 /* ISLAND: 3AULANDR 115.00 OPEN BUS 314626 /* ISLAND: 3WOODLND 115.00 OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 314266 TO BUS 314599 CKT 1 /* 6NORTHAMPTON230.00 - 6ROA VAL 230.00 END
DVP_P7-1: LN 54-2012-A	CONTINGENCY 'DVP_P7-1: LN 54-2012-A' /* . OPEN BRANCH FROM BUS 964500 TO BUS 314581 CKT 1 /* AG1-313 TAP115.00 - 3JACKSON 115.00 OPEN BRANCH FROM BUS 314568 TO BUS 314625 CKT 1 /* 3EARLEYS 115.00 - 3AULANDR 115.00 OPEN BRANCH FROM BUS 314581 TO BUS 314626 CKT 1 /* 3JACKSON 115.00 - 3WOODLND 115.00 OPEN BRANCH FROM BUS 314625 TO BUS 314626 CKT 1 /* 3AULANDR 115.00 - 3WOODLND 115.00 OPEN BUS 314581 /* ISLAND: 3JACKSON 115.00 OPEN BUS 314625 /* ISLAND: 3AULANDR 115.00 OPEN BUS 314626 /* ISLAND: 3WOODLND 115.00 OPEN BRANCH FROM BUS 314266 TO BUS 936400 CKT 1 /* 6NORTHAMPTON230.00 - AD2-051 TAP 230.00 OPEN BRANCH FROM BUS 314266 TO BUS 314599 CKT 1 /* 6NORTHAMPTON230.00 - 6ROA VAL 230.00 OPEN BUS 314266 /* ISLAND: 6NORTHAMPTON230.00 END
DVP_P1-2: LN 2056-A	CONTINGENCY 'DVP_P1-2: LN 2056-A' OPEN BRANCH FROM BUS 313845 TO BUS 934330 CKT 1 /* 6HATHAWAY 230.00 - AD1-057 TAP 230.00 END

Contingency Name	Contingency Definition
DVP_P4-6: CAROLIN T122	CONTINGENCY 'DVP_P4-6: CAROLIN T122' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 315126 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP2 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 315128 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP4 14.400 OPEN BUS 315126 /* ISLAND: 1ROARAP2 14.400 OPEN BUS 315128 /* ISLAND: 1ROARAP4 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314578 CKT 1 /* 3CAROLNA 115.00 - 3HORNRTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 OPEN BUS 314559 /* 3CAROLNA 115.00 KV OPEN BUS 314835 /* ISLAND: 3CAROL_1 115.00 END
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_P1-2: LN 140	CONTINGENCY 'DVP_P1-2: LN 140' OPEN BRANCH FROM BUS 313720 TO BUS 314526 CKT 1 /* 3NEWSOMS 115.00 - 3HANDSOM 115.00 OPEN BRANCH FROM BUS 314526 TO BUS 314534 CKT 1 /* 3HANDSOM 115.00 - 3S HAMPT 115.00 OPEN BUS 314526 /* ISLAND: 3HANDSOM 115.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 68-A	CONTINGENCY 'DVP_P1-2: LN 68-A' OPEN BRANCH FROM BUS 313737 TO BUS 314527 CKT 1 /* 3COPELD DP 115.00 - 3HOLLAND 115.00 OPEN BRANCH FROM BUS 313737 TO BUS 961850 CKT 1 /* 3COPELD DP 115.00 - 3SUFFOLK 115.00 OPEN BRANCH FROM BUS 314527 TO BUS 938770 CKT 1 /* 3HOLLAND 115.00 - AE1-103 TAP 115.00 OPEN BUS 313737 /* ISLAND: 3COPELD DP 115.00 OPEN BUS 314527 /* ISLAND: 3HOLLAND 115.00 END
Base Case	
314435 6SAPONY 230 940480 AE2-033 TAP 230 1	CONTINGENCY '314435 6SAPONY 230 940480 AE2-033 TAP 230 1' OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 END
DVP_P1-2: LN 235-A	CONTINGENCY 'DVP_P1-2: LN 235-A' OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 /* 6PRINCE EDW 230.00 - 6BRIERY 230.00 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 /* 6PRINCE EDW 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 /* 6BRIERY 230.00 - AG1-347 TAP 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 313802 /* ISLAND: 6PRINCE EDW 230.00 OPEN BUS 314268 /* ISLAND: 6BRIERY 230.00 END

Contingency Name	Contingency Definition
DVP_P7-1: LN 22-90	CONTINGENCY 'DVP_P7-1: LN 22-90' /*. OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 314571 TO BUS 316125 CKT 1 /* 3EATON F 115.00 - AC1-054 TAP 115.00 OPEN BRANCH FROM BUS 314702 TO BUS 316125 CKT 1 /* 3KERR 115.00 - AC1-054 TAP 115.00 OPEN BUS 314571 /* ISLAND: 3EATON F 115.00 OPEN BUS 316125 /* ISLAND: AC1-054 TAP 115.00 OPEN BUS 316126 /* ISLAND: AC1-054 MAIN115.00 OPEN BUS 316127 /* ISLAND: AC1-054 COL222.860 OPEN BUS 316128 /* ISLAND: AC1-054 COL122.860 OPEN BUS 316129 /* ISLAND: AC1-054 C 0.3850 OPEN BUS 925785 /* ISLAND: AC1-054 E 0.3850 OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END
DVP_P1-2: LN 2012-B	CONTINGENCY 'DVP_P1-2: LN 2012-B' OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* 6NORTHAMPTON230.00 - AD2-051 TAP 230.00 END
DVP_P4-2: 13002	CONTINGENCY 'DVP_P4-2: 13002' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314595 TO BUS 314600 CKT 1 /* 3PL HILL 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314600 TO BUS 314615 CKT 1 /* 3PLHITP 115.00 - 3SKIPPERS 115.00 OPEN BUS 314595 /* ISLAND: 3PL HILL 115.00 OPEN BUS 314600 /* ISLAND: 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 132-B	CONTINGENCY 'DVP_P1-2: LN 132-B' OPEN BRANCH FROM BUS 963300 TO BUS 314786 CKT 1 /* 2BRUNSWICK 69.000 - 2GASBURG 69.000 OPEN BUS 314786 /* ISLAND: 2GASBURG 69.000 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).