



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-313
JACKSON DP-OCONEECHEE 115 KV
27.6 MW Capacity / 46 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 Northhampton County, North Carolina. The installed facilities will have a total capability of 46 MW with 27.6 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is October 09, 2023. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-313
Project Name	JACKSON DP-OCCONEECHEE 115 KV
State	North Carolina
County	Northhampton
Transmission Owner	Dominion
MFO	46
MWE	46
MWC	27.6
Fuel	Solar
Basecase Study Year	2024

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

4 Point of Interconnection

4.1 Primary Point of Interconnection

AG1-313 "Jackson DP-Occoneechee 115 kV" will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 115 kV three breaker ring bus located on the line between the Jackson DP substation and Occoneechee substation.

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

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

4.2 Secondary Point of Interconnection

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

The secondary POI for AG1-313 is a direct connect to the Jackson DP 115 kV substation.

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

5 Cost Summary

The AG1-313 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$8,800,000
Total System Network Upgrade Costs	\$785,184,000 ¹
Total Costs	\$793,984,000

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.

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

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

6 Transmission Owner Scope of Work

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of AG1-313 to the Dominion Transmission System is detailed in the following sections. The associated one-line showing the generation project attachment facilities and primary direct and non-direct connection is shown in Attachment 1.

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

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

Description	Total Cost
<i>Attachment Facilities</i>	\$1,700,000
<i>115 kV Three Breaker Ring-Bus Substation</i>	\$5,500,000
<i>Re-arrange line and tie-in new substation</i>	\$1,600,000
Total Physical Interconnection Costs	\$8,800,000

AG1-313 "Jackson DP-Occoneechee 115 kV" will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 115 kV three breaker ring bus located on the line between the Jackson DP substation and Occoneechee substation.

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

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

7 Schedule

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

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

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-313 for compliance with NERC Reliability Criteria on the Dominion Transmission System. The system was assessed using the summer 2024 AG1 case provided to Dominion by PJM.

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

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

8.1 Power Flow Analysis

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

8.2 Short Circuit Analysis

No impacts.

8.3 Stability Analysis

To be performed in the Facilities Study phase.

9 Interconnection Customer Requirements

9.1 System Protection

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

9.2 Compliance Issues and Interconnection Customer Requirements

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

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

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

The IC will also be required to meet all PJM, SERC, and NERC reliability criteria and operating procedures for standards compliance. For example, the IC will need to properly locate and report the over and under voltage and over and under frequency system protection elements for its units as well as the submission of the generator model and protection data required to satisfy the PJM and SERC audits. Failure to comply with

these requirements may result in a disconnection of service if the violation is found to compromise the reliability of the Dominion system.

9.3 Power Factor Requirements

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

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

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

10.2 Meteorological Data Reporting Requirements

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

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

10.3 Interconnected Transmission Owner Requirements

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

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

11 Summer Peak - Load Flow Analysis - Primary POI

The Queue Project AG1-313 was evaluated as a 46.0 MW (Capacity 27.6 MW) injection tapping the Jackson to Occoneechee 115 kV line in the Dominion area. Project AG1-313 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-313 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

11.1 Generation Deliverability

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163714964	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL	1	DVP_P1-2: LN 193	single	199.0	99.29	100.07	DC	1.55

11.2 Multiple Facility Contingency

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

None

11.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168454969	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P1-2: LN 2056-A	single	165.440002441	105.44	107.11	DC	2.76
168454971	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P1-2: LN 2056-B	single	165.440002441	103.28	104.94	DC	2.76
163260015	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	AEP_P2-2_#1377_05J.FERR 765_1	bus	459.0	174.15	175.53	DC	6.3
163260016	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	459.0	169.8	171.15	DC	6.18
163260285	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	189.53	191.1	DC	7.21
163260286	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	PL:48:P71:102649	tower	459.0	168.72	170.07	DC	6.17
168454819	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2012-B	single	375.059997559	144.0	145.04	DC	3.91
168454959	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P1-2: LN 2056-B	single	165.440002441	112.1	113.77	DC	2.76
168454960	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P1-2: LN 126	single	165.440002441	100.86	102.07	DC	2.0
163260355	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P7-1: LN 54-2012-B	tower	830.0	150.18	151.89	DC	14.15
163260356	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P7-1: LN 54-2012-A	tower	830.0	150.1	151.81	DC	14.15
163714797	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT115T	115.0	CPL	1	DVP_P4-2: 2058T2167	breaker	164.0	131.79	132.5	DC	2.57
163715614	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT115T	115.0	CPL	1	DVP_P7-1: LN 2058-2181	tower	164.0	295.69	298.61	DC	4.77
168995862	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	single	239.888000488	121.04	124.24	DC	7.67
168995863	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 140	single	239.888000488	115.47	118.67	DC	7.68
168995807	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	202.77	204.53	DC	3.22
168995809	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	142.0	143.19	DC	2.12
163260101	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	136.14	137.33	DC	9.82

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	ACDC	MW IMPACT
163260360	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	142.42	143.7	DC	10.67
163260361	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	830.0	130.62	131.86	DC	10.28
168995883	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	DVP_P1-3: 6EARLEYS-TX#3	single	175.779998779	129.25	133.81	DC	8.01
168995927	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-3: 6EARLEYS-TX#4	single	202.475997925	112.3	116.26	DC	8.02
168995771	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	188.7	189.78	DC	6.16
168995772	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	185.79	186.87	DC	6.16
163715617	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	189.11	190.27	DC	5.56
168995789	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	180.02	181.1	DC	6.16
168995790	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	177.11	178.19	DC	6.16
168995922	314579	6HORNR TN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	single	441.799987793	121.01	122.03	DC	4.49
168995923	314579	6HORNR TN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	DVP_P1-2: LN 238-A	single	441.799987793	120.99	122.0	DC	4.49
163260310	314583	6LAKEVEW	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	173.69	175.26	DC	7.22
168454834	314583	6LAKEVEW	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P1-2: LN 2056-A	single	375.059997559	139.31	140.57	DC	4.7
169197095	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P1-2: LN 2056-B	single	165.440002441	112.16	113.83	DC	2.76
169197096	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P1-2: LN 126	single	165.440002441	100.92	102.13	DC	2.0
163260340	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	151.68	152.97	DC	10.67
163260341	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 54-2012-B	tower	830.0	148.49	150.2	DC	14.16
168758459	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	184.35	185.43	DC	6.16
168758460	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	181.44	182.52	DC	6.16

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
168454967	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P1-2: LN 2056-A	operation	165.440002441	148.51	149.76	DC	4.59
168454970	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	Base Case	operation	165.440002441	112.76	113.82	DC	3.9
168455107	313720	3NEWSOMS	115.0	DVP	314526	3HANDSOM	115.0	DVP	1	DVP_P1-2: LN 136	operation	280.119995117	113.98	114.51	DC	3.28
168454816	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	375.059997559	205.56	207.21	DC	6.17
168454953	313737	3COPELDDP	115.0	DVP	961850	AG1-027 TAP	115.0	DVP	1	Base Case	operation	247.220001221	124.27	124.94	DC	3.67
163714988	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT230T	230.0	CPL E	1	DVP_P1-2: LN 2181	operation	478.0	154.91	156.16	DC	5.99
168454956	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P1-2: LN 2056-B	operation	165.440002441	153.28	154.54	DC	4.59
168454958	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	Base Case	operation	165.440002441	123.22	124.29	DC	3.9
168455078	313858	3SO JUSTICE	115.0	DVP	314577	3COX DP	115.0	DVP	1	DVP_P1-2: LN 2056-A	operation	165.440002441	119.4	122.19	DC	4.61
168758535	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 2012-B	operation	678.679992676	182.0	183.48	DC	10.01
168758537	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	operation	678.679992676	163.96	165.4	DC	9.7
168758597	314524	3FRNKLN	115.0	DVP	314539	3UNCAMP	115.0	DVP	1	DVP_P1-2: LN 136	operation	224.660003662	167.35	168.01	DC	3.27
168758599	314524	3FRNKLN	115.0	DVP	314539	3UNCAMP	115.0	DVP	1	Base Case	operation	224.660003662	137.51	138.25	DC	3.67
168758857	314526	3HANDSOM	115.0	DVP	314534	3S HAMPT	115.0	DVP	1	DVP_P1-2: LN 136	operation	280.119995117	113.05	113.58	DC	3.28
168758645	314527	3HOLLAND	115.0	DVP	313737	3COPELDDP	115.0	DVP	1	Base Case	operation	247.220001221	128.11	128.78	DC	3.67
168758716	314534	3S HAMPT	115.0	DVP	314541	3WATKINS	115.0	DVP	1	DVP_P1-2: LN 136	operation	269.779998779	133.85	134.4	DC	3.27
168758718	314534	3S HAMPT	115.0	DVP	314541	3WATKINS	115.0	DVP	1	Base Case	operation	247.220001221	119.83	120.5	DC	3.67
168995916	314539	3UNCAMP	115.0	DVP	938770	AE1-103 TAP	115.0	DVP	1	Base Case	operation	224.660003662	136.29	137.03	DC	3.67
168758821	314541	3WATKINS	115.0	DVP	314524	3FRNKLN	115.0	DVP	1	DVP_P1-2: LN 136	operation	269.779998779	118.97	119.52	DC	3.27
168758823	314541	3WATKINS	115.0	DVP	314524	3FRNKLN	115.0	DVP	1	Base Case	operation	247.220001221	103.58	104.25	DC	3.67
163715167	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT115T	115.0	CPL E	1	DVP_P1-2: LN 2058	operation	164.0	128.57	129.29	DC	2.59
168995859	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	operation	239.888000488	162.55	167.89	DC	12.79
168995861	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operation	226.539993286	119.61	124.78	DC	11.7
168995890	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P1-2: LN 246-B	operation	375.059997559	135.93	139.36	DC	12.85
168995805	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	operation	182.641998291	244.05	246.99	DC	5.37
168995806	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	176.81401062	186.83	187.73	DC	3.53

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
168995903	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2056-A	operation	678.679992676	163.72	165.37	DC	11.15
168995905	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	Base Case	operation	678.679992676	156.61	158.05	DC	9.71
168995881	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	DVP_P1-3: 6EARLEY S-TX#3	operation	175.779998779	190.4	197.99	DC	13.35
168995884	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	Base Case	operation	167.414001465	115.02	119.79	DC	7.99
168995925	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-3: 6EARLEY S-TX#4	operation	202.475997925	165.45	172.05	DC	13.37
168995928	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	Base Case	operation	195.802001953	98.67	102.76	DC	8.02
168995769	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	271.57	273.36	DC	10.26
168995773	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	operation	571.520019531	163.65	165.14	DC	8.5
168995787	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	262.89	264.68	DC	10.26
168995791	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	Base Case	operation	571.520019531	154.95	156.44	DC	8.5
168996026	314577	3COX DP	115.0	DVP	313719	3CHESTNUT	115.0	DVP	1	DVP_P1-2: LN 2056-A	operation	165.440002441	111.06	113.85	DC	4.61
168995920	314579	6HORNRTN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	314435 6SAPON Y 230 940480 AE2-033 TAP 230 1	operation	441.799987793	159.57	161.27	DC	7.48
168454832	314583	6LAKEVEW	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P1-2: LN 2056-A	operation	375.059997559	200.62	202.72	DC	7.84
168454833	314583	6LAKEVEW	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	Base Case	operation	375.059997559	185.62	187.27	DC	6.19
168995999	314583	6LAKEVEW	230.0	DVP	314579	6HORNRTN	230.0	DVP	1	314435 6SAPON Y 230 940480 AE2-033 TAP 230 1	operation	441.799987793	116.44	118.14	DC	7.52
163714977	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P1-2: LN 2058	operation	478.0	155.56	156.78	DC	5.81
169197092	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P1-2: LN 2056-B	operation	165.440002441	153.34	154.6	DC	4.59
169197094	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	Base Case	operation	165.440002441	123.22	124.29	DC	3.9
169197290	314626	3WOODLND	115.0	DVP	314625	3AULANDR	115.0	DVP	1	DVP_P1-2: LN 1028	operation	110.919998169	60.9	102.36	DC	45.99
163714956	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPL E	1	Base Case	operation	191.0	137.37	137.92	DC	2.32
168454931	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P1-2: LN 238-B	operation	441.799987793	153.41	155.04	DC	7.2
168454935	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	Base Case	operation	441.799987793	102.71	103.17	DC	4.46

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC DC	MW IMPACT
169680276	938770	AE1-103 TAP	115.0	DVP	314527	3HOLLAND	115.0	DVP	1	Base Case	operation	224.660003662	145.12	145.86	DC	3.67
169680257	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P1-2: LN 2012-B	operation	678.679992676	182.44	183.92	DC	10.01
169680259	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	operation	678.679992676	166.63	168.06	DC	9.71
168758457	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	269.82	271.62	DC	10.26
168758461	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	operation	571.520019531	161.32	162.81	DC	8.5
169971126	961850	AG1-027 TAP	115.0	DVP	314536	3SUFFOLK	115.0	DVP	1	Base Case	operation	247.220001221	166.2	166.87	DC	3.67

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
168995771,168 995772	12	GEARLEYS 230.0 kV - 6NUCO TP 230.0 kV Ckt 1	<u>DVP</u> n6138 (1695) : Rebuild 13.7 miles of 230 kV Line 246 from Earleys to Nucor Tap with 2-636 ACSR. Project Type : FAC Cost : \$20,550,000 Time Estimate : 30-36 Months dom-315 (1846) : Rebuild 13.7 miles of 230 kV Line 246 from Earleys to Nucor Tap with 2-768.2 ACSS 250 C. Replace Wave Trap and Line Lead at Earleys terminal. Replace Line Switch at Nucor Tap Terminal. Project Type : FAC Cost : \$21,000,000 Time Estimate : 36-40 Months	\$41,550,000
168454971,168 454969	2	3CHESTNUT 115.0 kV - 3WITAKRS 115.0 kV Ckt 1	<u>DVP</u> dom-268 (1799) : Reconductor 4.55 miles of 115 kV line 1001 from Chestnut to Whitakers with 636 ACSR 150 C Project Type : FAC Cost : \$2,730,000 Time Estimate : 30-36 Months	\$2,730,000
168995927	11	3GEARLEYS 115.0 kV - 6GEARLEYS 230.0 kV Ckt 1	<u>DVP</u> dom-016 (1495) : Add additional 230/115 kV transformer at Earleys substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
168995883	10	3GEARLEYS 115.0 kV - 6GEARLEYS 230.0 kV Ckt 2		
163260016,163 260286,163260 285,163260015, 168454819	3	6DRY BREAD 230.0 kV - 6CLUBHSE 230.0 kV Ckt 1	<u>DVP</u> dom-270 (1801) : Rebuild 1.45 miles of 230 kV Line 2201 from Dry bread to Clubhouse with 2-636 ACSR 150 C. Replace Line Lead at Clubhouse terminal. Project Type : FAC Cost : \$2,175,000 Time Estimate : 30-36 Months	\$2,175,000
168758459,168 758460	19	AF2-076 TAP 230.0 kV - 6SUFFOLK 230.0 kV Ckt 1	<u>DVP</u> dom-243 (1774) : Rebuild 2.8 miles of 230 kV Line 246 from AF2-076 Tap to Suffolk with 2-768 ACSS. Project Type : FAC Cost : \$4,200,000 Time Estimate : 36-40 Months	\$4,200,000

ID	Idx	Facility	Upgrade Description	Cost
168995863,168995862	7	3CAROLNA 115.0 kV - 6CAROLNA 230.0 kV Ckt 1	<u>DVP</u> n6113 (1687) : Add additional 230/115 kV transformer at Carolina substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
163260340,163260341	18	AE2-033 TAP 230.0 kV - 6SAPONY 230.0 kV Ckt 1	<u>DVP</u> n6452 (1535) : 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
163714964	1	3KERR 115.0 kV - 3GW KING TAP 115.0 kV Ckt 1	<u>DVP</u> n6115 (1476) : 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
168995807,168995809	8	3CLUBHSE 115.0 kV - 6CLUBHSE 230.0 kV Ckt 1	<u>DVP</u> n6114 (1688) : Add additional 230/115 kV transformer at Clubhouse substation. Project Type : CON Cost : \$6,000,000 Time Estimate : 16-18 Months	\$6,000,000
168995789,168995790	14	6NUCO TP 230.0 kV - AF2-076 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-317 (1848) : Rebuild 26.63 miles of 230 kV Line 246 from Nucor Tap to AF2-076 Tap with 2-768.2 ACSS 250 C. Replace Line Switch at Nucor Tap terminal. Project Type : FAC Cost : \$40,195,000 Time Estimate : 36-40 Months	\$40,195,000
163260360,163260361,163260101	9	6CLUBHSE 230.0 kV - AE2-033 TAP 230.0 kV Ckt 1	<u>DVP</u> n6872 (1531) : 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

ID	Idx	Facility	Upgrade Description	Cost
168454834,163 260310	16	6LAKEVEW 230.0 kV - 6DRY BREAD 230.0 kV Ckt 1	<u>DVP</u> b3121 (1473) : PJM Baseline Upgrade b3121. Rebuild Clubhouse-Lakeview 230 kV Line #254 with single-circuit wood pole equivalent structures at the current 230 kV standard with a minimum rating of 1047 MVA. The baseline project has an projected in-service date of 12/31/2024. Project Type : FAC Cost : \$0	\$0
168454960,168 454959	4	3CONSLDL 115.0 kV - 3BTLEBRO 115.0 kV Ckt 1	<u>DVP</u> dom-201 (1732) : Reconductor 3.98 miles of 115 kV Line 1001 from Consolidated DSL to Battleboro with 636 ACSR. Project Type : FAC Cost : \$2,388,000 Time Estimate : 30-36 Months	\$2,388,000
163260355,163 260356	5	6SAPONY 230.0 kV - 6CARSON 230.0 kV Ckt 1	<u>DVP</u> n6221 (1724) : 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
163715614,163 714797	6	3BTLEBRO 115.0 kV - 3ROCKYMT115T 115.0 kV Ckt 1	<u>DVP</u> dom-007 (1179) : Build new 500 kV line between Everetts and Suffolk. Project Type : CON Cost : \$570,000,000 Time Estimate : 48-60 Months <u>DEP</u> The external (i.e. Non-PJM) Transmission Owner, DEP, will not evaluate this violation until the impact study phase. Scope: Reconductor the circuit to 1590 ACSR will bring the rating to 185/205/214 MVA. Upgrading the terminal equipment at Rocky Mount will bring the rating to 301/301/301 MVA (Limited by 1590 ACSR conductor). Project Type: FAC Cost: TBD Time Estimate: 36 Months Note 1: Mitigations have been identified to achieve a DEP end rating of 301/301/301 MVA. However, no queue customer has yet officially agreed to construct the upgrade. Therefore, no construction plans have been put in place to date. Note 2: PJM is coordinating with Duke Energy Progress (DEP) and Dominion Energy (DVP) to evaluate remedies to alleviate the higher loading seen in the AG1 study on the Battleboro to Rocky Mountain 115 kV line. Reinforcements for the PJM queue project driving the need for this upgrade have been scoped while the best solution for the loading seen in AG1 is still being evaluated by both DEP and DVP.	\$570,000,000

ID	Idx	Facility	Upgrade Description	Cost
168995922,168995923	15	6HORNRTN 230.0 kV - AD1-057 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-077 (1566) : 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
169197096,169197095	17	3WITAKRS 115.0 kV - 3CONSLDL 115.0 kV Ckt 1	<u>DVP</u> dom-113 (1610) : Rebuild 0.41 miles of 115 kV Line 1001 from Whitakers to Consolidated Diesel with 636 ACSR. Project Type : FAC Cost : \$533,000 Time Estimate : 30-36 Months dom-224 (1755) : Reconductor 0.67 miles of 115 kV line 1001 from Whitakers to Consolidated Diesel with 768 ACSS. Project Type : FAC Cost : \$402,000 Time Estimate : 30-36 Months	\$533,000
163715617	13	6EVERETS 230.0 kV - 6GREENVILE T 230.0 kV Ckt 1	<u>DVP</u> dom-173 (1656) : Rebuild 20.32 miles of 230 kV Line 218 from Everetts to Greenville with 2-636 ACSR Project Type : FAC Cost : \$30,480,000 Time Estimate : 30-36 Months	\$30,480,000
			TOTAL COST	\$785,184,000 ¹

11.6 Flow Gate Details - Primary POI

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

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163714964	314702	3KERR	DVP	304102	3GW KING TAP	CPL	1	DVP_P1-2: LN 193	single	199.0	99.29	100.07	DC	1.55

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.5375	80/20	2.5375
313527	AB2-043 C	0.4005	80/20	0.4005
314429	3JTRSVLE	0.2081	80/20	0.2081
314572	3EMPORIA	0.1417	80/20	0.1417
314704	3LAWRENC	0.1349	80/20	0.1349
315126	1ROARAP2	0.5852	80/20	0.5852
315128	1ROARAP4	0.5584	80/20	0.5584
315158	1KERR 1	0.6719	80/20	0.6719
315159	1KERR 2	1.8813	80/20	1.8813
315160	1KERR 3	1.8813	80/20	1.8813
315161	1KERR 4	1.8813	80/20	1.8813
315162	1KERR 5	1.8813	80/20	1.8813
315163	1KERR 6	1.8813	80/20	1.8813
315164	1KERR 7	1.8813	80/20	1.8813
315606	3AA2-053SOLA	0.5660	80/20	0.5660
315607	3AA1-063SOLA	0.4964	80/20	0.4964
316087	AB2-174 C	0.4013	80/20	0.4013
316129	AC1-054 C	8.4902	80/20	8.4902
316131	AB2-060 C	1.1361	80/20	1.1361
923991	AB2-040 C O1	2.7636	80/20	2.7636
924301	AB2-077 C O1 (Suspended)	1.5541	80/20	1.5541
924311	AB2-078 C O1 (Suspended)	1.5541	80/20	1.5541
924321	AB2-079 C O1 (Suspended)	1.5541	80/20	1.5541
925611	AC1-036 C	0.1443	80/20	0.1443
935221	AD1-157 C	0.1050	80/20	0.1050
936265	AD2-033 C	8.7173	80/20	8.7173
936361	AD2-046 C O1	14.1992	80/20	14.1992
936485	AD2-063 C	11.1195	80/20	11.1195
938371	AE1-056 C	2.8685	80/20	2.8685
939181	AE1-148 C	13.7214	80/20	13.7214
940661	AE2-053 O1	5.0820	80/20	5.0820
942451	AE2-258	1.8939	80/20	1.8939
942461	AE2-259 C O1	3.0480	80/20	3.0480
943911	AF1-059	9.7692	80/20	9.7692
946281	AF1-292 C	0.4826	80/20	0.4826
946301	AF1-294 C	2.1022	80/20	2.1022
958211	AF2-115 C	1.2366	80/20	1.2366
958801	AF2-171 C	7.4610	80/20	7.4610
959311	AF2-222 C	10.2940	80/20	10.2940

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960081	AF2-299 C	0.8135	80/20	0.8135
961791	AG1-021 C	0.9893	80/20	0.9893
961891	AG1-030 C	8.1711	80/20	8.1711
962041	AG1-048 C	6.1830	80/20	6.1830
963171	AG1-166 C	0.9893	80/20	0.9893
963181	AG1-167 C	0.9893	80/20	0.9893
963191	AG1-168 C	0.9893	80/20	0.9893
963201	AG1-169 C	0.9893	80/20	0.9893
963211	AG1-170 C	0.9893	80/20	0.9893
963301	AG1-179 C	2.8453	80/20	2.8453
963311	AG1-180	1.3863	80/20	1.3863
963321	AG1-181 C O1	11.1634	80/20	11.1634
963361	AG1-185 O1	5.4011	80/20	5.4011
963641	AG1-215 C	0.4617	80/20	0.4617
964111	AG1-272 C	1.6401	80/20	1.6401
964121	AG1-273 C	1.6401	80/20	1.6401
964131	AG1-274 C	1.6401	80/20	1.6401
964241	AG1-285 C O1	9.5010	80/20	9.5010
964501	AG1-313 C O1	1.5478	80/20	1.5478
964791	AG1-342 C	1.8056	80/20	1.8056
964821	AG1-345 C	0.3971	80/20	0.3971
965191	AG1-384 C	1.6401	80/20	1.6401
965281	AG1-393 C	0.9893	80/20	0.9893
965451	AG1-413 C O1	4.1066	80/20	4.1066
965591	AG1-427 C	8.9700	80/20	8.9700
965601	AG1-428 C O1	2.3753	80/20	2.3753
965641	AG1-432 C O1	6.0960	80/20	6.0960
965721	AG1-440 C	11.2437	80/20	11.2437
965731	AG1-441 C	11.2437	80/20	11.2437
965771	AG1-445	6.4964	80/20	6.4964
965781	AG1-446	6.4964	80/20	6.4964
965831	AG1-451	1.0160	80/20	1.0160
966621	AG1-532 C	0.4393	80/20	0.4393
966751	AG1-546 C	17.4203	80/20	17.4203
966811	AG1-552 C	0.9291	80/20	0.9291
966861	AG1-557 C O1 (Withdrawn : 12/14/2020)	0.6096	80/20	0.6096
G-007A	G-007A	0.2421	Confirmed LTF	0.2421
VFT	VFT	0.6450	Confirmed LTF	0.6450
CALDERWOOD	CALDERWOOD	0.4160	Confirmed LTF	0.4160
PRAIRIE	PRAIRIE	1.4491	Confirmed LTF	1.4491
CHEOAH	CHEOAH	0.4264	Confirmed LTF	0.4264
CBM-N	CBM-N	0.1164	Confirmed LTF	0.1164
COTTONWOOD	COTTONWOOD	1.5309	Confirmed LTF	1.5309
HAMLET	HAMLET	0.8356	Confirmed LTF	0.8356
GIBSON	GIBSON	0.2583	Confirmed LTF	0.2583
BLUEG	BLUEG	0.7986	Confirmed LTF	0.7986
TRIMBLE	TRIMBLE	0.2538	Confirmed LTF	0.2538
CATAWBA	CATAWBA	0.4515	Confirmed LTF	0.4515

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
168454969	313719	3CHESTNUT	DVP	314623	3WITAKRS	DVP	1	DVP_P1-2: LN 2056-A	single	165.44	105.44	107.11	DC	2.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.2930	80/20	3.2930
313719	3CHESTNUT	4.2857	80/20	4.2857
314572	3EMPORIA	0.1616	80/20	0.1616
314582	3KELFORD	0.4045	80/20	0.4045
314589	3MURPHYS	0.0392	80/20	0.0392
315115	1S HAMPT1	0.4782	80/20	0.4782
315126	1ROARAP2	0.8854	80/20	0.8854
315128	1ROARAP4	0.8449	80/20	0.8449
315136	1ROSEMG1	0.7073	80/20	0.7073
315137	1ROSEMS1	0.4386	80/20	0.4386
315138	1ROSEMG2	0.3315	80/20	0.3315
315139	1GASTONA	1.0158	80/20	1.0158
315141	1GASTONB	1.0158	80/20	1.0158
315606	3AA2-053SOLA	0.9172	80/20	0.9172
315607	3AA1-063SOLA	0.7806	80/20	0.7806
315608	3AA2-088SOLA	0.4348	80/20	0.4348
316087	AB2-174 C	0.4993	80/20	0.4993
316103	AB2-015 C	2.6360	80/20	2.6360
316129	AC1-054 C	3.1591	80/20	3.1591
316140	AB2-099 C (Suspended)	0.2799	80/20	0.2799
920591	AA2-165 C	0.5753	80/20	0.5753
923991	AB2-040 C O1	3.5864	80/20	3.5864
925591	AC1-034 C	-5.6897	Adder	-6.69
926070	AC1-086 C	7.2402	80/20	7.2402
926201	AC1-098 C	14.1647	80/20	14.1647
926211	AC1-099 C	4.7467	80/20	4.7467
927145	AC1-208 C	23.0580	80/20	23.0580
932631	AC2-084 C	20.1922	80/20	20.1922
934331	AD1-057 C O1	3.5873	80/20	3.5873
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0830	80/20	0.0830
943171	AE2-346 C	0.6718	80/20	0.6718
946281	AF1-292 C	0.5157	80/20	0.5157
957521	AF2-046 C	7.7375	80/20	7.7375
960081	AF2-299 C	0.8691	80/20	0.8691
961091	AF2-400 C	0.1423	80/20	0.1423
961681	AG1-008 C	7.7530	80/20	7.7530
961931	AG1-036 C	0.6385	80/20	0.6385
961941	AG1-037 C	0.2399	80/20	0.2399
962331	AG1-082 C	0.9598	80/20	0.9598
962341	AG1-083 C	0.9598	80/20	0.9598
962351	AG1-084 C	0.8502	80/20	0.8502

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962361	AG1-085 C	0.8502	80/20	0.8502
962571	AG1-106 C	2.0134	80/20	2.0134
964501	AG1-313 C O1	2.7567	80/20	2.7567
964801	AG1-343 C	2.6411	80/20	2.6411
965291	AG1-394 C	0.9018	80/20	0.9018
965721	AG1-440 C	2.2730	80/20	2.2730
965731	AG1-441 C	2.2730	80/20	2.2730
965771	AG1-445	1.3133	80/20	1.3133
965781	AG1-446	1.3133	80/20	1.3133
966621	AG1-532 C	0.4693	80/20	0.4693
966751	AG1-546 C	7.3469	80/20	7.3469
966811	AG1-552 C	1.4058	80/20	1.4058
G-007A	G-007A	0.3093	Confirmed LTF	0.3093
VFT	VFT	0.8256	Confirmed LTF	0.8256
CALDERWOOD	CALDERWOOD	0.4051	Confirmed LTF	0.4051
PRAIRIE	PRAIRIE	1.3922	Confirmed LTF	1.3922
CHEOAH	CHEOAH	0.4154	Confirmed LTF	0.4154
CBM-N	CBM-N	0.1500	Confirmed LTF	0.1500
COTTONWOOD	COTTONWOOD	1.5036	Confirmed LTF	1.5036
HAMLET	HAMLET	0.9038	Confirmed LTF	0.9038
GIBSON	GIBSON	0.2441	Confirmed LTF	0.2441
BLUEG	BLUEG	0.7517	Confirmed LTF	0.7517
TRIMBLE	TRIMBLE	0.2382	Confirmed LTF	0.2382
CATAWBA	CATAWBA	0.4375	Confirmed LTF	0.4375

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
163260285	313725	6DRY BREAD	DVP	314563	6CLUBHSE	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	189.53	191.1	DC	7.21

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313719	3CHESTNUT	1.1200	50/50	1.1200
314541	3WATKINS	0.2783	Adder	0.33
314582	3KELFORD	0.3259	50/50	0.3259
314589	3MURPHYS	0.0637	50/50	0.0637
314594	6PLYMOTH	0.0477	Adder	0.06
314623	3WITAKRS	0.2110	50/50	0.2110
315126	1ROARAP2	1.2790	50/50	1.2790
315128	1ROARAP4	1.2205	50/50	1.2205
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.4543	50/50	13.4543
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.4543	50/50	13.4543
315136	1ROSEMG1	4.2810	50/50	4.2810
315137	1ROSEMS1	2.6547	50/50	2.6547
315138	1ROSEMG2	2.0064	50/50	2.0064
315139	1GASTONA	6.4396	50/50	6.4396
315141	1GASTONB	6.4396	50/50	6.4396
315293	1DOMTR9	3.9847	Adder	4.69
315294	1DOMTR10	4.8833	Adder	5.75
315601	1CONETOE2SOL	1.5555	50/50	1.5555
315602	1HOLLOMANSOL	1.2800	50/50	1.2800
315606	3AA2-053SOLA	1.3751	50/50	1.3751
315607	3AA1-063SOLA	1.1446	50/50	1.1446
316020	AB2-059 C OP	1.7408	50/50	1.7408
316096	AB2-100 C1	3.3890	50/50	3.3890
316097	AB2-100 E1	10.5801	50/50	10.5801
316098	AB2-100 C2	3.3890	50/50	3.3890
316099	AB2-100 E2	10.5801	50/50	10.5801
316103	AB2-015 C	3.2495	Adder	3.82
316104	AB2-015 E	2.6646	Adder	3.13
316129	AC1-054 C	3.7171	Adder	4.37
316140	AB2-099 C (Suspended)	0.5015	50/50	0.5015
316141	AB2-099 E (Suspended)	0.2149	50/50	0.2149
900672	V4-068 E	0.2211	50/50	0.2211
917332	Z2-043 E	0.9722	50/50	0.9722
917342	Z2-044 E	0.5730	50/50	0.5730
917512	Z2-088 E OP1	9.2266	50/50	9.2266
918492	AA1-063AE OP	3.4207	50/50	3.4207
918512	AA1-065 E OP	3.6326	50/50	3.6326
918532	AA1-067 E	0.6273	50/50	0.6273
919692	AA2-053 E OP	3.5786	50/50	3.5786

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
919702	AA2-057 E OP	3.3511	50/50	3.3511
920042	AA2-088 E OP	5.7712	Adder	6.79
920591	AA2-165 C	0.1504	50/50	0.1504
920592	AA2-165 E	0.4606	50/50	0.4606
920692	AA2-178 E	1.8040	Adder	2.12
922922	AB1-081 C OP	1.4770	50/50	1.4770
922923	AB1-081 E OP	4.0123	50/50	4.0123
923262	AB1-132 C OP (Suspended)	31.1690	50/50	31.1690
923263	AB1-132 E OP (Suspended)	13.3582	50/50	13.3582
924152	AB2-059 E OP	5.6841	50/50	5.6841
925121	AB2-169 C	0.7584	50/50	0.7584
925122	AB2-169 E	4.3138	50/50	4.3138
925591	AC1-034 C	7.1469	50/50	7.1469
925592	AC1-034 E	5.3916	50/50	5.3916
925785	AC1-054 E	1.7124	Adder	2.01
926070	AC1-086 C	45.9001	50/50	45.9001
926071	AC1-086 E	20.8907	50/50	20.8907
926201	AC1-098 C	5.8825	50/50	5.8825
926202	AC1-098 E	3.5045	50/50	3.5045
926211	AC1-099 C	1.9713	50/50	1.9713
926212	AC1-099 E	1.1577	50/50	1.1577
927024	AC1-189 C	9.1234	50/50	9.1234
927025	AC1-189 E	4.5446	50/50	4.5446
927145	AC1-208 C	8.7875	50/50	8.7875
927146	AC1-208 E	3.8862	50/50	3.8862
932631	AC2-084 C	8.3857	50/50	8.3857
932632	AC2-084 E	4.1303	50/50	4.1303
933991	AD1-023 C	9.2587	50/50	9.2587
933992	AD1-023 E	5.0405	50/50	5.0405
934331	AD1-057 C O1	18.0112	50/50	18.0112
934332	AD1-057 E O1	9.6079	50/50	9.6079
934521	AD1-076 C	29.3748	Adder	34.56
934522	AD1-076 E	14.9576	Adder	17.6
936401	AD2-051 C O1	8.2336	50/50	8.2336
936402	AD2-051 E O1	3.5354	50/50	3.5354
938221	AE1-035 C	0.3200	50/50	0.3200
938222	AE1-035 E	0.9990	50/50	0.9990
940491	AE2-034 C	3.1570	Adder	3.71
940492	AE2-034 E	1.3530	Adder	1.59
940542	AE2-040 BAT	2.8696	50/50	2.8696
940571	AE2-044 C	4.6810	50/50	4.6810
940572	AE2-044 E	2.0062	50/50	2.0062
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1531	50/50	0.1531
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5226	50/50	0.5226
943171	AE2-346 C	1.2036	50/50	1.2036
943172	AE2-346 E	0.5158	50/50	0.5158
944141	AF1-082	3.0092	50/50	3.0092
945711	AF1-236 C O1	34.5611	Adder	40.66
945712	AF1-236 E O1	21.3470	Adder	25.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946012	AF1-266 BAT	15.1801	50/50	15.1801
957521	AF2-046 C	12.8113	50/50	12.8113
957522	AF2-046 E	6.4442	50/50	6.4442
957531	AF2-047 C	7.5015	Adder	8.83
957532	AF2-047 E	3.7733	Adder	4.44
957861	AF2-080 C	8.2862	50/50	8.2862
957862	AF2-080 E	3.6733	50/50	3.6733
959511	AF2-242 C	5.7978	50/50	5.7978
959512	AF2-242 E	4.5094	50/50	4.5094
961091	AF2-400 C	0.1755	Adder	0.21
961092	AF2-400 E	0.2879	Adder	0.34
961671	AG1-007 C	1.5237	50/50	1.5237
961672	AG1-007 E	0.8509	50/50	0.8509
961681	AG1-008 C	12.8370	50/50	12.8370
961682	AG1-008 E	6.4185	50/50	6.4185
961931	AG1-036 C	1.1039	50/50	1.1039
961932	AG1-036 E	0.7360	50/50	0.7360
961941	AG1-037 C	0.4298	50/50	0.4298
961942	AG1-037 E	0.2866	50/50	0.2866
962331	AG1-082 C	1.7194	50/50	1.7194
962332	AG1-082 E	1.1462	50/50	1.1462
962341	AG1-083 C	1.7194	50/50	1.7194
962342	AG1-083 E	1.1462	50/50	1.1462
962351	AG1-084 C	1.5679	50/50	1.5679
962352	AG1-084 E	1.0452	50/50	1.0452
962361	AG1-085 C	1.5679	50/50	1.5679
962362	AG1-085 E	1.0452	50/50	1.0452
962571	AG1-106 C	12.7645	50/50	12.7645
962572	AG1-106 E	5.7885	50/50	5.7885
963312	AG1-180 BAT	1.5599	Merchant Transmission	1.5599
964491	AG1-312 C O1	16.4662	50/50	16.4662
964492	AG1-312 E O1	4.1166	50/50	4.1166
964501	AG1-313 C O1	4.3233	50/50	4.3233
964502	AG1-313 E O1	2.8822	50/50	2.8822
964801	AG1-343 C	4.0533	50/50	4.0533
964802	AG1-343 E	3.1848	50/50	3.1848
965291	AG1-394 C	0.6159	Adder	1.37
965292	AG1-394 E	0.4106	Adder	0.91
965631	AG1-431	10.6048	Adder	23.54
965691	AG1-437 C O1	7.6920	50/50	7.6920
965692	AG1-437 E O1	5.1280	50/50	5.1280
965701	AG1-438 C O1	7.6920	50/50	7.6920
965702	AG1-438 E O1	5.1280	50/50	5.1280
965711	AG1-439 C O1	27.9030	50/50	27.9030
965712	AG1-439 E O1	18.6020	50/50	18.6020
965741	AG1-442 O1	4.4870	50/50	4.4870
965751	AG1-443 O1	4.4870	50/50	4.4870
965761	AG1-444 O1	14.8816	50/50	14.8816
966751	AG1-546 C	4.6133	Adder	10.24
966752	AG1-546 E	2.4753	Adder	5.49
966801	AG1-551 C	1.8735	50/50	1.8735
966802	AG1-551 E	0.8029	50/50	0.8029

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966811	AG1-552 C	2.0307	50/50	2.0307
966812	AG1-552 E	0.8703	50/50	0.8703
966931	AG1-431A	7.9675	Adder	17.69
WEC	WEC	0.1386	Confirmed LTF	0.1386
LGEE	LGEE	0.2840	Confirmed LTF	0.2840
CPLE	CPLE	1.9410	Confirmed LTF	1.9410
CBM-W2	CBM-W2	6.4512	Confirmed LTF	6.4512
NY	NY	0.2278	Confirmed LTF	0.2278
TVA	TVA	1.2362	Confirmed LTF	1.2362
O-066	O-066	3.1631	Confirmed LTF	3.1631
SIGE	SIGE	0.1008	Confirmed LTF	0.1008
CBM-S2	CBM-S2	20.5459	Confirmed LTF	20.5459
CBM-S1	CBM-S1	0.3059	Confirmed LTF	0.3059
G-007	G-007	0.4967	Confirmed LTF	0.4967
MEC	MEC	0.8533	Confirmed LTF	0.8533
LAGN	LAGN	1.5435	Confirmed LTF	1.5435
CBM-W1	CBM-W1	5.7622	Confirmed LTF	5.7622

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
168454959	313854	3CONSLDL	DVP	314554	3BTLEBRO	DVP	1	DVP_P1-2: LN 2056-B	single	165.44	112.1	113.77	DC	2.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.2914	80/20	3.2914
313719	3CHESTNUT	4.2854	80/20	4.2854
314572	3EMPORIA	0.1616	80/20	0.1616
314582	3KELFORD	0.4044	80/20	0.4044
314589	3MURPHYS	0.0392	80/20	0.0392
314623	3WITAKRS	0.9494	80/20	0.9494
315115	1S HAMPT1	0.4778	80/20	0.4778
315126	1ROARAP2	0.8850	80/20	0.8850
315128	1ROARAP4	0.8445	80/20	0.8445
315136	1ROSEMG1	0.7069	80/20	0.7069
315137	1ROSEMS1	0.4383	80/20	0.4383
315138	1ROSEMG2	0.3313	80/20	0.3313
315139	1GASTONA	1.0151	80/20	1.0151
315141	1GASTONB	1.0151	80/20	1.0151
315606	3AA2-053SOLA	0.9169	80/20	0.9169
315607	3AA1-063SOLA	0.7802	80/20	0.7802
315608	3AA2-088SOLA	0.4345	80/20	0.4345
316087	AB2-174 C	0.4990	80/20	0.4990
316103	AB2-015 C	2.6335	80/20	2.6335
316129	AC1-054 C	3.1568	80/20	3.1568
316140	AB2-099 C (Suspended)	0.2798	80/20	0.2798
920591	AA2-165 C	0.5753	80/20	0.5753
923991	AB2-040 C O1	3.5847	80/20	3.5847
925591	AC1-034 C	-5.6912	Adder	-6.7
926070	AC1-086 C	7.2352	80/20	7.2352
926201	AC1-098 C	14.1632	80/20	14.1632
926211	AC1-099 C	4.7462	80/20	4.7462
927145	AC1-208 C	23.0553	80/20	23.0553
932631	AC2-084 C	20.1900	80/20	20.1900
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0830	80/20	0.0830
943171	AE2-346 C	0.6714	80/20	0.6714
946281	AF1-292 C	0.5153	80/20	0.5153
957521	AF2-046 C	7.7325	80/20	7.7325
960081	AF2-299 C	0.8685	80/20	0.8685
961091	AF2-400 C	0.1422	80/20	0.1422
961681	AG1-008 C	7.7480	80/20	7.7480
961931	AG1-036 C	0.6382	80/20	0.6382
961941	AG1-037 C	0.2398	80/20	0.2398
962331	AG1-082 C	0.9592	80/20	0.9592
962341	AG1-083 C	0.9592	80/20	0.9592
962351	AG1-084 C	0.8498	80/20	0.8498

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962361	AG1-085 C	0.8498	80/20	0.8498
962571	AG1-106 C	2.0121	80/20	2.0121
964501	AG1-313 C O1	2.7556	80/20	2.7556
964801	AG1-343 C	2.6397	80/20	2.6397
965291	AG1-394 C	0.9013	80/20	0.9013
965721	AG1-440 C	2.2707	80/20	2.2707
965731	AG1-441 C	2.2707	80/20	2.2707
965771	AG1-445	1.3120	80/20	1.3120
965781	AG1-446	1.3120	80/20	1.3120
966621	AG1-532 C	0.4690	80/20	0.4690
966751	AG1-546 C	7.3430	80/20	7.3430
966811	AG1-552 C	1.4052	80/20	1.4052
G-007A	G-007A	0.2973	Confirmed LTF	0.2973
VFT	VFT	0.7934	Confirmed LTF	0.7934
CALDERWOOD	CALDERWOOD	0.4075	Confirmed LTF	0.4075
PRAIRIE	PRAIRIE	1.4052	Confirmed LTF	1.4052
CHEOAH	CHEOAH	0.4179	Confirmed LTF	0.4179
CBM-N	CBM-N	0.1440	Confirmed LTF	0.1440
COTTONWOOD	COTTONWOOD	1.5141	Confirmed LTF	1.5141
HAMLET	HAMLET	0.9067	Confirmed LTF	0.9067
GIBSON	GIBSON	0.2468	Confirmed LTF	0.2468
BLUEG	BLUEG	0.7604	Confirmed LTF	0.7604
TRIMBLE	TRIMBLE	0.2410	Confirmed LTF	0.2410
CATAWBA	CATAWBA	0.4393	Confirmed LTF	0.4393

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
163260356	314435	6SAPONY	DVP	314282	6CARSON	DVP	1	DVP_P7-1: LN 54-2012-A	tower	830.0	150.1	151.81	DC	14.15

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

11.6.6 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
163715614	314554	3BTLEBRO	DVP	304223	3ROCKYMT115T	CPL	1	DVP_P7-1: LN 2058-2181	tower	164.0	295.69	298.61	DC	4.77

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.1181	Adder	3.67
313719	3CHESTNUT	2.4261	50/50	2.4261
314541	3WATKINS	0.2172	Adder	0.26
314572	3EMPORIA	0.1704	Adder	0.2
314582	3KELFORD	0.3112	50/50	0.3112
314623	3WITAKRS	0.5240	50/50	0.5240
315126	1ROARAP2	0.8712	50/50	0.8712
315128	1ROARAP4	0.8314	50/50	0.8314
315131	1EDGECEMA (Deactivation : 22/04/2019)	12.5808	50/50	12.5808
315132	1EDGECEMB (Deactivation : 22/04/2019)	12.5808	50/50	12.5808
315136	1ROSEMG1	1.5086	50/50	1.5086
315137	1ROSEMS1	0.9355	50/50	0.9355
315138	1ROSEMG2	0.7070	50/50	0.7070
315139	1GASTONA	1.9383	50/50	1.9383
315141	1GASTONB	1.9383	50/50	1.9383
315293	1DOMTR9	2.0513	Adder	2.41
315294	1DOMTR10	2.5139	Adder	2.96
315601	1CONETOE2SOL	1.1895	50/50	1.1895
315606	3AA2-053SOLA	0.9246	50/50	0.9246
316020	AB2-059 C OP	4.4268	50/50	4.4268
316088	AB2-174 E	2.8075	Adder	3.3
316097	AB2-100 E1	1.0834	Adder	1.27
316099	AB2-100 E2	1.0834	Adder	1.27
316103	AB2-015 C	2.5912	Adder	3.05
316104	AB2-015 E	2.1248	Adder	2.5
316129	AC1-054 C	2.5555	Adder	3.01
316140	AB2-099 C (Suspended)	0.2729	Adder	0.32
316141	AB2-099 E (Suspended)	0.1170	Adder	0.14
900672	V4-068 E	0.1280	Adder	0.15
917332	Z2-043 E	0.9284	50/50	0.9284
917342	Z2-044 E	1.4235	50/50	1.4235
917512	Z2-088 E OP1	7.0561	50/50	7.0561
918492	AA1-063AE OP	2.0088	Adder	2.36
918512	AA1-065 E OP	1.4796	Adder	1.74
918532	AA1-067 E	0.2544	Adder	0.3
919692	AA2-053 E OP	2.4062	50/50	2.4062
919702	AA2-057 E OP	7.2586	50/50	7.2586
920042	AA2-088 E OP	4.1496	Adder	4.88
920591	AA2-165 C	0.3257	50/50	0.3257

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
920592	AA2-165 E	0.9976	50/50	0.9976
922922	AB1-081 C OP	3.7561	50/50	3.7561
922923	AB1-081 E OP	10.2031	50/50	10.2031
923262	AB1-132 C OP (Suspended)	9.3820	50/50	9.3820
923263	AB1-132 E OP (Suspended)	4.0208	50/50	4.0208
923573	AB1-173 E OP	0.4862	Adder	0.57
923991	AB2-040 C O1	3.3959	Adder	4.0
923992	AB2-040 E O1	2.7785	Adder	3.27
924152	AB2-059 E OP	14.4544	50/50	14.4544
925122	AB2-169 E	1.8344	Adder	2.16
925591	AC1-034 C	18.1743	50/50	18.1743
925592	AC1-034 E	13.7104	50/50	13.7104
925785	AC1-054 E	1.1772	Adder	1.38
926070	AC1-086 C	13.8161	50/50	13.8161
926071	AC1-086 E	6.2881	50/50	6.2881
926201	AC1-098 C	8.8191	50/50	8.8191
926202	AC1-098 E	5.2539	50/50	5.2539
926211	AC1-099 C	2.9553	50/50	2.9553
926212	AC1-099 E	1.7357	50/50	1.7357
927024	AC1-189 C	6.2804	50/50	6.2804
927025	AC1-189 E	3.1284	50/50	3.1284
927145	AC1-208 C	14.0422	50/50	14.0422
927146	AC1-208 E	6.2100	50/50	6.2100
932631	AC2-084 C	12.5719	50/50	12.5719
932632	AC2-084 E	6.1921	50/50	6.1921
933991	AD1-023 C	4.0327	Adder	4.74
933992	AD1-023 E	2.1954	Adder	2.58
934331	AD1-057 C O1	10.5448	50/50	10.5448
934332	AD1-057 E O1	5.6251	50/50	5.6251
936401	AD2-051 C O1	3.2781	Adder	3.86
936402	AD2-051 E O1	1.4076	Adder	1.66
938222	AE1-035 E	0.4069	Adder	0.48
940571	AE2-044 C	11.9036	50/50	11.9036
940572	AE2-044 E	5.1016	50/50	5.1016
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2794	Adder	0.33
942471	AE2-260 C O1	5.1280	Adder	6.03
942472	AE2-260 E O1	7.2735	Adder	8.56
943171	AE2-346 C	0.6550	Adder	0.77
943172	AE2-346 E	0.2807	Adder	0.33
944141	AF1-082	7.6523	50/50	7.6523
946281	AF1-292 C	0.5743	Adder	0.68
946282	AF1-292 E	0.3872	Adder	0.46
957521	AF2-046 C	7.3234	Adder	8.62
957522	AF2-046 E	3.6837	Adder	4.33
957861	AF2-080 C	5.7041	50/50	5.7041
957862	AF2-080 E	2.5286	50/50	2.5286
959511	AF2-242 C	2.4228	Adder	2.85
959512	AF2-242 E	1.8844	Adder	2.22
960081	AF2-299 C	0.9680	Adder	1.14
960082	AF2-299 E	0.6453	Adder	0.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.1399	Adder	0.16
961092	AF2-400 E	0.2296	Adder	0.27
961671	AG1-007 C	1.2437	50/50	1.2437
961672	AG1-007 E	0.6945	50/50	0.6945
961681	AG1-008 C	3.8892	Adder	8.63
961682	AG1-008 E	1.9446	Adder	4.32
961931	AG1-036 C	0.3255	Adder	0.72
961932	AG1-036 E	0.2170	Adder	0.48
961941	AG1-037 C	0.1240	Adder	0.28
961942	AG1-037 E	0.0826	Adder	0.18
962331	AG1-082 C	0.4959	Adder	1.1
962332	AG1-082 E	0.3306	Adder	0.73
962341	AG1-083 C	0.4959	Adder	1.1
962342	AG1-083 E	0.3306	Adder	0.73
962351	AG1-084 C	0.4442	Adder	0.99
962352	AG1-084 E	0.2961	Adder	0.66
962361	AG1-085 C	0.4442	Adder	0.99
962362	AG1-085 E	0.2961	Adder	0.66
962571	AG1-106 C	3.8421	50/50	3.8421
962572	AG1-106 E	1.7424	50/50	1.7424
964491	AG1-312 C O1	3.5814	Adder	7.95
964492	AG1-312 E O1	0.8953	Adder	1.99
964501	AG1-313 C O1	2.8627	50/50	2.8627
964502	AG1-313 E O1	1.9084	50/50	1.9084
964801	AG1-343 C	1.2896	Adder	2.86
964802	AG1-343 E	1.0133	Adder	2.25
965291	AG1-394 C	0.4384	Adder	0.97
965292	AG1-394 E	0.2923	Adder	0.65
965691	AG1-437 C O1	1.7375	Adder	3.86
965692	AG1-437 E O1	1.1583	Adder	2.57
965701	AG1-438 C O1	1.7375	Adder	3.86
965702	AG1-438 E O1	1.1583	Adder	2.57
965711	AG1-439 C O1	21.3390	50/50	21.3390
965712	AG1-439 E O1	14.2260	50/50	14.2260
965741	AG1-442 O1	1.0135	Adder	2.25
965751	AG1-443 O1	1.0135	Adder	2.25
965761	AG1-444 O1	11.3808	50/50	11.3808
966621	AG1-532 C	0.2770	Adder	0.61
966622	AG1-532 E	0.1847	Adder	0.41
966751	AG1-546 C	3.1668	Adder	7.03
966752	AG1-546 E	1.6992	Adder	3.77
966801	AG1-551 C	0.4089	Adder	0.91
966802	AG1-551 E	0.1753	Adder	0.39
966811	AG1-552 C	1.3832	50/50	1.3832
966812	AG1-552 E	0.5928	50/50	0.5928
G-007A	G-007A	0.4867	Confirmed LTF	0.4867
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	0.7087	Confirmed LTF	0.7087
PRAIRIE	PRAIRIE	2.4719	Confirmed LTF	2.4719
CHEOAH	CHEOAH	0.7262	Confirmed LTF	0.7262
CBM-N	CBM-N	0.2340	Confirmed LTF	0.2340
COTTONWOOD	COTTONWOOD	2.6313	Confirmed LTF	2.6313

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
HAMLET	HAMLET	1.5263	Confirmed LTF	1.5263
GIBSON	GIBSON	0.4390	Confirmed LTF	0.4390
BLUEG	BLUEG	1.3558	Confirmed LTF	1.3558
TRIMBLE	TRIMBLE	0.4307	Confirmed LTF	0.4307
CATAWBA	CATAWBA	0.7581	Confirmed LTF	0.7581

11.6.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168995862	314559	3CAROLNA	DVP	314561	6CAROLNA	DVP	1	DVP_P1-2: LN 68-A	single	239.89	121.04	124.24	DC	7.67

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965601	AG1-428 C O1	2.4689	80/20	2.4689
965721	AG1-440 C	8.7340	80/20	8.7340
965731	AG1-441 C	8.7340	80/20	8.7340
965771	AG1-445	5.0463	80/20	5.0463
965781	AG1-446	5.0463	80/20	5.0463
966621	AG1-532 C	0.6874	80/20	0.6874
966751	AG1-546 C	27.3941	80/20	27.3941
966811	AG1-552 C	5.1344	80/20	5.1344
WEC	WEC	0.0176	Confirmed LTF	0.0176
LGEE	LGEE	0.0390	Confirmed LTF	0.0390
CPL	CPL	0.1269	Confirmed LTF	0.1269
CBM-W2	CBM-W2	0.7168	Confirmed LTF	0.7168
NY	NY	0.0597	Confirmed LTF	0.0597
TVA	TVA	0.1344	Confirmed LTF	0.1344
SIGE	SIGE	0.0194	Confirmed LTF	0.0194
CBM-S2	CBM-S2	1.7226	Confirmed LTF	1.7226
CBM-S1	CBM-S1	0.0338	Confirmed LTF	0.0338
MEC	MEC	0.1017	Confirmed LTF	0.1017
LAGN	LAGN	0.1610	Confirmed LTF	0.1610
CBM-W1	CBM-W1	0.7150	Confirmed LTF	0.7150

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
168995807	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	202.77	204.53	DC	3.22

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

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
163260360	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	142.42	143.7	DC	10.67

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	1EDGECCA (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315132	1EDGECCB (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
315602	1HOLLOMAN SOL	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

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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
168995883	314568	3EARLEYS	DVP	314569	6EARLEYS	DVP	2	DVP_P1-3: 6EARLEYS-TX#3	single	175.78	129.25	133.81	DC	8.01

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.8357	80/20	2.8357
313719	3CHESTNUT	0.7616	80/20	0.7616
314582	3KELFORD	0.9905	80/20	0.9905
314589	3MURPHYS	0.1590	80/20	0.1590
314623	3WITAKRS	0.0972	80/20	0.0972
315115	1S HAMPT1	1.0912	80/20	1.0912
315126	1ROARAP2	0.8570	80/20	0.8570
315128	1ROARAP4	0.8178	80/20	0.8178
315606	3AA2-053SOLA	1.6715	80/20	1.6715
315607	3AA1-063SOLA	1.1232	80/20	1.1232
315608	3AA2-088SOLA	1.0808	80/20	1.0808
316087	AB2-174 C	0.4137	80/20	0.4137
316103	AB2-015 C	5.8060	80/20	5.8060
316129	AC1-054 C	3.1960	80/20	3.1960
316140	AB2-099 C (Suspended)	1.8114	80/20	1.8114
920591	AA2-165 C	0.1022	80/20	0.1022
923991	AB2-040 C O1	3.0884	80/20	3.0884
926201	AC1-098 C	9.2342	80/20	9.2342
926211	AC1-099 C	3.0944	80/20	3.0944
927145	AC1-208 C	8.4058	80/20	8.4058
932631	AC2-084 C	13.1636	80/20	13.1636
938771	AE1-103 C	1.7850	80/20	1.7850
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.6001	80/20	0.6001
943171	AE2-346 C	4.3473	80/20	4.3473
957521	AF2-046 C	34.9879	80/20	34.9879
961091	AF2-400 C	0.3135	80/20	0.3135
961681	AG1-008 C	35.0580	80/20	35.0580
961931	AG1-036 C	3.5583	80/20	3.5583
961941	AG1-037 C	1.5526	80/20	1.5526
962331	AG1-082 C	6.2105	80/20	6.2105
962341	AG1-083 C	6.2105	80/20	6.2105
962351	AG1-084 C	6.1440	80/20	6.1440
962361	AG1-085 C	6.1440	80/20	6.1440
964501	AG1-313 C O1	8.0106	80/20	8.0106
964801	AG1-343 C	7.3500	80/20	7.3500
965291	AG1-394 C	2.2658	80/20	2.2658
965721	AG1-440 C	2.4102	80/20	2.4102
965731	AG1-441 C	2.4102	80/20	2.4102
965771	AG1-445	1.3926	80/20	1.3926
965781	AG1-446	1.3926	80/20	1.3926

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966751	AG1-546 C	7.3830	80/20	7.3830
966811	AG1-552 C	1.3607	80/20	1.3607
WEC	WEC	0.0110	Confirmed LTF	0.0110
LGEE	LGEE	0.0239	Confirmed LTF	0.0239
CPLE	CPLE	0.0969	Confirmed LTF	0.0969
CBM-W2	CBM-W2	0.4928	Confirmed LTF	0.4928
NY	NY	0.0343	Confirmed LTF	0.0343
TVA	TVA	0.0952	Confirmed LTF	0.0952
SIGE	SIGE	0.0114	Confirmed LTF	0.0114
CBM-S2	CBM-S2	1.3676	Confirmed LTF	1.3676
CBM-S1	CBM-S1	0.0239	Confirmed LTF	0.0239
MEC	MEC	0.0667	Confirmed LTF	0.0667
LAGN	LAGN	0.1155	Confirmed LTF	0.1155
CBM-W1	CBM-W1	0.4486	Confirmed LTF	0.4486

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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
168995927	314568	3EARLEYS	DVP	314569	6EARLEYS	DVP	1	DVP_P1-3: 6EARLEYS-TX#4	single	202.48	112.3	116.26	DC	8.02

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.8389	80/20	2.8389
313719	3CHESTNUT	0.7625	80/20	0.7625
314582	3KELFORD	0.9917	80/20	0.9917
314589	3MURPHYS	0.1592	80/20	0.1592
314623	3WITAKRS	0.0973	80/20	0.0973
315115	1S HAMPT1	1.0924	80/20	1.0924
315126	1ROARAP2	0.8579	80/20	0.8579
315128	1ROARAP4	0.8187	80/20	0.8187
315606	3AA2-053SOLA	1.6734	80/20	1.6734
315607	3AA1-063SOLA	1.1244	80/20	1.1244
315608	3AA2-088SOLA	1.0820	80/20	1.0820
316087	AB2-174 C	0.4142	80/20	0.4142
316103	AB2-015 C	5.8125	80/20	5.8125
316129	AC1-054 C	3.1996	80/20	3.1996
316140	AB2-099 C (Suspended)	1.8134	80/20	1.8134
920591	AA2-165 C	0.1024	80/20	0.1024
923991	AB2-040 C O1	3.0919	80/20	3.0919
926201	AC1-098 C	9.2447	80/20	9.2447
926211	AC1-099 C	3.0980	80/20	3.0980
927145	AC1-208 C	8.4153	80/20	8.4153
932631	AC2-084 C	13.1786	80/20	13.1786
938771	AE1-103 C	1.7869	80/20	1.7869
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.6008	80/20	0.6008
943171	AE2-346 C	4.3522	80/20	4.3522
957521	AF2-046 C	35.0268	80/20	35.0268
961091	AF2-400 C	0.3139	80/20	0.3139
961681	AG1-008 C	35.0970	80/20	35.0970
961931	AG1-036 C	3.5624	80/20	3.5624
961941	AG1-037 C	1.5544	80/20	1.5544
962331	AG1-082 C	6.2174	80/20	6.2174
962341	AG1-083 C	6.2174	80/20	6.2174
962351	AG1-084 C	6.1509	80/20	6.1509
962361	AG1-085 C	6.1509	80/20	6.1509
964501	AG1-313 C O1	8.0195	80/20	8.0195
964801	AG1-343 C	7.3584	80/20	7.3584
965291	AG1-394 C	2.2684	80/20	2.2684
965721	AG1-440 C	2.4129	80/20	2.4129
965731	AG1-441 C	2.4129	80/20	2.4129
965771	AG1-445	1.3941	80/20	1.3941
965781	AG1-446	1.3941	80/20	1.3941

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966751	AG1-546 C	7.3918	80/20	7.3918
966811	AG1-552 C	1.3622	80/20	1.3622
WEC	WEC	0.0110	Confirmed LTF	0.0110
LGEE	LGEE	0.0239	Confirmed LTF	0.0239
CPLE	CPLE	0.0969	Confirmed LTF	0.0969
CBM-W2	CBM-W2	0.4928	Confirmed LTF	0.4928
NY	NY	0.0343	Confirmed LTF	0.0343
TVA	TVA	0.0952	Confirmed LTF	0.0952
SIGE	SIGE	0.0114	Confirmed LTF	0.0114
CBM-S2	CBM-S2	1.3676	Confirmed LTF	1.3676
CBM-S1	CBM-S1	0.0239	Confirmed LTF	0.0239
MEC	MEC	0.0667	Confirmed LTF	0.0667
LAGN	LAGN	0.1155	Confirmed LTF	0.1155
CBM-W1	CBM-W1	0.4486	Confirmed LTF	0.4486

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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
168995771	314569	GEARLEYS	DVP	314575	6NUCO TP	DVP	1	DVP_P1-2: LN 2092	single	571.52	188.7	189.78	DC	6.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6258	80/20	2.6258
315293	1DOMTR9	13.5807	80/20	13.5807
315294	1DOMTR10	16.6430	80/20	16.6430
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMANSOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9392	80/20	4.9392
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2104	80/20	4.2104
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5594	80/20	1.5594
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158
961941	AG1-037 C	0.8635	80/20	0.8635

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964241	AG1-285 C O1	4.2330	80/20	4.2330
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O1	6.1567	80/20	6.1567
964801	AG1-343 C	4.7135	80/20	4.7135
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O1	3.4453	80/20	3.4453
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O1	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

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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
163715617	314574	6EVERETS	DVP	304451	6GREENVILLE	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	189.11	190.27	DC	5.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.9855	Adder	3.51
314539	3UNCAMP	2.4187	Adder	2.85
314541	3WATKINS	0.2950	Adder	0.35
314572	3EMPORIA	0.1716	Adder	0.2
314582	3KELFORD	0.2963	50/50	0.2963
314589	3MURPHYS	0.0602	50/50	0.0602
314594	6PLYMOTH	0.0896	50/50	0.0896
314632	6AYDLETOLD	0.6586	Adder	0.77
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.5990	50/50	9.5990
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.5990	50/50	9.5990
315136	1ROSEMG1	1.5370	50/50	1.5370
315137	1ROSEMS1	0.9531	50/50	0.9531
315138	1ROSEMG2	0.7203	50/50	0.7203
315139	1GASTONA	2.1216	50/50	2.1216
315141	1GASTONB	2.1216	50/50	2.1216
315292	1DOMTR78	1.6763	50/50	1.6763
315293	1DOMTR9	8.6700	50/50	8.6700
315294	1DOMTR10	10.6250	50/50	10.6250
315601	1CONETOE2SOL	2.1704	50/50	2.1704
315602	1HOLLOMAN SOL	1.5332	50/50	1.5332
315606	3AA2-053SOLA	0.9398	50/50	0.9398
315611	6Z1-036WIND	0.6573	50/50	0.6573
315614	AA2-178 C	1.2997	50/50	1.2997
316088	AB2-174 E	2.7352	Adder	3.22
316097	AB2-100 E1	1.2133	Adder	1.43
316099	AB2-100 E2	1.2133	Adder	1.43
316103	AB2-015 C	3.5908	Adder	4.22
316104	AB2-015 E	2.9445	Adder	3.46
316140	AB2-099 C (Suspended)	0.5180	50/50	0.5180
316141	AB2-099 E (Suspended)	0.2220	50/50	0.2220
900672	V4-068 E	0.2092	50/50	0.2092
901082	W1-029 E	18.7397	Adder	22.05
913392	Y1-086 E	0.7676	Adder	0.9
916042	Z1-036 E (Suspended)	27.9147	50/50	27.9147
917122	Z2-027 E	0.3981	Adder	0.47
917332	Z2-043 E	0.8838	50/50	0.8838
917342	Z2-044 E	0.2085	Adder	0.25
917512	Z2-088 E OP1	12.8742	50/50	12.8742
918492	AA1-063AE OP	2.0182	Adder	2.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
918512	AA1-065 E OP	4.3514	50/50	4.3514
918532	AA1-067 E	1.5974	50/50	1.5974
919692	AA2-053 E OP	2.4457	50/50	2.4457
919702	AA2-057 E OP	1.3810	Adder	1.62
920042	AA2-088 E OP	5.1904	Adder	6.11
920592	AA2-165 E	0.1898	Adder	0.22
920692	AA2-178 E	3.5306	50/50	3.5306
922923	AB1-081 E OP	1.4211	Adder	1.67
923262	AB1-132 C OP (Suspended)	10.2690	50/50	10.2690
923263	AB1-132 E OP (Suspended)	4.4010	50/50	4.4010
923573	AB1-173 E OP	0.4656	Adder	0.55
923832	AB2-022 E	0.4333	Adder	0.51
923991	AB2-040 C O1	3.2516	Adder	3.83
923992	AB2-040 E O1	2.6604	Adder	3.13
924152	AB2-059 E OP	2.0132	Adder	2.37
925121	AB2-169 C	1.6064	50/50	1.6064
925122	AB2-169 E	9.1375	50/50	9.1375
925591	AC1-034 C	2.5313	Adder	2.98
925592	AC1-034 E	1.9096	Adder	2.25
926070	AC1-086 C	15.1223	50/50	15.1223
926071	AC1-086 E	6.8827	50/50	6.8827
926201	AC1-098 C	3.8972	50/50	3.8972
926202	AC1-098 E	2.3218	50/50	2.3218
926211	AC1-099 C	1.3060	50/50	1.3060
926212	AC1-099 E	0.7670	50/50	0.7670
927024	AC1-189 C	15.5186	50/50	15.5186
927025	AC1-189 E	7.7302	50/50	7.7302
927145	AC1-208 C	4.2602	Adder	5.01
927146	AC1-208 E	1.8840	Adder	2.22
932631	AC2-084 C	5.5556	50/50	5.5556
932632	AC2-084 E	2.7364	50/50	2.7364
933991	AD1-023 C	13.4949	50/50	13.4949
933992	AD1-023 E	7.3467	50/50	7.3467
934331	AD1-057 C O1	8.8818	50/50	8.8818
934332	AD1-057 E O1	4.7379	50/50	4.7379
934521	AD1-076 C	54.8301	50/50	54.8301
934522	AD1-076 E	27.9194	50/50	27.9194
936401	AD2-051 C O1	9.4142	50/50	9.4142
936402	AD2-051 E O1	4.0424	50/50	4.0424
938221	AE1-035 C	0.3834	50/50	0.3834
938222	AE1-035 E	1.1966	50/50	1.1966
938535	AE1-072 C	5.1769	Adder	6.09
938536	AE1-072 E	2.6669	Adder	3.14
938771	AE1-103 C	1.3869	Adder	1.63
938772	AE1-103 E	1.9153	Adder	2.25
940491	AE2-034 C	6.1786	50/50	6.1786
940492	AE2-034 E	2.6480	50/50	2.6480
940571	AE2-044 C	1.6579	Adder	1.95
940572	AE2-044 E	0.7105	Adder	0.84
941501	AE2-147 C	6.4620	Adder	7.6
941502	AE2-147 E	4.3080	Adder	5.07

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1618	50/50	0.1618
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5523	50/50	0.5523
942471	AE2-260 C O1	5.7670	Adder	6.78
942472	AE2-260 E O1	8.1798	Adder	9.62
943171	AE2-346 C	1.2432	50/50	1.2432
943172	AE2-346 E	0.5328	50/50	0.5328
944141	AF1-082	1.0658	Adder	1.25
944871	AF1-152 C	2.1540	Adder	2.53
944872	AF1-152 E	1.4360	Adder	1.69
945711	AF1-236 C O1	67.6412	50/50	67.6412
945712	AF1-236 E O1	41.7792	50/50	41.7792
946281	AF1-292 C	0.5921	Adder	0.7
946282	AF1-292 E	0.3992	Adder	0.47
957521	AF2-046 C	12.3552	50/50	12.3552
957522	AF2-046 E	6.2148	50/50	6.2148
957531	AF2-047 C	14.6816	50/50	14.6816
957532	AF2-047 E	7.3849	50/50	7.3849
957821	AF2-076 C	1.7985	Adder	2.12
957822	AF2-076 E	1.1990	Adder	1.41
957861	AF2-080 C	14.0946	50/50	14.0946
957862	AF2-080 E	6.2481	50/50	6.2481
959511	AF2-242 C	13.2102	50/50	13.2102
959512	AF2-242 E	10.2746	50/50	10.2746
960081	AF2-299 C	0.9979	Adder	1.17
960082	AF2-299 E	0.6653	Adder	0.78
961091	AF2-400 C	0.1939	Adder	0.23
961092	AF2-400 E	0.3181	Adder	0.37
961671	AG1-007 C	1.8117	50/50	1.8117
961672	AG1-007 E	1.0117	50/50	1.0117
961681	AG1-008 C	12.3800	50/50	12.3800
961682	AG1-008 E	6.1900	50/50	6.1900
961851	AG1-027 C	2.9209	Adder	6.48
961852	AG1-027 E	1.6147	Adder	3.58
961931	AG1-036 C	1.1069	50/50	1.1069
961932	AG1-036 E	0.7380	50/50	0.7380
961941	AG1-037 C	0.4440	50/50	0.4440
961942	AG1-037 E	0.2960	50/50	0.2960
962331	AG1-082 C	1.7760	50/50	1.7760
962332	AG1-082 E	1.1840	50/50	1.1840
962341	AG1-083 C	1.7760	50/50	1.7760
962342	AG1-083 E	1.1840	50/50	1.1840
962351	AG1-084 C	1.6569	50/50	1.6569
962352	AG1-084 E	1.1046	50/50	1.1046
962361	AG1-085 C	1.6569	50/50	1.6569
962362	AG1-085 E	1.1046	50/50	1.1046
962571	AG1-106 C	4.2054	50/50	4.2054
962572	AG1-106 E	1.9071	50/50	1.9071
964491	AG1-312 C O1	20.1914	50/50	20.1914
964492	AG1-312 E O1	5.0478	50/50	5.0478
964501	AG1-313 C O1	3.3352	50/50	3.3352
964502	AG1-313 E O1	2.2235	50/50	2.2235

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964801	AG1-343 C	3.6197	50/50	3.6197
964802	AG1-343 E	2.8440	50/50	2.8440
965291	AG1-394 C	1.2042	50/50	1.2042
965292	AG1-394 E	0.8028	50/50	0.8028
965631	AG1-431	39.1607	50/50	39.1607
965691	AG1-437 C O1	10.5492	50/50	10.5492
965692	AG1-437 E O1	7.0328	50/50	7.0328
965701	AG1-438 C O1	10.5492	50/50	10.5492
965702	AG1-438 E O1	7.0328	50/50	7.0328
965711	AG1-439 C O1	38.9340	50/50	38.9340
965712	AG1-439 E O1	25.9560	50/50	25.9560
965741	AG1-442 O1	6.1537	50/50	6.1537
965751	AG1-443 O1	6.1537	50/50	6.1537
965761	AG1-444 O1	20.7648	50/50	20.7648
966621	AG1-532 C	0.2856	Adder	0.63
966622	AG1-532 E	0.1904	Adder	0.42
966751	AG1-546 C	2.7754	Adder	6.16
966752	AG1-546 E	1.4892	Adder	3.31
966801	AG1-551 C	4.5154	50/50	4.5154
966802	AG1-551 E	1.9352	50/50	1.9352
966811	AG1-552 C	0.5563	Adder	1.23
966812	AG1-552 E	0.2384	Adder	0.53
966931	AG1-431A	29.4220	50/50	29.4220
G-007A	G-007A	1.1364	Confirmed LTF	1.1364
VFT	VFT	3.0250	Confirmed LTF	3.0250
CALDERWOOD	CALDERWOOD	1.3349	Confirmed LTF	1.3349
PRAIRIE	PRAIRIE	4.5383	Confirmed LTF	4.5383
AC1-131	AC1-131	5.3107	LTF	5.3107
CHEOAH	CHEOAH	1.3689	Confirmed LTF	1.3689
CBM-N	CBM-N	0.5508	Confirmed LTF	0.5508
COTTONWOOD	COTTONWOOD	4.9854	Confirmed LTF	4.9854
HAMLET	HAMLET	3.1098	Confirmed LTF	3.1098
GIBSON	GIBSON	0.7851	Confirmed LTF	0.7851
BLUEG	BLUEG	2.4096	Confirmed LTF	2.4096
TRIMBLE	TRIMBLE	0.7641	Confirmed LTF	0.7641
CATAWBA	CATAWBA	1.4357	Confirmed LTF	1.4357

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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
168995789	314575	6NUCO TP	DVP	957820	AF2-076 TAP	DVP	1	DVP_P1-2: LN 2092	single	571.52	180.02	181.1	DC	6.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6258	80/20	2.6258
315293	1DOMTR9	13.5807	80/20	13.5807
315294	1DOMTR10	16.6430	80/20	16.6430
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMANSOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9392	80/20	4.9392
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2104	80/20	4.2104
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5594	80/20	1.5594
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158
961941	AG1-037 C	0.8635	80/20	0.8635

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964241	AG1-285 C O1	4.2330	80/20	4.2330
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O1	6.1567	80/20	6.1567
964801	AG1-343 C	4.7135	80/20	4.7135
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O1	3.4453	80/20	3.4453
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O1	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

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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
168995923	314579	6HORNRTN	DVP	934330	AD1-057 TAP	DVP	1	DVP_P1-2: LN 238-A	single	441.8	120.99	122.0	DC	4.49

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965741	AG1-442 O1	2.5826	80/20	2.5826
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

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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
163260310	314583	6LAKEVEW	DVP	313725	6DRY BREAD	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	173.69	175.26	DC	7.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313719	3CHESTNUT	1.1225	50/50	1.1225
314539	3UNCAMP	2.0614	Adder	2.43
314541	3WATKINS	0.2795	Adder	0.33
314582	3KELFORD	0.3267	50/50	0.3267
314589	3MURPHYS	0.0638	50/50	0.0638
314594	6PLYMOTH	0.0478	Adder	0.06
314623	3WITAKRS	0.2114	50/50	0.2114
315126	1ROARAP2	1.2818	50/50	1.2818
315128	1ROARAP4	1.2232	50/50	1.2232
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.4751	50/50	13.4751
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.4751	50/50	13.4751
315136	1ROSEMG1	4.2853	50/50	4.2853
315137	1ROSEMS1	2.6573	50/50	2.6573
315138	1ROSEMG2	2.0084	50/50	2.0084
315139	1GASTONA	6.4457	50/50	6.4457
315141	1GASTONB	6.4457	50/50	6.4457
315293	1DOMTR9	3.9969	Adder	4.7
315294	1DOMTR10	4.8981	Adder	5.76
315601	1CONETOE2SOL	1.5584	50/50	1.5584
315602	1HOLLOMANSOL	1.2830	50/50	1.2830
315606	3AA2-053SOLA	1.3781	50/50	1.3781
315607	3AA1-063SOLA	1.1475	50/50	1.1475
316020	AB2-059 C OP	1.7446	50/50	1.7446
316103	AB2-015 C	3.2649	Adder	3.84
316104	AB2-015 E	2.6772	Adder	3.15
316129	AC1-054 C	3.7303	Adder	4.39
316140	AB2-099 C (Suspended)	0.5027	50/50	0.5027
316141	AB2-099 E (Suspended)	0.2154	50/50	0.2154
900672	V4-068 E	0.2217	50/50	0.2217
917332	Z2-043 E	0.9745	50/50	0.9745
917342	Z2-044 E	0.5743	50/50	0.5743
917512	Z2-088 E OP1	9.2440	50/50	9.2440
918492	AA1-063AE OP	3.4294	50/50	3.4294
918512	AA1-065 E OP	3.6413	50/50	3.6413
918532	AA1-067 E	0.6289	50/50	0.6289
919692	AA2-053 E OP	3.5865	50/50	3.5865
919702	AA2-057 E OP	3.3585	50/50	3.3585
920042	AA2-088 E OP	5.7901	Adder	6.81
920591	AA2-165 C	0.1507	50/50	0.1507

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
920592	AA2-165 E	0.4616	50/50	0.4616
920692	AA2-178 E	1.8111	Adder	2.13
922922	AB1-081 C OP	1.4802	50/50	1.4802
922923	AB1-081 E OP	4.0210	50/50	4.0210
923262	AB1-132 C OP (Suspended)	31.1984	50/50	31.1984
923263	AB1-132 E OP (Suspended)	13.3708	50/50	13.3708
924152	AB2-059 E OP	5.6964	50/50	5.6964
925121	AB2-169 C	0.7606	50/50	0.7606
925122	AB2-169 E	4.3263	50/50	4.3263
925591	AC1-034 C	7.1623	50/50	7.1623
925592	AC1-034 E	5.4032	50/50	5.4032
925785	AC1-054 E	1.7185	Adder	2.02
926070	AC1-086 C	45.9434	50/50	45.9434
926071	AC1-086 E	20.9104	50/50	20.9104
926201	AC1-098 C	5.8961	50/50	5.8961
926202	AC1-098 E	3.5125	50/50	3.5125
926211	AC1-099 C	1.9758	50/50	1.9758
926212	AC1-099 E	1.1604	50/50	1.1604
927024	AC1-189 C	9.1421	50/50	9.1421
927025	AC1-189 E	4.5539	50/50	4.5539
927145	AC1-208 C	8.8075	50/50	8.8075
927146	AC1-208 E	3.8950	50/50	3.8950
932631	AC2-084 C	8.4050	50/50	8.4050
932632	AC2-084 E	4.1398	50/50	4.1398
933991	AD1-023 C	9.2859	50/50	9.2859
933992	AD1-023 E	5.0553	50/50	5.0553
934331	AD1-057 C O1	18.0326	50/50	18.0326
934332	AD1-057 E O1	9.6194	50/50	9.6194
934521	AD1-076 C	29.4730	Adder	34.67
934522	AD1-076 E	15.0076	Adder	17.66
936401	AD2-051 C O1	8.2520	50/50	8.2520
936402	AD2-051 E O1	3.5433	50/50	3.5433
938221	AE1-035 C	0.3208	50/50	0.3208
938222	AE1-035 E	1.0014	50/50	1.0014
940491	AE2-034 C	3.1694	Adder	3.73
940492	AE2-034 E	1.3583	Adder	1.6
940542	AE2-040 BAT	2.8642	50/50	2.8642
940571	AE2-044 C	4.6911	50/50	4.6911
940572	AE2-044 E	2.0105	50/50	2.0105
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1535	50/50	0.1535
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5238	50/50	0.5238
943171	AE2-346 C	1.2065	50/50	1.2065
943172	AE2-346 E	0.5171	50/50	0.5171
943912	AF1-059 BAT	6.8210	Merchant Transmission	6.8210
944141	AF1-082	3.0157	50/50	3.0157
945711	AF1-236 C O1	34.6979	Adder	40.82
945712	AF1-236 E O1	21.4315	Adder	25.21
946012	AF1-266 BAT	15.1540	50/50	15.1540
957521	AF2-046 C	12.8463	50/50	12.8463

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957522	AF2-046 E	6.4617	50/50	6.4617
957531	AF2-047 C	7.5312	Adder	8.86
957532	AF2-047 E	3.7882	Adder	4.46
957861	AF2-080 C	8.3032	50/50	8.3032
957862	AF2-080 E	3.6808	50/50	3.6808
959511	AF2-242 C	5.8135	50/50	5.8135
959512	AF2-242 E	4.5216	50/50	4.5216
961091	AF2-400 C	0.1763	Adder	0.21
961092	AF2-400 E	0.2893	Adder	0.34
961671	AG1-007 C	1.5264	50/50	1.5264
961672	AG1-007 E	0.8524	50/50	0.8524
961681	AG1-008 C	12.8720	50/50	12.8720
961682	AG1-008 E	6.4360	50/50	6.4360
961931	AG1-036 C	1.1068	50/50	1.1068
961932	AG1-036 E	0.7379	50/50	0.7379
961941	AG1-037 C	0.4309	50/50	0.4309
961942	AG1-037 E	0.2873	50/50	0.2873
962331	AG1-082 C	1.7236	50/50	1.7236
962332	AG1-082 E	1.1490	50/50	1.1490
962341	AG1-083 C	1.7236	50/50	1.7236
962342	AG1-083 E	1.1490	50/50	1.1490
962351	AG1-084 C	1.5715	50/50	1.5715
962352	AG1-084 E	1.0477	50/50	1.0477
962361	AG1-085 C	1.5715	50/50	1.5715
962362	AG1-085 E	1.0477	50/50	1.0477
962571	AG1-106 C	12.7765	50/50	12.7765
962572	AG1-106 E	5.7940	50/50	5.7940
963312	AG1-180 BAT	1.5544	Merchant Transmission	1.5544
964491	AG1-312 C O1	16.5054	50/50	16.5054
964492	AG1-312 E O1	4.1264	50/50	4.1264
964501	AG1-313 C O1	4.3329	50/50	4.3329
964502	AG1-313 E O1	2.8886	50/50	2.8886
964801	AG1-343 C	4.0656	50/50	4.0656
964802	AG1-343 E	3.1944	50/50	3.1944
965291	AG1-394 C	0.6177	Adder	1.37
965292	AG1-394 E	0.4118	Adder	0.91
965631	AG1-431	10.6468	Adder	23.63
965691	AG1-437 C O1	7.7136	50/50	7.7136
965692	AG1-437 E O1	5.1424	50/50	5.1424
965701	AG1-438 C O1	7.7136	50/50	7.7136
965702	AG1-438 E O1	5.1424	50/50	5.1424
965711	AG1-439 C O1	27.9555	50/50	27.9555
965712	AG1-439 E O1	18.6370	50/50	18.6370
965721	AG1-440 C	1.3558	Adder	3.01
965722	AG1-440 E	0.9039	Adder	2.01
965731	AG1-441 C	1.3558	Adder	3.01
965732	AG1-441 E	0.9039	Adder	2.01
965741	AG1-442 O1	4.4996	50/50	4.4996
965751	AG1-443 O1	4.4996	50/50	4.4996
965761	AG1-444 O1	14.9096	50/50	14.9096
965771	AG1-445	0.7834	Adder	1.74
965781	AG1-446	0.7834	Adder	1.74

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966751	AG1-546 C	4.6287	Adder	10.27
966752	AG1-546 E	2.4836	Adder	5.51
966801	AG1-551 C	1.8784	50/50	1.8784
966802	AG1-551 E	0.8050	50/50	0.8050
966811	AG1-552 C	2.0352	50/50	2.0352
966812	AG1-552 E	0.8722	50/50	0.8722
966931	AG1-431A	7.9991	Adder	17.76
WEC	WEC	0.1496	Confirmed LTF	0.1496
LGEE	LGEE	0.3060	Confirmed LTF	0.3060
CPL	CPL	1.9649	Confirmed LTF	1.9649
CBM-W2	CBM-W2	6.7648	Confirmed LTF	6.7648
NY	NY	0.2085	Confirmed LTF	0.2085
TVA	TVA	1.2852	Confirmed LTF	1.2852
O-066	O-066	2.9276	Confirmed LTF	2.9276
SIGE	SIGE	0.1008	Confirmed LTF	0.1008
CBM-S2	CBM-S2	20.9113	Confirmed LTF	20.9113
CBM-S1	CBM-S1	0.3192	Confirmed LTF	0.3192
G-007	G-007	0.4599	Confirmed LTF	0.4599
MEC	MEC	0.9089	Confirmed LTF	0.9089
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	6.2529	Confirmed LTF	6.2529

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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
169197095	314623	3WITAKRS	DVP	313854	3CONSLDL	DVP	1	DVP_P1-2: LN 2056-B	single	165.44	112.16	113.83	DC	2.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.2914	80/20	3.2914
313719	3CHESTNUT	4.2854	80/20	4.2854
314572	3EMPORIA	0.1616	80/20	0.1616
314582	3KELFORD	0.4044	80/20	0.4044
314589	3MURPHYS	0.0392	80/20	0.0392
314623	3WITAKRS	0.9494	80/20	0.9494
315115	1S HAMPT1	0.4778	80/20	0.4778
315126	1ROARAP2	0.8850	80/20	0.8850
315128	1ROARAP4	0.8445	80/20	0.8445
315136	1ROSEMG1	0.7069	80/20	0.7069
315137	1ROSEMS1	0.4383	80/20	0.4383
315138	1ROSEMG2	0.3313	80/20	0.3313
315139	1GASTONA	1.0151	80/20	1.0151
315141	1GASTONB	1.0151	80/20	1.0151
315606	3AA2-053SOLA	0.9169	80/20	0.9169
315607	3AA1-063SOLA	0.7802	80/20	0.7802
315608	3AA2-088SOLA	0.4345	80/20	0.4345
316087	AB2-174 C	0.4990	80/20	0.4990
316103	AB2-015 C	2.6335	80/20	2.6335
316129	AC1-054 C	3.1568	80/20	3.1568
316140	AB2-099 C (Suspended)	0.2798	80/20	0.2798
920591	AA2-165 C	0.5753	80/20	0.5753
923991	AB2-040 C O1	3.5847	80/20	3.5847
925591	AC1-034 C	-5.6912	Adder	-6.7
926070	AC1-086 C	7.2352	80/20	7.2352
926201	AC1-098 C	14.1632	80/20	14.1632
926211	AC1-099 C	4.7462	80/20	4.7462
927145	AC1-208 C	23.0553	80/20	23.0553
932631	AC2-084 C	20.1900	80/20	20.1900
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0830	80/20	0.0830
943171	AE2-346 C	0.6714	80/20	0.6714
946281	AF1-292 C	0.5153	80/20	0.5153
957521	AF2-046 C	7.7325	80/20	7.7325
960081	AF2-299 C	0.8685	80/20	0.8685
961091	AF2-400 C	0.1422	80/20	0.1422
961681	AG1-008 C	7.7480	80/20	7.7480
961931	AG1-036 C	0.6382	80/20	0.6382
961941	AG1-037 C	0.2398	80/20	0.2398
962331	AG1-082 C	0.9592	80/20	0.9592
962341	AG1-083 C	0.9592	80/20	0.9592
962351	AG1-084 C	0.8498	80/20	0.8498

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962361	AG1-085 C	0.8498	80/20	0.8498
962571	AG1-106 C	2.0121	80/20	2.0121
964501	AG1-313 C O1	2.7556	80/20	2.7556
964801	AG1-343 C	2.6397	80/20	2.6397
965291	AG1-394 C	0.9013	80/20	0.9013
965721	AG1-440 C	2.2707	80/20	2.2707
965731	AG1-441 C	2.2707	80/20	2.2707
965771	AG1-445	1.3120	80/20	1.3120
965781	AG1-446	1.3120	80/20	1.3120
966621	AG1-532 C	0.4690	80/20	0.4690
966751	AG1-546 C	7.3430	80/20	7.3430
966811	AG1-552 C	1.4052	80/20	1.4052
G-007A	G-007A	0.2973	Confirmed LTF	0.2973
VFT	VFT	0.7934	Confirmed LTF	0.7934
CALDERWOOD	CALDERWOOD	0.4075	Confirmed LTF	0.4075
PRAIRIE	PRAIRIE	1.4052	Confirmed LTF	1.4052
CHEOAH	CHEOAH	0.4179	Confirmed LTF	0.4179
CBM-N	CBM-N	0.1440	Confirmed LTF	0.1440
COTTONWOOD	COTTONWOOD	1.5141	Confirmed LTF	1.5141
HAMLET	HAMLET	0.9067	Confirmed LTF	0.9067
GIBSON	GIBSON	0.2468	Confirmed LTF	0.2468
BLUEG	BLUEG	0.7604	Confirmed LTF	0.7604
TRIMBLE	TRIMBLE	0.2410	Confirmed LTF	0.2410
CATAWBA	CATAWBA	0.4393	Confirmed LTF	0.4393

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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
163260340	940480	AE2-033 TAP	DVP	314435	6SAPONY	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	151.68	152.97	DC	10.67

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962351	AG1-084 C	0.8099	Adder	1.8
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

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

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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
168758459	957820	AF2-076 TAP	DVP	314537	6SUFFOLK	DVP	1	DVP_P1-2: LN 2092	single	571.52	184.35	185.43	DC	6.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6258	80/20	2.6258
315293	1DOMTR9	13.5807	80/20	13.5807
315294	1DOMTR10	16.6430	80/20	16.6430
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMANSOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9392	80/20	4.9392
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2104	80/20	4.2104
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5594	80/20	1.5594
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957821	AF2-076 C	25.4541	80/20	25.4541
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961941	AG1-037 C	0.8635	80/20	0.8635
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964241	AG1-285 C O1	4.2330	80/20	4.2330
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O1	6.1567	80/20	6.1567
964801	AG1-343 C	4.7135	80/20	4.7135
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O1	3.4453	80/20	3.4453
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O1	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

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
AA2-178	Mackeys 230kV	Partially in Service - Under Construction
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
AB2-022	Elizabeth City 34.5kV	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	Partially in Service - 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
AC1-054	Kerr Dam–Eatons Ferry 115 kV	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
AC1-131	PJM-CPL	Confirmed
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-208	Cox-Whitakers 115kV	Engineering and Procurement
AC2-084	Dawson-South Justice 115kV	Active
AD1-023	Cashie-Trowbridge 230 kV	Active

Queue Number	Project Name	Status
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
AE1-072	Shawboro-Sligo 230 kV	Active
AE1-103	Holland-Union Camp 115 kV	Active
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-034	Mackeys 230 kV	Active
AE2-040	Sapony 34.5 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-147	Swamp 230 kV	Active
AE2-151	Earleys 34.5kV	Withdrawn
AE2-225	Suffolk 34 kV	Engineering and Procurement
AE2-229	Suffolk 34 kV	Engineering and Procurement
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active
AE2-260	Clubhouse 230 kV	Active
AE2-346	Ahoskie 34.5 kV	Active
AF1-032	Suffolk 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-152	Swamp 230 kV	Active
AF1-236	Mackeys 230 kV	Active
AF1-266	Clubhouse-Sapony 230 kV	Active
AF1-292	Fields 34.5kV	Active
AF1-294	Jetersville-Ponton 115 kV	Active
AF2-043	Suffolk 34.5 kV	Engineering and Procurement
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-047	Creswell-Riders Creek 115 kV	Active
AF2-076	Suffolk-Nucor Steel 230 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
AF2-299	Fields 34.5 kV	Active
AF2-400	Franklin 13.2 kV	Engineering and Procurement
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-027	Suffolk-Holland 115 kV	Active
AG1-030	Victoria DP-Martin DP 115 kV	Active
AG1-036	Tunis 34.5 kV	Active
AG1-037	Ahoskie 34.5 kV	Active
AG1-048	Jetersville-Ponton 115 kV	Active

Queue Number	Project Name	Status
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
AG1-215	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
AG1-285	Chase City-Central 115 kV	Active
AG1-312	Earleys-Cashie 230 kV	Active
AG1-313	Jackson DP-Occoneechee 115 kV	Active
AG1-342	Dryburg 115 kV	Active
AG1-343	Boykins-Murphy 115 kV	Active
AG1-345	Crewe 12.5 kV	Active
AG1-384	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	Danielstown 69 kV	Active
AG1-431	Mackeys 230 kV	Active
AG1-431A	Mackeys 230 kV	Active
AG1-432	Curdsville DP-Willis Mt. 115 kV	Active
AG1-437	Cashie-Earleys 230 kV	Active
AG1-438	Cashie-Earleys 230 kV	Active
AG1-439	Chinquapin 230 kV	Active
AG1-440	Palmer Springs 115 kV	Active
AG1-441	Palmer Springs 115 kV	Active
AG1-442	Cashie-Earleys 230 kV	Active
AG1-443	Cashie-Earleys 230 kV	Active
AG1-444	Chinquapin 230 kV	Active
AG1-445	Palmer Spring 115 kV	Active
AG1-446	Palmer Springs 115 kV	Active
AG1-451	Curdsville DP-Willis Mt. 115 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-546	Ebony-Elams Road 115 kV	Active
AG1-551	Parmelee 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
W1-029	Winfall 230kV	In Service

Queue Number	Project Name	Status
Y1-086	Morgans Corner	In Service
Z1-036	WinFall-Chowan 230kV	Suspended
Z2-027	Pasquotank 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 - Primary POI

Contingency Name	Contingency Definition
PL:48:P71:102649	CONTINGENCY 'PL:48:P71:102649' /* SUSQ-GEN1 230KV & BETA-SUSQ 230KV DISCONNECT BRANCH FROM BUS 207915 TO BUS 208113 CKT 1 /* BETA-SUSQ DISCONNECT BUS 208114 /* SUSQ G1 END
AEP_P2-2_#1377_05J.FERR 765_1	CONTINGENCY 'AEP_P2-2_#1377_05J.FERR 765_1' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
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_P1-2: LN 136	CONTINGENCY 'DVP_P1-2: LN 136' OPEN BRANCH FROM BUS 314551 TO BUS 314568 CKT 1 /* 3AHOSKIE 115.00 - 3EARLEYS 115.00 OPEN BRANCH FROM BUS 314551 TO BUS 314617 CKT 1 /* 3AHOSKIE 115.00 - 3TUNIS 115.00 OPEN BUS 314551 /* ISLAND: 3AHOSKIE 115.00 OPEN BUS 316140 /* ISLAND: AB2-099 C 115.00 OPEN BUS 316141 /* ISLAND: AB2-099 E 115.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2131	CONTINGENCY 'DVP_P1-2: LN 2131' OPEN BRANCH FROM BUS 313714 TO BUS 313885 CKT 1 /* 6PERQUIMANS 230.00 - 6WALBMRL 230.00 OPEN BRANCH FROM BUS 313885 TO BUS 314637 CKT 1 /* 6WALBMRL 230.00 - 6EDENTON 230.00 OPEN BRANCH FROM BUS 314203 TO BUS 314637 CKT 1 /* 6MACKEYS 230.00 - 6EDENTON 230.00 OPEN BUS 313885 /* ISLAND: 6WALBMRL 230.00 OPEN BUS 314637 /* ISLAND: 6EDENTON 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
DVP_P1-2: LN 246-B	CONTINGENCY 'DVP_P1-2: LN 246-B' OPEN BRANCH FROM BUS 957820 TO BUS 314575 CKT 1 /* AF2-076 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 END
DVP_P1-2: LN 1028	CONTINGENCY 'DVP_P1-2: LN 1028' OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 END
DVP_P1-2: LN 2181	CONTINGENCY 'DVP_P1-2: LN 2181' 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

Contingency Name	Contingency Definition
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
DVP_P1-2: LN 193	CONTINGENCY 'DVP_P1-2: LN 193' OPEN BRANCH FROM BUS 313705 TO BUS 314699 CKT 1 /* 3KERRDP 115.00 - 3ISLND C 115.00 OPEN BRANCH FROM BUS 313705 TO BUS 314702 CKT 1 /* 3KERRDP 115.00 - 3KERR 115.00 OPEN BRANCH FROM BUS 314335 TO BUS 314665 CKT 1 /* 3CLRKSVI DP 115.00 - 3CLRK TAP 115.00 OPEN BRANCH FROM BUS 314335 TO BUS 314869 CKT Z1 /* 3CLRKSVI DP 115.00 - 3BURLING 115.00 OPEN BRANCH FROM BUS 314665 TO BUS 314682 CKT 1 /* 3CLRK TAP 115.00 - 3BUGGS I 115.00 OPEN BRANCH FROM BUS 314665 TO BUS 314699 CKT 1 /* 3CLRK TAP 115.00 - 3ISLND C 115.00 OPEN BUS 313705 /* ISLAND: 3KERRDP 115.00 OPEN BUS 314335 /* ISLAND: 3CLRKSVI DP 115.00 OPEN BUS 314665 /* ISLAND: 3CLRK TAP 115.00 OPEN BUS 314699 /* ISLAND: 3ISLND C 115.00 END
DVP_P1-2: LN 238-B	CONTINGENCY 'DVP_P1-2: LN 238-B' OPEN BRANCH FROM BUS 940480 TO BUS 314563 CKT 1 /* AE2-033 TAP 230.00 - 6CLUBHSE 230.00 OPEN BRANCH FROM BUS 314562 TO BUS 314563 CKT 1 /* 3CLUBHSE 115.00 - 6CLUBHSE 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
DVP_P1-2: LN 2056-B	CONTINGENCY 'DVP_P1-2: LN 2056-B' OPEN BRANCH FROM BUS 934330 TO BUS 314579 CKT 1 /* AD1-057 TAP 230.00 - 6HORNRTN 230.00 END
DVP_P1-3: 6EARLEYS-TX#3	CONTINGENCY 'DVP_P1-3: 6EARLEYS-TX#3' OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END

Contingency Name	Contingency Definition
DVP_P1-3: 6EARLEYS-TX#4	CONTINGENCY 'DVP_P1-3: 6EARLEYS-TX#4' OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 2 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END
DVP_P1-2: LN 126	CONTINGENCY 'DVP_P1-2: LN 126' OPEN BRANCH FROM BUS 314568 TO BUS 314582 CKT 1 /* 3EARLEYS 115.00 - 3KELFORD 115.00 OPEN BRANCH FROM BUS 314582 TO BUS 314602 CKT 1 /* 3KELFORD 115.00 - 3SAMS HD 115.00 OPEN BRANCH FROM BUS 314602 TO BUS 314603 CKT 1 /* 3SAMS HD 115.00 - 3SCOT NK 115.00 OPEN BUS 314582 /* ISLAND: 3KELFORD 115.00 OPEN BUS 314602 /* ISLAND: 3SAMS HD 115.00 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
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 2058	CONTINGENCY 'DVP_P1-2: LN 2058' 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 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2092	CONTINGENCY 'DVP_P1-2: LN 2092' OPEN BRANCH FROM BUS 313714 TO BUS 314662 CKT 1 /* 6PERQUIMANS 230.00 - 6S HERTFORD 230.00 OPEN BRANCH FROM BUS 314651 TO BUS 314662 CKT 1 /* 6WINFALL 230.00 - 6S HERTFORD 230.00 OPEN BUS 314662 /* ISLAND: 6S HERTFORD 230.00 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: 2058T2167	CONTINGENCY 'DVP_P4-2: 2058T2167' /* HATHAWAY 230 KV 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 BRANCH FROM BUS 313845 TO BUS 314564 CKT 1 /* 6HATHAWAY 230.00 - 6EDGECON 230.00 END

12 Short Circuit Analysis - Primary POI

The following Breakers are overdutied:

None

12.1 System Reinforcements - Short Circuit

None

13 Summer Peak - Load Flow Analysis - Secondary POI

The Queue Project AG1-313 was evaluated as a 46.0 MW (Capacity 27.6 MW) injection at the Jackson 115 kV substation in the Dominion area. Project AG1-313 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-313 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

13.1 Generation Deliverability

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

None

13.2 Multiple Facility Contingency

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

None

13.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC/D C	MW IMPA CT
163260015	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	AEP_P2-2_#1377_05J.F ERR 765_1	bus	459.0	174.15	175.52	DC	6.29
163260016	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	459.0	169.8	171.15	DC	6.16
163260017	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	PL:08:P22:102799	bus	459.0	168.59	169.94	DC	6.16
163260018	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	PL:11:P22:000176	bus	459.0	168.57	169.92	DC	6.16
163260285	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	189.53	191.1	DC	7.19
163260287	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P7-1: LN 81-2056-A	tower	459.0	167.33	169.11	DC	8.16
171521813	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	PL:08:P22:102801	bus	459.0	168.55	169.9	DC	6.16
173863879	313737	3COPELD DP	115.0	DVP	961850	AG1-027 TAP	115.0	DVP	1	DVP_P4-2: 2202	break er	349.0	113.38	113.93	DC	4.24
174674074	313854	3CONSLD L	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	single	165.440002441	104.38	106.43	DC	3.4
174254350	314299	6HARRO WG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P4-2: 24972-4	break er	541.0	170.12	171.26	DC	6.14
174254349	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P4-2: 24972-4	break er	541.0	170.14	171.28	DC	6.14
173863867	314527	3HOLLAN D	115.0	DVP	313737	3COPELD DP	115.0	DVP	1	DVP_P4-2: 2202	break er	349.0	116.07	116.62	DC	4.24
173863882	314539	3UNCAM P	115.0	DVP	938770	AE1-103 TAP	115.0	DVP	1	DVP_P4-2: 2202	break er	335.0	111.84	112.41	DC	4.24
163714797	314554	3BTLEBR O	115.0	DVP	304223	3ROCKYMT1 15T	115.0	CPL E	1	DVP_P4-2: 2058T2167	break er	164.0	131.79	132.5	DC	2.56
163715614	314554	3BTLEBR O	115.0	DVP	304223	3ROCKYMT1 15T	115.0	CPL E	1	DVP_P7-1: LN 2058-2181	tower	164.0	295.69	298.6	DC	4.75
168995862	314559	3CAROLN A	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	single	239.888000488	122.58	125.67	DC	7.42
174254348	314559	3CAROLN A	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P4-2: L5T68	break er	288.600006104	148.37	152.66	DC	12.37
173863765	314561	6CAROLN A	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 246T247	break er	459.0	131.3	134.15	DC	13.07
168995807	314562	3CLUBHS E	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	202.58	204.31	DC	3.15
168995809	314562	3CLUBHS E	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	141.88	143.04	DC	2.06

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/D C	MW IMPACT
163260101	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	136.68	137.85	DC	9.7
163260102	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	AEP_P2-2_#1377_05J.F ERR 765_1	bus	830.0	132.26	133.44	DC	9.74
163260360	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	142.42	143.7	DC	10.55
163260361	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	830.0	130.63	131.86	DC	10.18
174050977	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P4-2: 201262	breaker	830.0	134.28	135.53	DC	10.37
168995883	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	DVP_P1-3: 6EARLEYS-TX#3	single	175.779998779	129.25	134.01	DC	8.36
168995927	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-3: 6EARLEYS-TX#4	single	202.475997925	112.3	116.44	DC	8.37
173863744	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	DVP_P4-2: 201262	breaker	208.0	185.67	192.52	DC	14.25
173863788	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 217162	breaker	231.699996948	146.12	152.15	DC	13.95
174440659	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 201462	breaker	231.699996948	144.66	150.5	DC	13.53
168995771	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	189.53	190.63	DC	6.27
163715617	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P7-1: LN 2058-2181	tower	478.0	189.11	190.29	DC	5.63
168995789	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	180.85	181.95	DC	6.27
175887980	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 238-B	single	571.520019531	147.82	148.93	DC	6.53
163260035	314583	6LAKEVE W	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	AEP_P2-2_#1377_05J.F ERR 765_1	bus	459.0	157.89	159.27	DC	6.31
163260036	314583	6LAKEVE W	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	459.0	153.4	154.75	DC	6.18
163260310	314583	6LAKEVE W	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	173.69	175.26	DC	7.21
171522100	314583	6LAKEVE W	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	DVP_P7-1: LN 22-90	tower	459.0	158.52	160.1	DC	7.21
174674071	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	single	165.440002441	104.44	106.5	DC	3.4
173863839	938770	AE1-103 TAP	115.0	DVP	314527	3HOLLAND	115.0	DVP	1	DVP_P4-2: 2202	breaker	335.0	123.73	124.3	DC	4.24
163260340	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	164.37	165.65	DC	10.55
168758459	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	185.18	186.28	DC	6.27
175887974	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 238-B	single	571.520019531	152.21	153.33	DC	6.53
173863789	961850	AG1-027 TAP	115.0	DVP	314536	3SUFFOLK	115.0	DVP	1	DVP_P4-2: 2202	breaker	349.0	148.4	148.94	DC	4.24

13.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPA CT
168454970	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	Base Case	operation	165.440002441	112.76	113.81	DC	3.88
174674110	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	operation	165.440002441	134.26	137.68	DC	5.66
168455107	313720	3NEWSOMMS	115.0	DVP	314526	3HANDSOM	115.0	DVP	1	DVP_P1-2: LN 136	operation	280.119995117	113.98	114.49	DC	3.19
168454816	313725	6DRY BREAD	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	375.059997559	205.56	207.21	DC	6.16
168454953	313737	3COPELDDP	115.0	DVP	961850	AG1-027 TAP	115.0	DVP	1	Base Case	operation	247.220001221	124.27	124.94	DC	3.65
163714988	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT230T	230.0	CPL E	1	DVP_P1-2: LN 2181	operation	478.0	156.07	157.32	DC	5.97
168454958	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	Base Case	operation	165.440002441	123.22	124.28	DC	3.88
174674072	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	operation	165.440002441	143.73	147.15	DC	5.66
174872702	313858	3SO JUSTICE	115.0	DVP	314577	3COX DP	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	operation	165.440002441	109.59	113.03	DC	5.67
168758535	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 2012-B	operation	678.679992676	197.78	199.22	DC	9.79
168758537	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	operation	678.679992676	174.86	176.28	DC	9.59
168758597	314524	3FRNKLN	115.0	DVP	314539	3UNCAMP	115.0	DVP	1	DVP_P1-2: LN 136	operation	224.660003662	167.35	167.99	DC	3.18
168758599	314524	3FRNKLN	115.0	DVP	314539	3UNCAMP	115.0	DVP	1	Base Case	operation	224.660003662	137.51	138.24	DC	3.65
168758857	314526	3HANDSOM	115.0	DVP	314534	3S HAMPT	115.0	DVP	1	DVP_P1-2: LN 136	operation	280.119995117	113.05	113.57	DC	3.19
168758645	314527	3HOLLAND	115.0	DVP	313737	3COPELDDP	115.0	DVP	1	Base Case	operation	247.220001221	128.11	128.78	DC	3.65
168758716	314534	3S HAMPT	115.0	DVP	314541	3WATKINS	115.0	DVP	1	DVP_P1-2: LN 136	operation	269.779998779	133.85	134.38	DC	3.18
168758718	314534	3S HAMPT	115.0	DVP	314541	3WATKINS	115.0	DVP	1	Base Case	operation	247.220001221	119.83	120.49	DC	3.65
168995916	314539	3UNCAMP	115.0	DVP	938770	AE1-103 TAP	115.0	DVP	1	Base Case	operation	224.660003662	136.29	137.02	DC	3.65
168758821	314541	3WATKINS	115.0	DVP	314524	3FRNKLN	115.0	DVP	1	DVP_P1-2: LN 136	operation	269.779998779	118.97	119.51	DC	3.18
168758823	314541	3WATKINS	115.0	DVP	314524	3FRNKLN	115.0	DVP	1	Base Case	operation	247.220001221	103.58	104.24	DC	3.65
163715167	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT115T	115.0	CPL E	1	DVP_P1-2: LN 2058	operation	164.0	128.57	129.28	DC	2.57
168995859	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	operation	239.888000488	162.56	167.72	DC	12.37
168995861	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operation	226.539993286	120.75	125.75	DC	11.28

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
168995890	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P1-2: LN 246-B	operation	375.059997559	135.93	139.34	DC	12.8
168995805	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	operation	182.641998291	246.0	248.88	DC	5.26
168995806	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	176.81401062	188.98	189.85	DC	3.43
168995904	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2012-B	operation	678.679992676	161.93	163.38	DC	9.79
168995905	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	Base Case	operation	678.679992676	156.62	158.04	DC	9.59
168995881	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	DVP_P1-3: 6EARLEYS-TX#3	operation	175.779998779	190.4	198.33	DC	13.94
168995884	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	2	Base Case	operation	167.414001465	115.02	120.0	DC	8.35
168995925	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-3: 6EARLEYS-TX#4	operation	202.475997925	165.45	172.34	DC	13.96
168995928	314568	3EARLEYS	115.0	DVP	314569	6EARLEYS	230.0	DVP	1	Base Case	operation	195.802001953	98.67	102.94	DC	8.37
168995769	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	271.57	273.4	DC	10.46
168995773	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	operation	571.520019531	163.65	165.17	DC	8.67
168995787	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	262.89	264.72	DC	10.46
168995791	314575	6NUCO TP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	Base Case	operation	571.520019531	154.95	156.47	DC	8.67
175076306	314577	3COX DP	115.0	DVP	313719	3CHESTNUT	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	operation	165.440002441	101.25	104.69	DC	5.67
175076189	314579	6HORNRTN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	DVP_P1-2: LN 238-B	operation	441.799987793	140.17	141.78	DC	7.1
168454833	314583	6LAKEVEW	230.0	DVP	313725	6DRY BREAD	230.0	DVP	1	Base Case	operation	375.059997559	185.62	187.27	DC	6.18
168995999	314583	6LAKEVEW	230.0	DVP	314579	6HORNRTN	230.0	DVP	1	3144356SAPONY 230 940480 AE2-033 TAP 230 1	operation	441.799987793	126.65	128.32	DC	7.39
163714977	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P1-2: LN 2058	operation	478.0	156.75	157.96	DC	5.79
169197094	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	Base Case	operation	165.440002441	123.22	124.28	DC	3.88
174674069	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	operation	165.440002441	143.79	147.21	DC	5.66
169197290	314626	3WOODLND	115.0	DVP	314625	3AULANDR	115.0	DVP	1	DVP_P1-2: LN 1028	operation	110.919998169	60.9	102.36	DC	45.99
168454931	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P1-2: LN 238-B	operation	441.799987793	153.41	155.02	DC	7.1

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 PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC DC	MW IMPACT
169680276	938770	AE1-103 TAP	115.0	DVP	314527	3HOLLAND	115.0	DVP	1	Base Case	operation	224.660003662	145.12	145.85	DC	3.65
169680257	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P1-2: LN 2012-B	operation	678.679992676	198.74	200.19	DC	9.79
169680259	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	operation	678.679992676	179.15	180.57	DC	9.59
168758457	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	269.82	271.65	DC	10.46
168758461	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	operation	571.520019531	161.32	162.84	DC	8.67
169971126	961850	AG1-027 TAP	115.0	DVP	314536	3SUFFOLK	115.0	DVP	1	Base Case	operation	247.220001221	166.2	166.87	DC	3.65

13.5 Flow Gate Details - Secondary POI

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

13.5.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163260285	313725	6DRY BREAD	DVP	314563	6CLUBHSE	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	189.53	191.1	DC	7.19

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313719	3CHESTNUT	1.1200	50/50	1.1200
314541	3WATKINS	0.2783	Adder	0.33
314582	3KELFORD	0.3259	50/50	0.3259
314589	3MURPHYS	0.0637	50/50	0.0637
314594	6PLYMOTH	0.0477	Adder	0.06
314623	3WITAKRS	0.2110	50/50	0.2110
315126	1ROARAP2	1.2790	50/50	1.2790
315128	1ROARAP4	1.2205	50/50	1.2205
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.4543	50/50	13.4543
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.4543	50/50	13.4543
315136	1ROSEMG1	4.2810	50/50	4.2810
315137	1ROSEMS1	2.6547	50/50	2.6547
315138	1ROSEMG2	2.0064	50/50	2.0064
315139	1GASTONA	6.4396	50/50	6.4396
315141	1GASTONB	6.4396	50/50	6.4396
315293	1DOMTR9	3.9847	Adder	4.69
315294	1DOMTR10	4.8833	Adder	5.75
315601	1CONETOE2SOL	1.5555	50/50	1.5555
315602	1HOLLOMANSOL	1.2800	50/50	1.2800
315606	3AA2-053SOLA	1.3751	50/50	1.3751
315607	3AA1-063SOLA	1.1446	50/50	1.1446
316020	AB2-059 C OP	1.7408	50/50	1.7408
316096	AB2-100 C1	3.3890	50/50	3.3890
316097	AB2-100 E1	10.5801	50/50	10.5801
316098	AB2-100 C2	3.3890	50/50	3.3890
316099	AB2-100 E2	10.5801	50/50	10.5801
316103	AB2-015 C	3.2495	Adder	3.82
316104	AB2-015 E	2.6646	Adder	3.13
316129	AC1-054 C	3.7171	Adder	4.37
316140	AB2-099 C (Suspended)	0.5015	50/50	0.5015
316141	AB2-099 E (Suspended)	0.2149	50/50	0.2149
900672	V4-068 E	0.2211	50/50	0.2211
917332	Z2-043 E	0.9722	50/50	0.9722
917342	Z2-044 E	0.5730	50/50	0.5730
917512	Z2-088 E OP1	9.2266	50/50	9.2266
918492	AA1-063AE OP	3.4207	50/50	3.4207
918512	AA1-065 E OP	3.6326	50/50	3.6326
918532	AA1-067 E	0.6273	50/50	0.6273
919692	AA2-053 E OP	3.5786	50/50	3.5786

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
919702	AA2-057 E OP	3.3511	50/50	3.3511
920042	AA2-088 E OP	5.7712	Adder	6.79
920591	AA2-165 C	0.1504	50/50	0.1504
920592	AA2-165 E	0.4606	50/50	0.4606
920692	AA2-178 E	1.8040	Adder	2.12
922922	AB1-081 C OP	1.4770	50/50	1.4770
922923	AB1-081 E OP	4.0123	50/50	4.0123
923262	AB1-132 C OP (Suspended)	31.1690	50/50	31.1690
923263	AB1-132 E OP (Suspended)	13.3582	50/50	13.3582
924152	AB2-059 E OP	5.6841	50/50	5.6841
925121	AB2-169 C	0.7584	50/50	0.7584
925122	AB2-169 E	4.3138	50/50	4.3138
925591	AC1-034 C	7.1469	50/50	7.1469
925592	AC1-034 E	5.3916	50/50	5.3916
925785	AC1-054 E	1.7124	Adder	2.01
926070	AC1-086 C	45.9001	50/50	45.9001
926071	AC1-086 E	20.8907	50/50	20.8907
926201	AC1-098 C	5.8825	50/50	5.8825
926202	AC1-098 E	3.5045	50/50	3.5045
926211	AC1-099 C	1.9713	50/50	1.9713
926212	AC1-099 E	1.1577	50/50	1.1577
927024	AC1-189 C	9.1234	50/50	9.1234
927025	AC1-189 E	4.5446	50/50	4.5446
927145	AC1-208 C	8.7881	50/50	8.7881
927146	AC1-208 E	3.8864	50/50	3.8864
932631	AC2-084 C	8.3857	50/50	8.3857
932632	AC2-084 E	4.1303	50/50	4.1303
933991	AD1-023 C	9.2587	50/50	9.2587
933992	AD1-023 E	5.0405	50/50	5.0405
934331	AD1-057 C O1	18.0112	50/50	18.0112
934332	AD1-057 E O1	9.6079	50/50	9.6079
934521	AD1-076 C	29.3748	Adder	34.56
934522	AD1-076 E	14.9576	Adder	17.6
936401	AD2-051 C O1	8.2336	50/50	8.2336
936402	AD2-051 E O1	3.5354	50/50	3.5354
938221	AE1-035 C	0.3200	50/50	0.3200
938222	AE1-035 E	0.9990	50/50	0.9990
940491	AE2-034 C	3.1570	Adder	3.71
940492	AE2-034 E	1.3530	Adder	1.59
940542	AE2-040 BAT	2.8696	50/50	2.8696
940571	AE2-044 C	4.6810	50/50	4.6810
940572	AE2-044 E	2.0062	50/50	2.0062
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1531	50/50	0.1531
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5226	50/50	0.5226
943171	AE2-346 C	1.2036	50/50	1.2036
943172	AE2-346 E	0.5158	50/50	0.5158
944141	AF1-082	3.0092	50/50	3.0092
945711	AF1-236 C O1	34.5611	Adder	40.66
945712	AF1-236 E O1	21.3470	Adder	25.11

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946012	AF1-266 BAT	15.1801	50/50	15.1801
957521	AF2-046 C	12.8113	50/50	12.8113
957522	AF2-046 E	6.4442	50/50	6.4442
957531	AF2-047 C	7.5015	Adder	8.83
957532	AF2-047 E	3.7733	Adder	4.44
957861	AF2-080 C	8.2862	50/50	8.2862
957862	AF2-080 E	3.6733	50/50	3.6733
959511	AF2-242 C	5.7978	50/50	5.7978
959512	AF2-242 E	4.5094	50/50	4.5094
961091	AF2-400 C	0.1755	Adder	0.21
961092	AF2-400 E	0.2879	Adder	0.34
961671	AG1-007 C	1.5237	50/50	1.5237
961672	AG1-007 E	0.8509	50/50	0.8509
961681	AG1-008 C	12.8370	50/50	12.8370
961682	AG1-008 E	6.4185	50/50	6.4185
961931	AG1-036 C	1.1039	50/50	1.1039
961932	AG1-036 E	0.7360	50/50	0.7360
961941	AG1-037 C	0.4298	50/50	0.4298
961942	AG1-037 E	0.2866	50/50	0.2866
962331	AG1-082 C	1.7194	50/50	1.7194
962332	AG1-082 E	1.1462	50/50	1.1462
962341	AG1-083 C	1.7194	50/50	1.7194
962342	AG1-083 E	1.1462	50/50	1.1462
962351	AG1-084 C	1.5679	50/50	1.5679
962352	AG1-084 E	1.0452	50/50	1.0452
962361	AG1-085 C	1.5679	50/50	1.5679
962362	AG1-085 E	1.0452	50/50	1.0452
962571	AG1-106 C	12.7645	50/50	12.7645
962572	AG1-106 E	5.7885	50/50	5.7885
963312	AG1-180 BAT	1.5599	Merchant Transmission	1.5599
964491	AG1-312 C O1	16.4662	50/50	16.4662
964492	AG1-312 E O1	4.1166	50/50	4.1166
964501	AG1-313 C O2	4.3144	50/50	4.3144
964502	AG1-313 E O2	2.8763	50/50	2.8763
964801	AG1-343 C	4.0533	50/50	4.0533
964802	AG1-343 E	3.1848	50/50	3.1848
965291	AG1-394 C	0.6159	Adder	1.37
965292	AG1-394 E	0.4106	Adder	0.91
965631	AG1-431	10.6048	Adder	23.54
965691	AG1-437 C O1	7.6920	50/50	7.6920
965692	AG1-437 E O1	5.1280	50/50	5.1280
965701	AG1-438 C O1	7.6920	50/50	7.6920
965702	AG1-438 E O1	5.1280	50/50	5.1280
965711	AG1-439 C O1	27.9030	50/50	27.9030
965712	AG1-439 E O1	18.6020	50/50	18.6020
965741	AG1-442 O1	4.4870	50/50	4.4870
965751	AG1-443 O1	4.4870	50/50	4.4870
965761	AG1-444 O1	14.8816	50/50	14.8816
966751	AG1-546 C	4.6133	Adder	10.24
966752	AG1-546 E	2.4753	Adder	5.49
966801	AG1-551 C	1.8735	50/50	1.8735
966802	AG1-551 E	0.8029	50/50	0.8029

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966811	AG1-552 C	2.0307	50/50	2.0307
966812	AG1-552 E	0.8703	50/50	0.8703
966931	AG1-431A	7.9675	Adder	17.69
WEC	WEC	0.1386	Confirmed LTF	0.1386
LGEE	LGEE	0.2840	Confirmed LTF	0.2840
CPLE	CPLE	1.9410	Confirmed LTF	1.9410
CBM-W2	CBM-W2	6.4512	Confirmed LTF	6.4512
NY	NY	0.2278	Confirmed LTF	0.2278
TVA	TVA	1.2362	Confirmed LTF	1.2362
O-066	O-066	3.1631	Confirmed LTF	3.1631
SIGE	SIGE	0.1008	Confirmed LTF	0.1008
CBM-S2	CBM-S2	20.5459	Confirmed LTF	20.5459
CBM-S1	CBM-S1	0.3059	Confirmed LTF	0.3059
G-007	G-007	0.4967	Confirmed LTF	0.4967
MEC	MEC	0.8533	Confirmed LTF	0.8533
LAGN	LAGN	1.5435	Confirmed LTF	1.5435
CBM-W1	CBM-W1	5.7622	Confirmed LTF	5.7622

13.5.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173863879	313737	3COPELD DP	DVP	961850	AG1-027 TAP	DVP	1	DVP_P4-2: 2202	breaker	349.0	113.38	113.93	DC	4.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	26.7645	50/50	26.7645
314541	3WATKINS	2.8546	50/50	2.8546
314589	3MURPHYS	0.2207	50/50	0.2207
315115	1S HAMPT1	5.9158	50/50	5.9158
315607	3AA1-063SOLA	4.7128	50/50	4.7128
315608	3AA2-088SOLA	3.6228	50/50	3.6228
316103	AB2-015 C	36.7470	50/50	36.7470
316104	AB2-015 E	30.1325	50/50	30.1325
316140	AB2-099 C (Suspended)	0.6183	50/50	0.6183
316141	AB2-099 E (Suspended)	0.2650	50/50	0.2650
900672	V4-068 E	0.7666	50/50	0.7666
918492	AA1-063AE OP	14.0849	50/50	14.0849
919692	AA2-053 E OP	1.7649	Adder	2.08
920042	AA2-088 E OP	37.4654	50/50	37.4654
938771	AE1-103 C	16.7647	50/50	16.7647
938772	AE1-103 E	23.1513	50/50	23.1513
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2745	Adder	0.32
943171	AE2-346 C	1.4839	50/50	1.4839
943172	AE2-346 E	0.6359	50/50	0.6359
957521	AF2-046 C	38.4230	50/50	38.4230
957522	AF2-046 E	19.3270	50/50	19.3270
961091	AF2-400 C	1.9843	50/50	1.9843
961092	AF2-400 E	3.2558	50/50	3.2558
961681	AG1-008 C	38.5000	50/50	38.5000
961682	AG1-008 E	19.2500	50/50	19.2500
961853	AG1-028 BAT	12.3516	50/50	12.3516
961931	AG1-036 C	2.2217	50/50	2.2217
961932	AG1-036 E	1.4811	50/50	1.4811
961941	AG1-037 C	0.5300	50/50	0.5300
961942	AG1-037 E	0.3533	50/50	0.3533
962331	AG1-082 C	2.1198	50/50	2.1198
962332	AG1-082 E	1.4132	50/50	1.4132
962341	AG1-083 C	2.1198	50/50	2.1198
962342	AG1-083 E	1.4132	50/50	1.4132
962351	AG1-084 C	0.4365	Adder	0.97
962352	AG1-084 E	0.2910	Adder	0.65
962361	AG1-085 C	0.4365	Adder	0.97
962362	AG1-085 E	0.2910	Adder	0.65
964501	AG1-313 C O2	1.1474	Adder	2.55
964502	AG1-313 E O2	0.7649	Adder	1.7
964801	AG1-343 C	19.6154	50/50	19.6154

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964802	AG1-343 E	15.4121	50/50	15.4121
965291	AG1-394 C	7.0424	50/50	7.0424
965292	AG1-394 E	4.6950	50/50	4.6950
WEC	WEC	0.0170	Confirmed LTF	0.0170
LGEE	LGEE	0.0352	Confirmed LTF	0.0352
CPL	CPL	0.3317	Confirmed LTF	0.3317
CBM-W2	CBM-W2	0.9408	Confirmed LTF	0.9408
NY	NY	0.0575	Confirmed LTF	0.0575
TVA	TVA	0.1890	Confirmed LTF	0.1890
O-066	O-066	0.7740	Confirmed LTF	0.7740
SIGE	SIGE	0.0187	Confirmed LTF	0.0187
CBM-S2	CBM-S2	3.4556	Confirmed LTF	3.4556
CBM-S1	CBM-S1	0.0460	Confirmed LTF	0.0460
G-007	G-007	0.1218	Confirmed LTF	0.1218
MEC	MEC	0.1144	Confirmed LTF	0.1144
LAGN	LAGN	0.2363	Confirmed LTF	0.2363
CBM-W1	CBM-W1	0.6870	Confirmed LTF	0.6870

13.5.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174674074	313854	3CONSLDL	DVP	314554	3BTLEBRO	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	single	165.44	104.38	106.43	DC	3.4

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.8222	80/20	3.8222
313719	3CHESTNUT	4.4841	80/20	4.4841
314572	3EMPORIA	0.1553	80/20	0.1553
314582	3KELFORD	0.4206	80/20	0.4206
314589	3MURPHYS	0.0452	80/20	0.0452
314623	3WITAKRS	0.9870	80/20	0.9870
315115	1S HAMPT1	0.5698	80/20	0.5698
315126	1ROARAP2	1.2111	80/20	1.2111
315128	1ROARAP4	1.1557	80/20	1.1557
315158	1KERR 1	0.1289	80/20	0.1289
315159	1KERR 2	0.3609	80/20	0.3609
315160	1KERR 3	0.3609	80/20	0.3609
315161	1KERR 4	0.3609	80/20	0.3609
315162	1KERR 5	0.3609	80/20	0.3609
315163	1KERR 6	0.3609	80/20	0.3609
315164	1KERR 7	0.3609	80/20	0.3609
315606	3AA2-053SOLA	1.2076	80/20	1.2076
315607	3AA1-063SOLA	1.0353	80/20	1.0353
315608	3AA2-088SOLA	0.5334	80/20	0.5334
316087	AB2-174 C	0.5482	80/20	0.5482
316103	AB2-015 C	3.1045	80/20	3.1045
316129	AC1-054 C	4.3588	80/20	4.3588
316140	AB2-099 C (Suspended)	0.2883	80/20	0.2883
920591	AA2-165 C	0.6020	80/20	0.6020
923991	AB2-040 C O1	4.1628	80/20	4.1628
925591	AC1-034 C	-4.6309	Adder	-5.45
926201	AC1-098 C	14.9870	80/20	14.9870
926211	AC1-099 C	5.0222	80/20	5.0222
927145	AC1-208 C	24.6763	80/20	24.6763
932631	AC2-084 C	21.3644	80/20	21.3644
936361	AD2-046 C O1	2.8063	80/20	2.8063
939181	AE1-148 C	2.7292	80/20	2.7292
940661	AE2-053 O1	1.0108	80/20	1.0108
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0823	80/20	0.0823
943171	AE2-346 C	0.6919	80/20	0.6919
957521	AF2-046 C	8.7365	80/20	8.7365
961091	AF2-400 C	0.1676	80/20	0.1676
961681	AG1-008 C	8.7540	80/20	8.7540
961931	AG1-036 C	0.6868	80/20	0.6868
961941	AG1-037 C	0.2471	80/20	0.2471
962331	AG1-082 C	0.9884	80/20	0.9884

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962341	AG1-083 C	0.9884	80/20	0.9884
962351	AG1-084 C	0.8428	80/20	0.8428
962361	AG1-085 C	0.8428	80/20	0.8428
964501	AG1-313 C O2	3.3959	80/20	3.3959
964801	AG1-343 C	3.2161	80/20	3.2161
965291	AG1-394 C	1.1106	80/20	1.1106
965721	AG1-440 C	3.1667	80/20	3.1667
965731	AG1-441 C	3.1667	80/20	3.1667
965771	AG1-445	1.8296	80/20	1.8296
965781	AG1-446	1.8296	80/20	1.8296
966751	AG1-546 C	10.1242	80/20	10.1242
966811	AG1-552 C	1.9229	80/20	1.9229
G-007A	G-007A	0.1439	Confirmed LTF	0.1439
VFT	VFT	0.3806	Confirmed LTF	0.3806
CALDERWOOD	CALDERWOOD	0.2624	Confirmed LTF	0.2624
PRAIRIE	PRAIRIE	0.9066	Confirmed LTF	0.9066
CHEOAH	CHEOAH	0.2693	Confirmed LTF	0.2693
CBM-N	CBM-N	0.0684	Confirmed LTF	0.0684
COTTONWOOD	COTTONWOOD	0.9786	Confirmed LTF	0.9786
HAMLET	HAMLET	0.5937	Confirmed LTF	0.5937
GIBSON	GIBSON	0.1594	Confirmed LTF	0.1594
BLUEG	BLUEG	0.4896	Confirmed LTF	0.4896
TRIMBLE	TRIMBLE	0.1553	Confirmed LTF	0.1553
CATAWBA	CATAWBA	0.2831	Confirmed LTF	0.2831

13.5.4 Index 4

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174254350	314299	6HARROWG	DVP	314263	6TYLER1	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	170.12	171.26	DC	6.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	8.1766	50/50	8.1766
313719	3CHESTNUT	0.7736	50/50	0.7736
314331	6POE	7.0021	50/50	7.0021
314435	6SAPONY	0.9033	50/50	0.9033
314539	3UNCAMP	2.7703	Adder	3.26
314541	3WATKINS	0.3383	Adder	0.4
314572	3EMPORIA	0.5739	50/50	0.5739
314582	3KELFORD	0.2317	50/50	0.2317
314589	3MURPHYS	0.0570	50/50	0.0570
314623	3WITAKRS	0.1376	50/50	0.1376
314704	3LAWRENC	0.3366	50/50	0.3366
315115	1S HAMPT1	0.8414	50/50	0.8414
315126	1ROARAP2	1.2213	50/50	1.2213
315128	1ROARAP4	1.1655	50/50	1.1655
315131	1EDGE CMA (Deactivation : 22/04/2019)	4.8570	Adder	5.71
315132	1EDGE CMB (Deactivation : 22/04/2019)	4.8570	Adder	5.71
315136	1ROSEMG1	2.1541	50/50	2.1541
315137	1ROSEMS1	1.3357	50/50	1.3357
315138	1ROSEMG2	1.0095	50/50	1.0095
315139	1GASTONA	3.2852	50/50	3.2852
315141	1GASTONB	3.2852	50/50	3.2852
315606	3AA2-053SOLA	1.2534	50/50	1.2534
315607	3AA1-063SOLA	1.1137	50/50	1.1137
315608	3AA2-088SOLA	0.6785	50/50	0.6785
316083	AB2-161 C	5.1370	50/50	5.1370
316084	AB2-161 E	8.3815	50/50	8.3815
316087	AB2-174 C	1.4069	50/50	1.4069
316088	AB2-174 E	8.0682	50/50	8.0682
316096	AB2-100 C1	1.5598	50/50	1.5598
316097	AB2-100 E1	4.8696	50/50	4.8696
316098	AB2-100 C2	1.5598	50/50	1.5598
316099	AB2-100 E2	4.8696	50/50	4.8696
316103	AB2-015 C	4.1157	Adder	4.84
316104	AB2-015 E	3.3749	Adder	3.97
316129	AC1-054 C	5.2595	50/50	5.2595
316140	AB2-099 C (Suspended)	0.3706	50/50	0.3706
316141	AB2-099 E (Suspended)	0.1588	50/50	0.1588
900672	V4-068 E	0.1979	50/50	0.1979
917332	Z2-043 E	0.6912	50/50	0.6912
917342	Z2-044 E	0.3738	50/50	0.3738

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
917512	Z2-088 E OP1	3.8285	Adder	4.5
918492	AA1-063AE OP	3.3286	50/50	3.3286
918512	AA1-065 E OP	1.9223	Adder	2.26
918532	AA1-067 E	0.3175	Adder	0.37
919692	AA2-053 E OP	3.2618	50/50	3.2618
919702	AA2-057 E OP	2.3145	50/50	2.3145
920042	AA2-088 E OP	7.0165	50/50	7.0165
920591	AA2-165 C	0.1038	50/50	0.1038
920592	AA2-165 E	0.3181	50/50	0.3181
922923	AB1-081 E OP	1.9980	Adder	2.35
923262	AB1-132 C OP (Suspended)	15.9012	50/50	15.9012
923263	AB1-132 E OP (Suspended)	6.8148	50/50	6.8148
923573	AB1-173 E OP	1.2751	50/50	1.2751
923852	AB2-025 E	2.5723	50/50	2.5723
923991	AB2-040 C O1	8.9052	50/50	8.9052
923992	AB2-040 E O1	7.2860	50/50	7.2860
924022	AB2-043 E O1	1.1824	Adder	1.39
924152	AB2-059 E OP	2.8305	Adder	3.33
924162	AB2-060 E OP	1.7632	Adder	2.07
924301	AB2-077 C O1 (Suspended)	0.8309	Adder	0.98
924302	AB2-077 E O1 (Suspended)	0.5539	Adder	0.65
924311	AB2-078 C O1 (Suspended)	0.8309	Adder	0.98
924312	AB2-078 E O1 (Suspended)	0.5539	Adder	0.65
924321	AB2-079 C O1 (Suspended)	0.8309	Adder	0.98
924322	AB2-079 E O1 (Suspended)	0.5539	Adder	0.65
925122	AB2-169 E	2.2878	Adder	2.69
925591	AC1-034 C	3.5589	Adder	4.19
925592	AC1-034 E	2.6848	Adder	3.16
925785	AC1-054 E	2.4229	50/50	2.4229
926070	AC1-086 C	23.4164	50/50	23.4164
926071	AC1-086 E	10.6576	50/50	10.6576
926201	AC1-098 C	4.3270	50/50	4.3270
926202	AC1-098 E	2.5778	50/50	2.5778
926211	AC1-099 C	1.4500	50/50	1.4500
926212	AC1-099 E	0.8516	50/50	0.8516
927024	AC1-189 C	4.0066	Adder	4.71
927025	AC1-189 E	1.9958	Adder	2.35
927145	AC1-208 C	6.7544	50/50	6.7544
927146	AC1-208 E	2.9870	50/50	2.9870
932581	AC2-078 C O1	6.3117	50/50	6.3117
932582	AC2-078 E O1	10.2981	50/50	10.2981
932591	AC2-079 C O1	5.7113	50/50	5.7113
932592	AC2-079 E O1	9.3184	50/50	9.3184
932631	AC2-084 C	6.1683	50/50	6.1683
932632	AC2-084 E	3.0381	50/50	3.0381

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933991	AD1-023 C	5.0927	Adder	5.99
933992	AD1-023 E	2.7725	Adder	3.26
934331	AD1-057 C O1	8.4901	50/50	8.4901
934332	AD1-057 E O1	4.5290	50/50	4.5290
934575	AD1-082 C	11.7070	50/50	11.7070
934576	AD1-082 E	6.6781	50/50	6.6781
936361	AD2-046 C O1	4.1242	Adder	4.85
936362	AD2-046 E O1	1.8965	Adder	2.23
936401	AD2-051 C O1	4.3110	Adder	5.07
936402	AD2-051 E O1	1.8511	Adder	2.18
936485	AD2-063 C	5.7796	Adder	6.8
936486	AD2-063 E	3.8531	Adder	4.53
936661	AD2-085 C	2.5365	50/50	2.5365
936662	AD2-085 E	4.1384	50/50	4.1384
938222	AE1-035 E	0.5286	Adder	0.62
938634	AE1-085 C	14.1165	50/50	14.1165
938635	AE1-085 E	7.0583	50/50	7.0583
938771	AE1-103 C	1.5872	Adder	1.87
938772	AE1-103 E	2.1919	Adder	2.58
939181	AE1-148 C	4.0521	Adder	4.77
939182	AE1-148 E	2.7014	Adder	3.18
939195	AE1-149 C	18.5958	50/50	18.5958
939196	AE1-149 E	12.3972	50/50	12.3972
940061	AE2-000BC O1	15.5706	50/50	15.5706
940062	AE2-000BE O1	10.3804	50/50	10.3804
940481	AE2-033 C	35.5252	50/50	35.5252
940482	AE2-033 E	23.9496	50/50	23.9496
940541	AE2-040	6.5136	50/50	6.5136
940571	AE2-044 C	2.3310	Adder	2.74
940572	AE2-044 E	0.9990	Adder	1.18
940651	AE2-052	6.1986	50/50	6.1986
940661	AE2-053 O1	1.5008	Adder	1.77
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1066	50/50	0.1066
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.3639	50/50	0.3639
942161	AE2-228 C	-1.1943	Adder	-1.41
942341	AE2-247 C	1.1069	50/50	1.1069
942342	AE2-247 E	1.5285	50/50	1.5285
942451	AE2-258	0.9865	Adder	1.16
942471	AE2-260 C O1	25.5014	50/50	25.5014
942472	AE2-260 E O1	36.1706	50/50	36.1706
943171	AE2-346 C	0.8896	50/50	0.8896
943172	AE2-346 E	0.3812	50/50	0.3812
943461	AF1-017 C	1.0015	50/50	1.0015
943462	AF1-017 E	1.6339	50/50	1.6339
943911	AF1-059	15.1836	50/50	15.1836
944141	AF1-082	1.4985	Adder	1.76
946011	AF1-266	29.7374	50/50	29.7374
946261	AF1-291 C	-1.5795	Adder	-1.86
946281	AF1-292 C	2.1397	50/50	2.1397
946282	AF1-292 E	1.4425	50/50	1.4425
957521	AF2-046 C	11.0479	50/50	11.0479

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957522	AF2-046 E	5.5571	50/50	5.5571
957861	AF2-080 C	3.6389	Adder	4.28
957862	AF2-080 E	1.6131	Adder	1.9
958142	AF2-108 BAT	0.6460	Merchant Transmission	0.6460
959511	AF2-242 C	3.0221	Adder	3.56
959512	AF2-242 E	2.3505	Adder	2.77
959651	AF2-256 C	-0.2986	Adder	-0.35
960081	AF2-299 C	3.6063	50/50	3.6063
960082	AF2-299 E	2.4042	50/50	2.4042
961091	AF2-400 C	0.2222	Adder	0.26
961092	AF2-400 E	0.3647	Adder	0.43
961671	AG1-007 C	0.3219	Adder	0.71
961672	AG1-007 E	0.1798	Adder	0.4
961681	AG1-008 C	11.0700	50/50	11.0700
961682	AG1-008 E	5.5350	50/50	5.5350
961851	AG1-027 C	3.3326	Adder	7.4
961852	AG1-027 E	1.8423	Adder	4.09
961931	AG1-036 C	0.8760	50/50	0.8760
961932	AG1-036 E	0.5840	50/50	0.5840
961941	AG1-037 C	0.3177	50/50	0.3177
961942	AG1-037 E	0.2118	50/50	0.2118
962271	AG1-075 C O2	37.2017	50/50	37.2017
962272	AG1-075 E O2	22.6723	50/50	22.6723
962331	AG1-082 C	1.2708	50/50	1.2708
962332	AG1-082 E	0.8472	50/50	0.8472
962341	AG1-083 C	1.2708	50/50	1.2708
962342	AG1-083 E	0.8472	50/50	0.8472
962351	AG1-084 C	1.0916	50/50	1.0916
962352	AG1-084 E	0.7277	50/50	0.7277
962361	AG1-085 C	1.0916	50/50	1.0916
962362	AG1-085 E	0.7277	50/50	0.7277
962491	AG1-098 C O2	2.6635	Adder	5.91
962492	AG1-098 E O2	1.7756	Adder	3.94
962571	AG1-106 C	6.5119	50/50	6.5119
962572	AG1-106 E	2.9531	50/50	2.9531
963301	AG1-179 C	6.0793	50/50	6.0793
963311	AG1-180	2.9620	50/50	2.9620
964491	AG1-312 C O1	4.6379	Adder	10.3
964492	AG1-312 E O1	1.1595	Adder	2.57
964501	AG1-313 C O2	3.6840	50/50	3.6840
964502	AG1-313 E O2	2.4560	50/50	2.4560
964801	AG1-343 C	4.0159	50/50	4.0159
964802	AG1-343 E	3.1553	50/50	3.1553
964931	AG1-357 C O2	4.0961	Adder	9.09
964932	AG1-357 E O2	2.7308	Adder	6.06
965291	AG1-394 C	1.3842	50/50	1.3842
965292	AG1-394 E	0.9228	50/50	0.9228
965451	AG1-413 C O2	6.1307	50/50	6.1307
965452	AG1-413 E O2	4.0872	50/50	4.0872
965591	AG1-427 C	2.4724	Adder	5.49
965592	AG1-427 E	1.6518	Adder	3.67
965601	AG1-428 C O2	5.0751	50/50	5.0751

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965602	AG1-428 E O2	3.3774	50/50	3.3774
965691	AG1-437 C O1	2.2143	Adder	4.92
965692	AG1-437 E O1	1.4762	Adder	3.28
965701	AG1-438 C O1	2.2143	Adder	4.92
965702	AG1-438 E O1	1.4762	Adder	3.28
965711	AG1-439 C O1	6.1365	Adder	13.62
965712	AG1-439 E O1	4.0910	Adder	9.08
965721	AG1-440 C	4.5077	50/50	4.5077
965722	AG1-440 E	3.0051	50/50	3.0051
965731	AG1-441 C	4.5077	50/50	4.5077
965732	AG1-441 E	3.0051	50/50	3.0051
965741	AG1-442 O1	1.2917	Adder	2.87
965751	AG1-443 O1	1.2917	Adder	2.87
965761	AG1-444 O1	3.2728	Adder	7.26
965771	AG1-445	2.6044	50/50	2.6044
965781	AG1-446	2.6044	50/50	2.6044
966621	AG1-532 C	1.9474	50/50	1.9474
966622	AG1-532 E	1.2983	50/50	1.2983
966731	AG1-544 C	11.0250	50/50	11.0250
966732	AG1-544 E	5.9148	50/50	5.9148
966741	AG1-545 C	3.6422	50/50	3.6422
966742	AG1-545 E	1.9526	50/50	1.9526
966751	AG1-546 C	11.9048	50/50	11.9048
966752	AG1-546 E	6.3877	50/50	6.3877
966801	AG1-551 C	0.5102	Adder	1.13
966802	AG1-551 E	0.2186	Adder	0.49
966811	AG1-552 C	1.9391	50/50	1.9391
966812	AG1-552 E	0.8311	50/50	0.8311
WEC	WEC	0.2082	Confirmed LTF	0.2082
LGEE	LGEE	0.4272	Confirmed LTF	0.4272
CPL	CPL	2.3997	Confirmed LTF	2.3997
CBM-W2	CBM-W2	9.1840	Confirmed LTF	9.1840
NY	NY	0.2826	Confirmed LTF	0.2826
TVA	TVA	1.7346	Confirmed LTF	1.7346
O-066	O-066	3.9842	Confirmed LTF	3.9842
SIGE	SIGE	0.1386	Confirmed LTF	0.1386
CBM-S2	CBM-S2	26.9561	Confirmed LTF	26.9561
CBM-S1	CBM-S1	0.4324	Confirmed LTF	0.4324
G-007	G-007	0.6268	Confirmed LTF	0.6268
MEC	MEC	1.2505	Confirmed LTF	1.2505
LAGN	LAGN	2.1595	Confirmed LTF	2.1595
AA2-074	AA2-074	1.5849	LTF	1.5849
CBM-W1	CBM-W1	8.7064	Confirmed LTF	8.7064

13.5.5 Index 5

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174254349	314331	6POE	DVP	314299	6HARROWG	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	170.14	171.28	DC	6.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	8.1766	50/50	8.1766
313719	3CHESTNUT	0.7736	50/50	0.7736
314331	6POE	7.0021	50/50	7.0021
314435	6SAPONY	0.9033	50/50	0.9033
314539	3UNCAMP	2.7703	Adder	3.26
314541	3WATKINS	0.3383	Adder	0.4
314572	3EMPORIA	0.5739	50/50	0.5739
314582	3KELFORD	0.2317	50/50	0.2317
314589	3MURPHYS	0.0570	50/50	0.0570
314623	3WITAKRS	0.1376	50/50	0.1376
314704	3LAWRENC	0.3366	50/50	0.3366
315115	1S HAMPT1	0.8414	50/50	0.8414
315126	1ROARAP2	1.2213	50/50	1.2213
315128	1ROARAP4	1.1655	50/50	1.1655
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.8570	Adder	5.71
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.8570	Adder	5.71
315136	1ROSEMG1	2.1541	50/50	2.1541
315137	1ROSEMS1	1.3357	50/50	1.3357
315138	1ROSEMG2	1.0095	50/50	1.0095
315139	1GASTONA	3.2852	50/50	3.2852
315141	1GASTONB	3.2852	50/50	3.2852
315606	3AA2-053SOLA	1.2534	50/50	1.2534
315607	3AA1-063SOLA	1.1137	50/50	1.1137
315608	3AA2-088SOLA	0.6785	50/50	0.6785
316083	AB2-161 C	5.1370	50/50	5.1370
316084	AB2-161 E	8.3815	50/50	8.3815
316087	AB2-174 C	1.4069	50/50	1.4069
316088	AB2-174 E	8.0682	50/50	8.0682
316096	AB2-100 C1	1.5598	50/50	1.5598
316097	AB2-100 E1	4.8696	50/50	4.8696
316098	AB2-100 C2	1.5598	50/50	1.5598
316099	AB2-100 E2	4.8696	50/50	4.8696
316103	AB2-015 C	4.1157	Adder	4.84
316104	AB2-015 E	3.3749	Adder	3.97
316129	AC1-054 C	5.2595	50/50	5.2595
316140	AB2-099 C (Suspended)	0.3706	50/50	0.3706
316141	AB2-099 E (Suspended)	0.1588	50/50	0.1588
900672	V4-068 E	0.1979	50/50	0.1979
917332	Z2-043 E	0.6912	50/50	0.6912
917342	Z2-044 E	0.3738	50/50	0.3738

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
917512	Z2-088 E OP1	3.8285	Adder	4.5
918492	AA1-063AE OP	3.3286	50/50	3.3286
918512	AA1-065 E OP	1.9223	Adder	2.26
918532	AA1-067 E	0.3175	Adder	0.37
919692	AA2-053 E OP	3.2618	50/50	3.2618
919702	AA2-057 E OP	2.3145	50/50	2.3145
920042	AA2-088 E OP	7.0165	50/50	7.0165
920591	AA2-165 C	0.1038	50/50	0.1038
920592	AA2-165 E	0.3181	50/50	0.3181
922923	AB1-081 E OP	1.9980	Adder	2.35
923262	AB1-132 C OP (Suspended)	15.9012	50/50	15.9012
923263	AB1-132 E OP (Suspended)	6.8148	50/50	6.8148
923573	AB1-173 E OP	1.2751	50/50	1.2751
923852	AB2-025 E	2.5723	50/50	2.5723
923991	AB2-040 C O1	8.9052	50/50	8.9052
923992	AB2-040 E O1	7.2860	50/50	7.2860
924022	AB2-043 E O1	1.1824	Adder	1.39
924152	AB2-059 E OP	2.8305	Adder	3.33
924162	AB2-060 E OP	1.7632	Adder	2.07
924301	AB2-077 C O1 (Suspended)	0.8309	Adder	0.98
924302	AB2-077 E O1 (Suspended)	0.5539	Adder	0.65
924311	AB2-078 C O1 (Suspended)	0.8309	Adder	0.98
924312	AB2-078 E O1 (Suspended)	0.5539	Adder	0.65
924321	AB2-079 C O1 (Suspended)	0.8309	Adder	0.98
924322	AB2-079 E O1 (Suspended)	0.5539	Adder	0.65
925122	AB2-169 E	2.2878	Adder	2.69
925591	AC1-034 C	3.5589	Adder	4.19
925592	AC1-034 E	2.6848	Adder	3.16
925785	AC1-054 E	2.4229	50/50	2.4229
926070	AC1-086 C	23.4164	50/50	23.4164
926071	AC1-086 E	10.6576	50/50	10.6576
926201	AC1-098 C	4.3270	50/50	4.3270
926202	AC1-098 E	2.5778	50/50	2.5778
926211	AC1-099 C	1.4500	50/50	1.4500
926212	AC1-099 E	0.8516	50/50	0.8516
927024	AC1-189 C	4.0066	Adder	4.71
927025	AC1-189 E	1.9958	Adder	2.35
927145	AC1-208 C	6.7544	50/50	6.7544
927146	AC1-208 E	2.9870	50/50	2.9870
932581	AC2-078 C O1	6.3117	50/50	6.3117
932582	AC2-078 E O1	10.2981	50/50	10.2981
932591	AC2-079 C O1	5.7113	50/50	5.7113
932592	AC2-079 E O1	9.3184	50/50	9.3184
932631	AC2-084 C	6.1683	50/50	6.1683
932632	AC2-084 E	3.0381	50/50	3.0381

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933991	AD1-023 C	5.0927	Adder	5.99
933992	AD1-023 E	2.7725	Adder	3.26
934331	AD1-057 C O1	8.4901	50/50	8.4901
934332	AD1-057 E O1	4.5290	50/50	4.5290
934575	AD1-082 C	11.7070	50/50	11.7070
934576	AD1-082 E	6.6781	50/50	6.6781
936361	AD2-046 C O1	4.1242	Adder	4.85
936362	AD2-046 E O1	1.8965	Adder	2.23
936401	AD2-051 C O1	4.3110	Adder	5.07
936402	AD2-051 E O1	1.8511	Adder	2.18
936485	AD2-063 C	5.7796	Adder	6.8
936486	AD2-063 E	3.8531	Adder	4.53
936661	AD2-085 C	2.5365	50/50	2.5365
936662	AD2-085 E	4.1384	50/50	4.1384
938222	AE1-035 E	0.5286	Adder	0.62
938634	AE1-085 C	14.1165	50/50	14.1165
938635	AE1-085 E	7.0583	50/50	7.0583
938771	AE1-103 C	1.5872	Adder	1.87
938772	AE1-103 E	2.1919	Adder	2.58
939181	AE1-148 C	4.0521	Adder	4.77
939182	AE1-148 E	2.7014	Adder	3.18
939195	AE1-149 C	18.5958	50/50	18.5958
939196	AE1-149 E	12.3972	50/50	12.3972
940061	AE2-000BC O1	15.5706	50/50	15.5706
940062	AE2-000BE O1	10.3804	50/50	10.3804
940481	AE2-033 C	35.5252	50/50	35.5252
940482	AE2-033 E	23.9496	50/50	23.9496
940541	AE2-040	6.5136	50/50	6.5136
940571	AE2-044 C	2.3310	Adder	2.74
940572	AE2-044 E	0.9990	Adder	1.18
940651	AE2-052	6.1986	50/50	6.1986
940661	AE2-053 O1	1.5008	Adder	1.77
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1066	50/50	0.1066
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.3639	50/50	0.3639
942161	AE2-228 C	-1.1943	Adder	-1.41
942341	AE2-247 C	1.1069	50/50	1.1069
942342	AE2-247 E	1.5285	50/50	1.5285
942451	AE2-258	0.9865	Adder	1.16
942471	AE2-260 C O1	25.5014	50/50	25.5014
942472	AE2-260 E O1	36.1706	50/50	36.1706
943171	AE2-346 C	0.8896	50/50	0.8896
943172	AE2-346 E	0.3812	50/50	0.3812
943461	AF1-017 C	1.0015	50/50	1.0015
943462	AF1-017 E	1.6339	50/50	1.6339
943911	AF1-059	15.1836	50/50	15.1836
944141	AF1-082	1.4985	Adder	1.76
946011	AF1-266	29.7374	50/50	29.7374
946261	AF1-291 C	-1.5795	Adder	-1.86
946281	AF1-292 C	2.1397	50/50	2.1397
946282	AF1-292 E	1.4425	50/50	1.4425
957521	AF2-046 C	11.0479	50/50	11.0479

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957522	AF2-046 E	5.5571	50/50	5.5571
957861	AF2-080 C	3.6389	Adder	4.28
957862	AF2-080 E	1.6131	Adder	1.9
958142	AF2-108 BAT	0.6460	Merchant Transmission	0.6460
959511	AF2-242 C	3.0221	Adder	3.56
959512	AF2-242 E	2.3505	Adder	2.77
959651	AF2-256 C	-0.2986	Adder	-0.35
960081	AF2-299 C	3.6063	50/50	3.6063
960082	AF2-299 E	2.4042	50/50	2.4042
961091	AF2-400 C	0.2222	Adder	0.26
961092	AF2-400 E	0.3647	Adder	0.43
961671	AG1-007 C	0.3219	Adder	0.71
961672	AG1-007 E	0.1798	Adder	0.4
961681	AG1-008 C	11.0700	50/50	11.0700
961682	AG1-008 E	5.5350	50/50	5.5350
961851	AG1-027 C	3.3326	Adder	7.4
961852	AG1-027 E	1.8423	Adder	4.09
961931	AG1-036 C	0.8760	50/50	0.8760
961932	AG1-036 E	0.5840	50/50	0.5840
961941	AG1-037 C	0.3177	50/50	0.3177
961942	AG1-037 E	0.2118	50/50	0.2118
962271	AG1-075 C O2	37.2017	50/50	37.2017
962272	AG1-075 E O2	22.6723	50/50	22.6723
962331	AG1-082 C	1.2708	50/50	1.2708
962332	AG1-082 E	0.8472	50/50	0.8472
962341	AG1-083 C	1.2708	50/50	1.2708
962342	AG1-083 E	0.8472	50/50	0.8472
962351	AG1-084 C	1.0916	50/50	1.0916
962352	AG1-084 E	0.7277	50/50	0.7277
962361	AG1-085 C	1.0916	50/50	1.0916
962362	AG1-085 E	0.7277	50/50	0.7277
962491	AG1-098 C O2	2.6635	Adder	5.91
962492	AG1-098 E O2	1.7756	Adder	3.94
962571	AG1-106 C	6.5119	50/50	6.5119
962572	AG1-106 E	2.9531	50/50	2.9531
963301	AG1-179 C	6.0793	50/50	6.0793
963311	AG1-180	2.9620	50/50	2.9620
964491	AG1-312 C O1	4.6379	Adder	10.3
964492	AG1-312 E O1	1.1595	Adder	2.57
964501	AG1-313 C O2	3.6840	50/50	3.6840
964502	AG1-313 E O2	2.4560	50/50	2.4560
964801	AG1-343 C	4.0159	50/50	4.0159
964802	AG1-343 E	3.1553	50/50	3.1553
964931	AG1-357 C O2	4.0961	Adder	9.09
964932	AG1-357 E O2	2.7308	Adder	6.06
965291	AG1-394 C	1.3842	50/50	1.3842
965292	AG1-394 E	0.9228	50/50	0.9228
965451	AG1-413 C O2	6.1307	50/50	6.1307
965452	AG1-413 E O2	4.0872	50/50	4.0872
965591	AG1-427 C	2.4724	Adder	5.49
965592	AG1-427 E	1.6518	Adder	3.67
965601	AG1-428 C O2	5.0751	50/50	5.0751

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965602	AG1-428 E O2	3.3774	50/50	3.3774
965691	AG1-437 C O1	2.2143	Adder	4.92
965692	AG1-437 E O1	1.4762	Adder	3.28
965701	AG1-438 C O1	2.2143	Adder	4.92
965702	AG1-438 E O1	1.4762	Adder	3.28
965711	AG1-439 C O1	6.1365	Adder	13.62
965712	AG1-439 E O1	4.0910	Adder	9.08
965721	AG1-440 C	4.5077	50/50	4.5077
965722	AG1-440 E	3.0051	50/50	3.0051
965731	AG1-441 C	4.5077	50/50	4.5077
965732	AG1-441 E	3.0051	50/50	3.0051
965741	AG1-442 O1	1.2917	Adder	2.87
965751	AG1-443 O1	1.2917	Adder	2.87
965761	AG1-444 O1	3.2728	Adder	7.26
965771	AG1-445	2.6044	50/50	2.6044
965781	AG1-446	2.6044	50/50	2.6044
966621	AG1-532 C	1.9474	50/50	1.9474
966622	AG1-532 E	1.2983	50/50	1.2983
966731	AG1-544 C	11.0250	50/50	11.0250
966732	AG1-544 E	5.9148	50/50	5.9148
966741	AG1-545 C	3.6422	50/50	3.6422
966742	AG1-545 E	1.9526	50/50	1.9526
966751	AG1-546 C	11.9048	50/50	11.9048
966752	AG1-546 E	6.3877	50/50	6.3877
966801	AG1-551 C	0.5102	Adder	1.13
966802	AG1-551 E	0.2186	Adder	0.49
966811	AG1-552 C	1.9391	50/50	1.9391
966812	AG1-552 E	0.8311	50/50	0.8311
WEC	WEC	0.2082	Confirmed LTF	0.2082
LGEE	LGEE	0.4272	Confirmed LTF	0.4272
CPL	CPL	2.3997	Confirmed LTF	2.3997
CBM-W2	CBM-W2	9.1840	Confirmed LTF	9.1840
NY	NY	0.2826	Confirmed LTF	0.2826
TVA	TVA	1.7346	Confirmed LTF	1.7346
O-066	O-066	3.9842	Confirmed LTF	3.9842
SIGE	SIGE	0.1386	Confirmed LTF	0.1386
CBM-S2	CBM-S2	26.9561	Confirmed LTF	26.9561
CBM-S1	CBM-S1	0.4324	Confirmed LTF	0.4324
G-007	G-007	0.6268	Confirmed LTF	0.6268
MEC	MEC	1.2505	Confirmed LTF	1.2505
LAGN	LAGN	2.1595	Confirmed LTF	2.1595
AA2-074	AA2-074	1.5849	LTF	1.5849
CBM-W1	CBM-W1	8.7064	Confirmed LTF	8.7064

13.5.6 Index 6

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173863867	314527	3HOLLAND	DVP	313737	3COPELD DP	DVP	1	DVP_P4-2: 2202	breaker	349.0	116.07	116.62	DC	4.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	26.7645	50/50	26.7645
314541	3WATKINS	2.8546	50/50	2.8546
314589	3MURPHYS	0.2207	50/50	0.2207
315115	1S HAMPT1	5.9158	50/50	5.9158
315607	3AA1-063SOLA	4.7128	50/50	4.7128
315608	3AA2-088SOLA	3.6228	50/50	3.6228
316103	AB2-015 C	36.7470	50/50	36.7470
316104	AB2-015 E	30.1325	50/50	30.1325
316140	AB2-099 C (Suspended)	0.6183	50/50	0.6183
316141	AB2-099 E (Suspended)	0.2650	50/50	0.2650
900672	V4-068 E	0.7666	50/50	0.7666
918492	AA1-063AE OP	14.0849	50/50	14.0849
919692	AA2-053 E OP	1.7649	Adder	2.08
920042	AA2-088 E OP	37.4654	50/50	37.4654
938771	AE1-103 C	16.7647	50/50	16.7647
938772	AE1-103 E	23.1513	50/50	23.1513
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2745	Adder	0.32
943171	AE2-346 C	1.4839	50/50	1.4839
943172	AE2-346 E	0.6359	50/50	0.6359
957521	AF2-046 C	38.4230	50/50	38.4230
957522	AF2-046 E	19.3270	50/50	19.3270
961091	AF2-400 C	1.9843	50/50	1.9843
961092	AF2-400 E	3.2558	50/50	3.2558
961681	AG1-008 C	38.5000	50/50	38.5000
961682	AG1-008 E	19.2500	50/50	19.2500
961853	AG1-028 BAT	12.3516	50/50	12.3516
961931	AG1-036 C	2.2217	50/50	2.2217
961932	AG1-036 E	1.4811	50/50	1.4811
961941	AG1-037 C	0.5300	50/50	0.5300
961942	AG1-037 E	0.3533	50/50	0.3533
962331	AG1-082 C	2.1198	50/50	2.1198
962332	AG1-082 E	1.4132	50/50	1.4132
962341	AG1-083 C	2.1198	50/50	2.1198
962342	AG1-083 E	1.4132	50/50	1.4132
962351	AG1-084 C	0.4365	Adder	0.97
962352	AG1-084 E	0.2910	Adder	0.65
962361	AG1-085 C	0.4365	Adder	0.97
962362	AG1-085 E	0.2910	Adder	0.65
964501	AG1-313 C O2	1.1474	Adder	2.55
964502	AG1-313 E O2	0.7649	Adder	1.7
964801	AG1-343 C	19.6154	50/50	19.6154

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964802	AG1-343 E	15.4121	50/50	15.4121
965291	AG1-394 C	7.0424	50/50	7.0424
965292	AG1-394 E	4.6950	50/50	4.6950
WEC	WEC	0.0170	Confirmed LTF	0.0170
LGEE	LGEE	0.0352	Confirmed LTF	0.0352
CPL	CPL	0.3317	Confirmed LTF	0.3317
CBM-W2	CBM-W2	0.9408	Confirmed LTF	0.9408
NY	NY	0.0575	Confirmed LTF	0.0575
TVA	TVA	0.1890	Confirmed LTF	0.1890
O-066	O-066	0.7740	Confirmed LTF	0.7740
SIGE	SIGE	0.0187	Confirmed LTF	0.0187
CBM-S2	CBM-S2	3.4556	Confirmed LTF	3.4556
CBM-S1	CBM-S1	0.0460	Confirmed LTF	0.0460
G-007	G-007	0.1218	Confirmed LTF	0.1218
MEC	MEC	0.1144	Confirmed LTF	0.1144
LAGN	LAGN	0.2363	Confirmed LTF	0.2363
CBM-W1	CBM-W1	0.6870	Confirmed LTF	0.6870

13.5.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173863882	314539	3UNCAMP	DVP	938770	AE1-103 TAP	DVP	1	DVP_P4-2: 2202	breaker	335.0	111.84	112.41	DC	4.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	26.7645	50/50	26.7645
314541	3WATKINS	2.8546	50/50	2.8546
314589	3MURPHYS	0.2207	50/50	0.2207
315115	1S HAMPT1	5.9158	50/50	5.9158
315607	3AA1-063SOLA	4.7128	50/50	4.7128
315608	3AA2-088SOLA	3.6228	50/50	3.6228
316103	AB2-015 C	36.7470	50/50	36.7470
316104	AB2-015 E	30.1325	50/50	30.1325
316140	AB2-099 C (Suspended)	0.6183	50/50	0.6183
316141	AB2-099 E (Suspended)	0.2650	50/50	0.2650
900672	V4-068 E	0.7666	50/50	0.7666
918492	AA1-063AE OP	14.0849	50/50	14.0849
919692	AA2-053 E OP	1.7649	Adder	2.08
920042	AA2-088 E OP	37.4654	50/50	37.4654
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2745	Adder	0.32
943171	AE2-346 C	1.4839	50/50	1.4839
943172	AE2-346 E	0.6359	50/50	0.6359
957521	AF2-046 C	38.4230	50/50	38.4230
957522	AF2-046 E	19.3270	50/50	19.3270
961091	AF2-400 C	1.9843	50/50	1.9843
961092	AF2-400 E	3.2558	50/50	3.2558
961681	AG1-008 C	38.5000	50/50	38.5000
961682	AG1-008 E	19.2500	50/50	19.2500
961853	AG1-028 BAT	12.3516	50/50	12.3516
961931	AG1-036 C	2.2217	50/50	2.2217
961932	AG1-036 E	1.4811	50/50	1.4811
961941	AG1-037 C	0.5300	50/50	0.5300
961942	AG1-037 E	0.3533	50/50	0.3533
962331	AG1-082 C	2.1198	50/50	2.1198
962332	AG1-082 E	1.4132	50/50	1.4132
962341	AG1-083 C	2.1198	50/50	2.1198
962342	AG1-083 E	1.4132	50/50	1.4132
962351	AG1-084 C	0.4365	Adder	0.97
962352	AG1-084 E	0.2910	Adder	0.65
962361	AG1-085 C	0.4365	Adder	0.97
962362	AG1-085 E	0.2910	Adder	0.65
964501	AG1-313 C O2	1.1474	Adder	2.55
964502	AG1-313 E O2	0.7649	Adder	1.7
964801	AG1-343 C	19.6154	50/50	19.6154
964802	AG1-343 E	15.4121	50/50	15.4121
965291	AG1-394 C	7.0424	50/50	7.0424

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965292	AG1-394 E	4.6950	50/50	4.6950
WEC	WEC	0.0170	Confirmed LTF	0.0170
LGEE	LGEE	0.0352	Confirmed LTF	0.0352
CPLE	CPLE	0.3317	Confirmed LTF	0.3317
CBM-W2	CBM-W2	0.9408	Confirmed LTF	0.9408
NY	NY	0.0575	Confirmed LTF	0.0575
TVA	TVA	0.1890	Confirmed LTF	0.1890
O-066	O-066	0.7740	Confirmed LTF	0.7740
SIGE	SIGE	0.0187	Confirmed LTF	0.0187
CBM-S2	CBM-S2	3.4556	Confirmed LTF	3.4556
CBM-S1	CBM-S1	0.0460	Confirmed LTF	0.0460
G-007	G-007	0.1218	Confirmed LTF	0.1218
MEC	MEC	0.1144	Confirmed LTF	0.1144
LAGN	LAGN	0.2363	Confirmed LTF	0.2363
CBM-W1	CBM-W1	0.6870	Confirmed LTF	0.6870

13.5.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163715614	314554	3BTLEBRO	DVP	304223	3ROCKYMT115T	CPL	1	DVP_P7-1: LN 2058-2181	tower	164.0	295.69	298.6	DC	4.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.1181	Adder	3.67
313719	3CHESTNUT	2.4261	50/50	2.4261
314541	3WATKINS	0.2172	Adder	0.26
314572	3EMPORIA	0.1704	Adder	0.2
314582	3KELFORD	0.3112	50/50	0.3112
314623	3WITAKRS	0.5240	50/50	0.5240
315126	1ROARAP2	0.8712	50/50	0.8712
315128	1ROARAP4	0.8314	50/50	0.8314
315131	1EDGECEMA (Deactivation : 22/04/2019)	12.5808	50/50	12.5808
315132	1EDGECEMB (Deactivation : 22/04/2019)	12.5808	50/50	12.5808
315136	1ROSEMG1	1.5086	50/50	1.5086
315137	1ROSEMS1	0.9355	50/50	0.9355
315138	1ROSEMG2	0.7070	50/50	0.7070
315139	1GASTONA	1.9383	50/50	1.9383
315141	1GASTONB	1.9383	50/50	1.9383
315293	1DOMTR9	2.0513	Adder	2.41
315294	1DOMTR10	2.5139	Adder	2.96
315601	1CONETOE2SOL	1.1895	50/50	1.1895
315606	3AA2-053SOLA	0.9246	50/50	0.9246
316020	AB2-059 C OP	4.4268	50/50	4.4268
316088	AB2-174 E	2.8075	Adder	3.3
316097	AB2-100 E1	1.0834	Adder	1.27
316099	AB2-100 E2	1.0834	Adder	1.27
316103	AB2-015 C	2.5912	Adder	3.05
316104	AB2-015 E	2.1248	Adder	2.5
316129	AC1-054 C	2.5555	Adder	3.01
316140	AB2-099 C (Suspended)	0.2729	Adder	0.32
316141	AB2-099 E (Suspended)	0.1170	Adder	0.14
900672	V4-068 E	0.1280	Adder	0.15
917332	Z2-043 E	0.9284	50/50	0.9284
917342	Z2-044 E	1.4235	50/50	1.4235
917512	Z2-088 E OP1	7.0561	50/50	7.0561
918492	AA1-063AE OP	2.0088	Adder	2.36
918512	AA1-065 E OP	1.4796	Adder	1.74
918532	AA1-067 E	0.2544	Adder	0.3
919692	AA2-053 E OP	2.4062	50/50	2.4062
919702	AA2-057 E OP	7.2586	50/50	7.2586
920042	AA2-088 E OP	4.1496	Adder	4.88
920591	AA2-165 C	0.3257	50/50	0.3257

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
920592	AA2-165 E	0.9976	50/50	0.9976
922922	AB1-081 C OP	3.7561	50/50	3.7561
922923	AB1-081 E OP	10.2031	50/50	10.2031
923262	AB1-132 C OP (Suspended)	9.3820	50/50	9.3820
923263	AB1-132 E OP (Suspended)	4.0208	50/50	4.0208
923573	AB1-173 E OP	0.4862	Adder	0.57
923991	AB2-040 C O1	3.3959	Adder	4.0
923992	AB2-040 E O1	2.7785	Adder	3.27
924152	AB2-059 E OP	14.4544	50/50	14.4544
925122	AB2-169 E	1.8344	Adder	2.16
925591	AC1-034 C	18.1743	50/50	18.1743
925592	AC1-034 E	13.7104	50/50	13.7104
925785	AC1-054 E	1.1772	Adder	1.38
926070	AC1-086 C	13.8161	50/50	13.8161
926071	AC1-086 E	6.2881	50/50	6.2881
926201	AC1-098 C	8.8191	50/50	8.8191
926202	AC1-098 E	5.2539	50/50	5.2539
926211	AC1-099 C	2.9553	50/50	2.9553
926212	AC1-099 E	1.7357	50/50	1.7357
927024	AC1-189 C	6.2804	50/50	6.2804
927025	AC1-189 E	3.1284	50/50	3.1284
927145	AC1-208 C	14.0422	50/50	14.0422
927146	AC1-208 E	6.2100	50/50	6.2100
932631	AC2-084 C	12.5719	50/50	12.5719
932632	AC2-084 E	6.1921	50/50	6.1921
933991	AD1-023 C	4.0327	Adder	4.74
933992	AD1-023 E	2.1954	Adder	2.58
934331	AD1-057 C O1	10.5448	50/50	10.5448
934332	AD1-057 E O1	5.6251	50/50	5.6251
936401	AD2-051 C O1	3.2781	Adder	3.86
936402	AD2-051 E O1	1.4076	Adder	1.66
938222	AE1-035 E	0.4069	Adder	0.48
940571	AE2-044 C	11.9036	50/50	11.9036
940572	AE2-044 E	5.1016	50/50	5.1016
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2794	Adder	0.33
942471	AE2-260 C O1	5.1280	Adder	6.03
942472	AE2-260 E O1	7.2735	Adder	8.56
943171	AE2-346 C	0.6550	Adder	0.77
943172	AE2-346 E	0.2807	Adder	0.33
944141	AF1-082	7.6523	50/50	7.6523
946281	AF1-292 C	0.5743	Adder	0.68
946282	AF1-292 E	0.3872	Adder	0.46
957521	AF2-046 C	7.3234	Adder	8.62
957522	AF2-046 E	3.6837	Adder	4.33
957861	AF2-080 C	5.7041	50/50	5.7041
957862	AF2-080 E	2.5286	50/50	2.5286
959511	AF2-242 C	2.4228	Adder	2.85
959512	AF2-242 E	1.8844	Adder	2.22
960081	AF2-299 C	0.9680	Adder	1.14
960082	AF2-299 E	0.6453	Adder	0.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.1399	Adder	0.16
961092	AF2-400 E	0.2296	Adder	0.27
961671	AG1-007 C	1.2437	50/50	1.2437
961672	AG1-007 E	0.6945	50/50	0.6945
961681	AG1-008 C	3.8892	Adder	8.63
961682	AG1-008 E	1.9446	Adder	4.32
961931	AG1-036 C	0.3255	Adder	0.72
961932	AG1-036 E	0.2170	Adder	0.48
961941	AG1-037 C	0.1240	Adder	0.28
961942	AG1-037 E	0.0826	Adder	0.18
962331	AG1-082 C	0.4959	Adder	1.1
962332	AG1-082 E	0.3306	Adder	0.73
962341	AG1-083 C	0.4959	Adder	1.1
962342	AG1-083 E	0.3306	Adder	0.73
962351	AG1-084 C	0.4442	Adder	0.99
962352	AG1-084 E	0.2961	Adder	0.66
962361	AG1-085 C	0.4442	Adder	0.99
962362	AG1-085 E	0.2961	Adder	0.66
962571	AG1-106 C	3.8421	50/50	3.8421
962572	AG1-106 E	1.7424	50/50	1.7424
964491	AG1-312 C O1	3.5814	Adder	7.95
964492	AG1-312 E O1	0.8953	Adder	1.99
964501	AG1-313 C O2	2.8508	50/50	2.8508
964502	AG1-313 E O2	1.9005	50/50	1.9005
964801	AG1-343 C	1.2896	Adder	2.86
964802	AG1-343 E	1.0133	Adder	2.25
965291	AG1-394 C	0.4384	Adder	0.97
965292	AG1-394 E	0.2923	Adder	0.65
965691	AG1-437 C O1	1.7375	Adder	3.86
965692	AG1-437 E O1	1.1583	Adder	2.57
965701	AG1-438 C O1	1.7375	Adder	3.86
965702	AG1-438 E O1	1.1583	Adder	2.57
965711	AG1-439 C O1	21.3390	50/50	21.3390
965712	AG1-439 E O1	14.2260	50/50	14.2260
965741	AG1-442 O1	1.0135	Adder	2.25
965751	AG1-443 O1	1.0135	Adder	2.25
965761	AG1-444 O1	11.3808	50/50	11.3808
966621	AG1-532 C	0.2770	Adder	0.61
966622	AG1-532 E	0.1847	Adder	0.41
966751	AG1-546 C	3.1668	Adder	7.03
966752	AG1-546 E	1.6992	Adder	3.77
966801	AG1-551 C	0.4089	Adder	0.91
966802	AG1-551 E	0.1753	Adder	0.39
966811	AG1-552 C	1.3832	50/50	1.3832
966812	AG1-552 E	0.5928	50/50	0.5928
G-007A	G-007A	0.4867	Confirmed LTF	0.4867
VFT	VFT	1.2964	Confirmed LTF	1.2964
CALDERWOOD	CALDERWOOD	0.7087	Confirmed LTF	0.7087
PRAIRIE	PRAIRIE	2.4719	Confirmed LTF	2.4719
CHEOAH	CHEOAH	0.7262	Confirmed LTF	0.7262
CBM-N	CBM-N	0.2340	Confirmed LTF	0.2340
COTTONWOOD	COTTONWOOD	2.6313	Confirmed LTF	2.6313

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
HAMLET	HAMLET	1.5263	Confirmed LTF	1.5263
GIBSON	GIBSON	0.4390	Confirmed LTF	0.4390
BLUEG	BLUEG	1.3558	Confirmed LTF	1.3558
TRIMBLE	TRIMBLE	0.4307	Confirmed LTF	0.4307
CATAWBA	CATAWBA	0.7581	Confirmed LTF	0.7581

13.5.9 Index 9

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174254348	314559	3CAROLNA	DVP	314561	6CAROLNA	DVP	1	DVP_P4-2: L5T68	breaker	288.6	148.37	152.66	DC	12.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	9.1583	50/50	9.1583
314539	3UNCAMP	10.1699	50/50	10.1699
314541	3WATKINS	1.1623	50/50	1.1623
314572	3EMPORIA	0.2663	Adder	0.31
314589	3MURPHYS	0.1129	50/50	0.1129
315115	1S HAMPT1	2.4343	50/50	2.4343
315126	1ROARAP2	3.2338	50/50	3.2338
315128	1ROARAP4	3.0859	50/50	3.0859
315161	1KERR 4	1.0128	50/50	1.0128
315162	1KERR 5	1.0128	50/50	1.0128
315163	1KERR 6	1.0128	50/50	1.0128
315164	1KERR 7	1.0128	50/50	1.0128
315606	3AA2-053SOLA	2.9990	50/50	2.9990
315607	3AA1-063SOLA	2.9020	50/50	2.9020
315608	3AA2-088SOLA	1.7420	50/50	1.7420
316087	AB2-174 C	1.2565	50/50	1.2565
316088	AB2-174 E	7.2059	50/50	7.2059
316103	AB2-015 C	14.5285	50/50	14.5285
316104	AB2-015 E	11.9134	50/50	11.9134
316129	AC1-054 C	11.8223	50/50	11.8223
316140	AB2-099 C (Suspended)	0.3167	Adder	0.37
316141	AB2-099 E (Suspended)	0.1357	Adder	0.16
900672	V4-068 E	0.3921	50/50	0.3921
917332	Z2-043 E	0.5086	Adder	0.6
918492	AA1-063AE OP	8.6731	50/50	8.6731
919692	AA2-053 E OP	7.8046	50/50	7.8046
919702	AA2-057 E OP	1.7004	Adder	2.0
920042	AA2-088 E OP	18.0153	50/50	18.0153
920592	AA2-165 E	0.2337	Adder	0.27
923573	AB1-173 E OP	1.4281	50/50	1.4281
923991	AB2-040 C O1	9.9744	50/50	9.9744
923992	AB2-040 E O1	8.1608	50/50	8.1608
924022	AB2-043 E O1	1.3328	Adder	1.57
924162	AB2-060 E OP	1.9886	Adder	2.34
924301	AB2-077 C O1 (Suspended)	0.9579	Adder	1.13
924302	AB2-077 E O1 (Suspended)	0.6386	Adder	0.75
924311	AB2-078 C O1 (Suspended)	0.9579	Adder	1.13
924312	AB2-078 E O1 (Suspended)	0.6386	Adder	0.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924321	AB2-079 C O1 (Suspended)	0.9579	Adder	1.13
924322	AB2-079 E O1 (Suspended)	0.6386	Adder	0.75
925612	AC1-036 E	0.3205	Adder	0.38
925785	AC1-054 E	5.4462	50/50	5.4462
926201	AC1-098 C	4.3814	Adder	5.15
926202	AC1-098 E	2.6102	Adder	3.07
926211	AC1-099 C	1.4682	Adder	1.73
926212	AC1-099 E	0.8623	Adder	1.01
927145	AC1-208 C	10.1194	50/50	10.1194
927146	AC1-208 E	4.4752	50/50	4.4752
932631	AC2-084 C	6.2458	Adder	7.35
932632	AC2-084 E	3.0763	Adder	3.62
936265	AD2-033 C	5.1024	Adder	6.0
936266	AD2-033 E	3.4016	Adder	4.0
936361	AD2-046 C O1	6.6553	Adder	7.83
936362	AD2-046 E O1	3.0605	Adder	3.6
936485	AD2-063 C	6.5209	Adder	7.67
936486	AD2-063 E	4.3472	Adder	5.11
938771	AE1-103 C	6.1020	50/50	6.1020
938772	AE1-103 E	8.4265	50/50	8.4265
939181	AE1-148 C	6.4655	Adder	7.61
939182	AE1-148 E	4.3103	Adder	5.07
940661	AE2-053 O1	2.3946	Adder	2.82
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2040	Adder	0.24
942451	AE2-258	1.1120	Adder	1.31
943171	AE2-346 C	0.7600	Adder	0.89
943172	AE2-346 E	0.3257	Adder	0.38
943911	AF1-059	7.5247	Adder	8.85
946281	AF1-292 C	0.6420	Adder	0.76
946282	AF1-292 E	0.4328	Adder	0.51
957521	AF2-046 C	19.9560	50/50	19.9560
957522	AF2-046 E	10.0380	50/50	10.0380
959311	AF2-222 C	6.0197	Adder	7.08
959312	AF2-222 E	4.0332	Adder	4.74
960081	AF2-299 C	1.0821	Adder	1.27
960082	AF2-299 E	0.7214	Adder	0.85
961091	AF2-400 C	0.7845	50/50	0.7845
961092	AF2-400 E	1.2872	50/50	1.2872
961681	AG1-008 C	19.9960	50/50	19.9960
961682	AG1-008 E	9.9980	50/50	9.9980
961851	AG1-027 C	28.0681	50/50	28.0681
961852	AG1-027 E	15.5159	50/50	15.5159
961931	AG1-036 C	0.5483	Adder	1.22
961932	AG1-036 E	0.3655	Adder	0.81
961941	AG1-037 C	0.1439	Adder	0.32
961942	AG1-037 E	0.0959	Adder	0.21
962331	AG1-082 C	0.5754	Adder	1.28
962332	AG1-082 E	0.3836	Adder	0.85
962341	AG1-083 C	0.5754	Adder	1.28
962342	AG1-083 E	0.3836	Adder	0.85

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962351	AG1-084 C	0.3244	Adder	0.72
962352	AG1-084 E	0.2162	Adder	0.48
962361	AG1-085 C	0.3244	Adder	0.72
962362	AG1-085 E	0.2162	Adder	0.48
962491	AG1-098 C O2	3.0047	Adder	6.67
962492	AG1-098 E O2	2.0031	Adder	4.45
963301	AG1-179 C	1.3323	Adder	2.96
963311	AG1-180	0.6491	Adder	1.44
963321	AG1-181 C O2	3.4138	Adder	7.58
963361	AG1-185 O2	1.6517	Adder	3.67
964111	AG1-272 C	0.5086	Adder	1.13
964112	AG1-272 E	0.1511	Adder	0.34
964121	AG1-273 C	0.5086	Adder	1.13
964122	AG1-273 E	0.1511	Adder	0.34
964131	AG1-274 C	0.5086	Adder	1.13
964132	AG1-274 E	0.1511	Adder	0.34
964501	AG1-313 C O2	7.4230	50/50	7.4230
964502	AG1-313 E O2	4.9487	50/50	4.9487
964801	AG1-343 C	9.7549	50/50	9.7549
964802	AG1-343 E	7.6645	50/50	7.6645
964931	AG1-357 C O2	4.6227	Adder	10.26
964932	AG1-357 E O2	3.0818	Adder	6.84
965191	AG1-384 C	0.5086	Adder	1.13
965192	AG1-384 E	0.1511	Adder	0.34
965291	AG1-394 C	3.4868	50/50	3.4868
965292	AG1-394 E	2.3246	50/50	2.3246
965451	AG1-413 C O2	1.6821	Adder	3.73
965452	AG1-413 E O2	1.1214	Adder	2.49
965591	AG1-427 C	2.7889	Adder	6.19
965592	AG1-427 E	1.8632	Adder	4.14
965601	AG1-428 C O2	1.1122	Adder	2.47
965602	AG1-428 E O2	0.7402	Adder	1.64
965721	AG1-440 C	8.7340	50/50	8.7340
965722	AG1-440 E	5.8227	50/50	5.8227
965731	AG1-441 C	8.7340	50/50	8.7340
965732	AG1-441 E	5.8227	50/50	5.8227
965771	AG1-445	5.0463	50/50	5.0463
965781	AG1-446	5.0463	50/50	5.0463
966621	AG1-532 C	0.3097	Adder	0.69
966622	AG1-532 E	0.2065	Adder	0.46
966751	AG1-546 C	27.3941	50/50	27.3941
966752	AG1-546 E	14.6989	50/50	14.6989
966811	AG1-552 C	5.1344	50/50	5.1344
966812	AG1-552 E	2.2004	50/50	2.2004
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
O-066	O-066	0.8211	Confirmed LTF	0.8211
SIGE	SIGE	0.0194	Confirmed LTF	0.0194

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	1.7226	Confirmed LTF	1.7226
CBM-S1	CBM-S1	0.0338	Confirmed LTF	0.0338
G-007	G-007	0.1292	Confirmed LTF	0.1292
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

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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
173863765	314561	6CAROLNA	DVP	314583	6LAKEVIEW	DVP	1	DVP_P4-2: 246T247	breaker	459.0	131.3	134.15	DC	13.07

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	4.8331	50/50	4.8331
314539	3UNCAMP	4.0999	50/50	4.0999
314541	3WATKINS	0.5680	50/50	0.5680
314582	3KELFORD	0.4846	50/50	0.4846
314589	3MURPHYS	0.1126	50/50	0.1126
314594	6PLYMOTH	0.0967	50/50	0.0967
315115	1S HAMPT1	1.2202	50/50	1.2202
315126	1ROARAP2	2.3907	50/50	2.3907
315128	1ROARAP4	2.2813	50/50	2.2813
315164	1KERR 7	0.6951	50/50	0.6951
315292	1DOMTR78	1.3460	50/50	1.3460
315293	1DOMTR9	6.9617	50/50	6.9617
315294	1DOMTR10	8.5315	50/50	8.5315
315602	1HOLLOMANSOL	2.3248	50/50	2.3248
315606	3AA2-053SOLA	2.5398	50/50	2.5398
315607	3AA1-063SOLA	2.1103	50/50	2.1103
315608	3AA2-088SOLA	1.1705	50/50	1.1705
315611	6Z1-036WIND	0.7024	50/50	0.7024
315614	AA2-178 C	1.3989	50/50	1.3989
316088	AB2-174 E	2.6618	Adder	3.13
316103	AB2-015 C	6.5815	50/50	6.5815
316104	AB2-015 E	5.3968	50/50	5.3968
316129	AC1-054 C	8.5395	50/50	8.5395
316140	AB2-099 C (Suspended)	0.8745	50/50	0.8745
316141	AB2-099 E (Suspended)	0.3748	50/50	0.3748
900672	V4-068 E	0.3912	50/50	0.3912
901082	W1-029 E	20.7208	Adder	24.38
916042	Z1-036 E (Suspended)	29.8274	50/50	29.8274
917332	Z2-043 E	1.4454	50/50	1.4454
918492	AA1-063AE OP	6.3070	50/50	6.3070
918512	AA1-065 E OP	6.5981	50/50	6.5981
918532	AA1-067 E	0.5532	50/50	0.5532
919692	AA2-053 E OP	6.6096	50/50	6.6096
919702	AA2-057 E OP	1.4432	Adder	1.7
920042	AA2-088 E OP	12.1049	50/50	12.1049
920592	AA2-165 E	0.1984	Adder	0.23
920692	AA2-178 E	3.8002	50/50	3.8002
923573	AB1-173 E OP	0.7537	50/50	0.7537
923991	AB2-040 C O1	5.2637	50/50	5.2637
923992	AB2-040 E O1	4.3067	50/50	4.3067
925121	AB2-169 C	0.9498	50/50	0.9498

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925122	AB2-169 E	5.4029	50/50	5.4029
925785	AC1-054 E	3.9339	50/50	3.9339
926201	AC1-098 C	6.2886	50/50	6.2886
926202	AC1-098 E	3.7464	50/50	3.7464
926211	AC1-099 C	2.1074	50/50	2.1074
926212	AC1-099 E	1.2377	50/50	1.2377
927145	AC1-208 C	8.8972	50/50	8.8972
927146	AC1-208 E	3.9347	50/50	3.9347
932631	AC2-084 C	8.9646	50/50	8.9646
932632	AC2-084 E	4.4154	50/50	4.4154
933991	AD1-023 C	16.1740	50/50	16.1740
933992	AD1-023 E	8.8052	50/50	8.8052
934521	AD1-076 C	59.1788	50/50	59.1788
934522	AD1-076 E	30.1338	50/50	30.1338
936361	AD2-046 C O1	4.4861	Adder	5.28
936362	AD2-046 E O1	2.0630	Adder	2.43
936401	AD2-051 C O1	14.9052	50/50	14.9052
936402	AD2-051 E O1	6.4001	50/50	6.4001
938221	AE1-035 C	0.5813	50/50	0.5813
938222	AE1-035 E	1.8145	50/50	1.8145
938771	AE1-103 C	1.7987	Adder	2.12
938772	AE1-103 E	2.4840	Adder	2.92
939181	AE1-148 C	4.3408	Adder	5.11
939182	AE1-148 E	2.8938	Adder	3.4
940491	AE2-034 C	6.6503	50/50	6.6503
940492	AE2-034 E	2.8501	50/50	2.8501
940542	AE2-040 BAT	1.4628	Merchant Transmission	1.4628
940661	AE2-053 O1	1.6077	Adder	1.89
941501	AE2-147 C	7.1451	Adder	8.41
941502	AE2-147 E	4.7634	Adder	5.6
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.2660	50/50	0.2660
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.9077	50/50	0.9077
943171	AE2-346 C	2.0988	50/50	2.0988
943172	AE2-346 E	0.8995	50/50	0.8995
944871	AF1-152 C	2.3817	Adder	2.8
944872	AF1-152 E	1.5878	Adder	1.87
945711	AF1-236 C O1	72.8047	50/50	72.8047
945712	AF1-236 E O1	44.9686	50/50	44.9686
946012	AF1-266 BAT	7.7681	Merchant Transmission	7.7681
957521	AF2-046 C	22.5977	50/50	22.5977
957522	AF2-046 E	11.3668	50/50	11.3668
957531	AF2-047 C	15.8023	50/50	15.8023
957532	AF2-047 E	7.9487	50/50	7.9487
957821	AF2-076 C	8.2473	50/50	8.2473
957822	AF2-076 E	5.4982	50/50	5.4982
959511	AF2-242 C	6.4575	50/50	6.4575
959512	AF2-242 E	5.0225	50/50	5.0225
961091	AF2-400 C	0.3554	50/50	0.3554
961092	AF2-400 E	0.5831	50/50	0.5831
961681	AG1-008 C	22.6430	50/50	22.6430
961682	AG1-008 E	11.3215	50/50	11.3215

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961931	AG1-036 C	1.9349	50/50	1.9349
961932	AG1-036 E	1.2900	50/50	1.2900
961941	AG1-037 C	0.7496	50/50	0.7496
961942	AG1-037 E	0.4997	50/50	0.4997
962331	AG1-082 C	2.9983	50/50	2.9983
962332	AG1-082 E	1.9989	50/50	1.9989
962341	AG1-083 C	2.9983	50/50	2.9983
962342	AG1-083 E	1.9989	50/50	1.9989
962351	AG1-084 C	2.7232	50/50	2.7232
962352	AG1-084 E	1.8155	50/50	1.8155
962361	AG1-085 C	2.7232	50/50	2.7232
962362	AG1-085 E	1.8155	50/50	1.8155
964491	AG1-312 C O1	29.7830	50/50	29.7830
964492	AG1-312 E O1	7.4458	50/50	7.4458
964501	AG1-313 C O2	7.8417	50/50	7.8417
964502	AG1-313 E O2	5.2278	50/50	5.2278
964801	AG1-343 C	7.2341	50/50	7.2341
964802	AG1-343 E	5.6840	50/50	5.6840
965291	AG1-394 C	2.4446	50/50	2.4446
965292	AG1-394 E	1.6298	50/50	1.6298
965631	AG1-431	42.1501	50/50	42.1501
965691	AG1-437 C O1	13.6146	50/50	13.6146
965692	AG1-437 E O1	9.0764	50/50	9.0764
965701	AG1-438 C O1	13.6146	50/50	13.6146
965702	AG1-438 E O1	9.0764	50/50	9.0764
965721	AG1-440 C	6.1520	50/50	6.1520
965722	AG1-440 E	4.1013	50/50	4.1013
965731	AG1-441 C	6.1520	50/50	6.1520
965732	AG1-441 E	4.1013	50/50	4.1013
965741	AG1-442 O1	7.9418	50/50	7.9418
965751	AG1-443 O1	7.9418	50/50	7.9418
965771	AG1-445	3.5545	50/50	3.5545
965781	AG1-446	3.5545	50/50	3.5545
966491	AG1-518 O2	2.1038	Adder	4.67
966751	AG1-546 C	19.8588	50/50	19.8588
966752	AG1-546 E	10.6557	50/50	10.6557
966801	AG1-551 C	1.8732	50/50	1.8732
966802	AG1-551 E	0.8028	50/50	0.8028
966811	AG1-552 C	3.7958	50/50	3.7958
966812	AG1-552 E	1.6268	50/50	1.6268
966931	AG1-431A	31.6680	50/50	31.6680
WEC	WEC	0.0444	Confirmed LTF	0.0444
LGEE	LGEE	0.0917	Confirmed LTF	0.0917
CPL	CPL	0.5521	Confirmed LTF	0.5521
CBM-W2	CBM-W2	1.8816	Confirmed LTF	1.8816
NY	NY	0.0536	Confirmed LTF	0.0536
TVA	TVA	0.3500	Confirmed LTF	0.3500
O-066	O-066	0.7672	Confirmed LTF	0.7672
SIGE	SIGE	0.0281	Confirmed LTF	0.0281
CBM-S2	CBM-S2	5.5019	Confirmed LTF	5.5019
CBM-S1	CBM-S1	0.0878	Confirmed LTF	0.0878
G-007	G-007	0.1208	Confirmed LTF	0.1208

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MEC	MEC	0.2622	Confirmed LTF	0.2622
LAGN	LAGN	0.4358	Confirmed LTF	0.4358
CBM-W1	CBM-W1	1.8787	Confirmed LTF	1.8787

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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
168995807	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	202.58	204.31	DC	3.15

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	1.5130	80/20	1.5130
924321	AB2-079 C O1 (Suspended)	1.5130	80/20	1.5130
925591	AC1-034 C	2.2414	80/20	2.2414
925611	AC1-036 C	0.1376	80/20	0.1376
926070	AC1-086 C	10.0123	80/20	10.0123
926201	AC1-098 C	3.1031	80/20	3.1031
926211	AC1-099 C	1.0399	80/20	1.0399
927145	AC1-208 C	5.2586	80/20	5.2586
932631	AC2-084 C	4.4236	80/20	4.4236
934331	AD1-057 C O1	3.8417	80/20	3.8417
935221	AD1-157 C	0.0980	80/20	0.0980
936265	AD2-033 C	8.3234	80/20	8.3234
936361	AD2-046 C O1	6.2368	80/20	6.2368
936485	AD2-063 C	10.6713	80/20	10.6713
938371	AE1-056 C	2.6788	80/20	2.6788
939181	AE1-148 C	6.1781	80/20	6.1781
940571	AE2-044 C	1.4680	80/20	1.4680
940661	AE2-053 O1	2.2882	80/20	2.2882
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0630	80/20	0.0630
942451	AE2-258	1.8236	80/20	1.8236
943171	AE2-346 C	0.5473	80/20	0.5473
943911	AF1-059	31.0992	80/20	31.0992
944141	AF1-082	0.9437	80/20	0.9437
946281	AF1-292 C	4.8137	80/20	4.8137
946301	AF1-294 C	1.9757	80/20	1.9757
957521	AF2-046 C	7.4161	80/20	7.4161
958211	AF2-115 C	1.1622	80/20	1.1622
958801	AF2-171 C	7.0200	80/20	7.0200
959311	AF2-222 C	9.8000	80/20	9.8000
960081	AF2-299 C	8.1131	80/20	8.1131
961091	AF2-400 C	0.1383	80/20	0.1383
961681	AG1-008 C	7.4310	80/20	7.4310
961791	AG1-021 C	0.9298	80/20	0.9298
961891	AG1-030 C	7.7220	80/20	7.7220
961931	AG1-036 C	0.5625	80/20	0.5625
961941	AG1-037 C	0.1955	80/20	0.1955
962041	AG1-048 C	5.8110	80/20	5.8110
962331	AG1-082 C	0.7819	80/20	0.7819
962341	AG1-083 C	0.7819	80/20	0.7819
962351	AG1-084 C	0.6452	80/20	0.6452
962361	AG1-085 C	0.6452	80/20	0.6452
962491	AG1-098 C O2	9.2813	80/20	9.2813
962561	AG1-105 C O2	5.1162	80/20	5.1162
962571	AG1-106 C	2.7843	80/20	2.7843
963171	AG1-166 C	0.9298	80/20	0.9298
963181	AG1-167 C	0.9298	80/20	0.9298
963191	AG1-168 C	0.9298	80/20	0.9298
963201	AG1-169 C	0.9298	80/20	0.9298
963211	AG1-170 C	0.9298	80/20	0.9298
963301	AG1-179 C	12.9655	80/20	12.9655

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963311	AG1-180	6.3171	80/20	6.3171
963321	AG1-181 C O2	10.5053	80/20	10.5053
963361	AG1-185 O2	5.0827	80/20	5.0827
963641	AG1-215 C	0.4339	80/20	0.4339
964111	AG1-272 C	1.5637	80/20	1.5637
964121	AG1-273 C	1.5637	80/20	1.5637
964131	AG1-274 C	1.5637	80/20	1.5637
964501	AG1-313 C O2	3.1550	80/20	3.1550
964791	AG1-342 C	1.9409	80/20	1.9409
964801	AG1-343 C	2.8707	80/20	2.8707
964821	AG1-345 C	0.3733	80/20	0.3733
964931	AG1-357 C O2	14.2668	80/20	14.2668
965191	AG1-384 C	1.5637	80/20	1.5637
965281	AG1-393 C	0.9298	80/20	0.9298
965291	AG1-394 C	0.9982	80/20	0.9982
965451	AG1-413 C O2	12.4174	80/20	12.4174
965591	AG1-427 C	8.6159	80/20	8.6159
965601	AG1-428 C O2	10.8238	80/20	10.8238
965721	AG1-440 C	5.2753	80/20	5.2753
965731	AG1-441 C	5.2753	80/20	5.2753
965771	AG1-445	3.0480	80/20	3.0480
965781	AG1-446	3.0480	80/20	3.0480
966621	AG1-532 C	4.3810	80/20	4.3810
966751	AG1-546 C	12.7746	80/20	12.7746
966811	AG1-552 C	1.9007	80/20	1.9007
WEC	WEC	0.1181	Confirmed LTF	0.1181
LGEE	LGEE	0.2444	Confirmed LTF	0.2444
CPL	CPL	1.2353	Confirmed LTF	1.2353
CBM-W2	CBM-W2	4.9818	Confirmed LTF	4.9818
NY	NY	0.1526	Confirmed LTF	0.1526
TVA	TVA	0.9282	Confirmed LTF	0.9282
SIGE	SIGE	0.0771	Confirmed LTF	0.0771
CBM-S2	CBM-S2	13.8539	Confirmed LTF	13.8539
CBM-S1	CBM-S1	0.2329	Confirmed LTF	0.2329
MEC	MEC	0.6960	Confirmed LTF	0.6960
LAGN	LAGN	1.1515	Confirmed LTF	1.1515
CBM-W1	CBM-W1	4.9631	Confirmed LTF	4.9631

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163260360	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	142.42	143.7	DC	10.55

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	1EDGECCA (Deactivation : 22/04/2019)	13.3075	50/50	13.3075
315132	1EDGECCB (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
315602	1HOLLOMAN SOL	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	7.9663	Adder	9.37
933992	AD1-023 E	4.3369	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
962491	AG1-098 C O2	4.3424	Adder	9.64
962492	AG1-098 E O2	2.8949	Adder	6.43
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 O2	4.8852	Adder	10.84
963361	AG1-185 O2	2.3636	Adder	5.25
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
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 O2	6.3298	50/50	6.3298
964502	AG1-313 E O2	4.2199	50/50	4.2199
964801	AG1-343 C	5.8664	50/50	5.8664
964802	AG1-343 E	4.6093	50/50	4.6093
964931	AG1-357 C O2	6.6667	Adder	14.8
964932	AG1-357 E O2	4.4445	Adder	9.87
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 O2	10.6898	50/50	10.6898
965452	AG1-413 E O2	7.1265	50/50	7.1265
965591	AG1-427 C	4.0275	Adder	8.94
965592	AG1-427 E	2.6907	Adder	5.97
965601	AG1-428 C O2	8.9810	50/50	8.9810
965602	AG1-428 E O2	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965751	AG1-443 O1	2.0528	Adder	4.56
965761	AG1-444 O1	14.8896	50/50	14.8896
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

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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
173863744	314568	3EARLEYS	DVP	314569	6EARLEYS	DVP	2	DVP_P4-2: 201262	breaker	208.0	185.67	192.52	DC	14.25

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.2094	Adder	3.78
313719	3CHESTNUT	0.8253	50/50	0.8253
314539	3UNCAMP	3.5388	50/50	3.5388
314541	3WATKINS	0.5104	50/50	0.5104
314582	3KELFORD	0.9697	50/50	0.9697
314589	3MURPHYS	0.1579	50/50	0.1579
315115	1S HAMPT1	1.1016	50/50	1.1016
315126	1ROARAP2	1.0429	50/50	1.0429
315128	1ROARAP4	0.9952	50/50	0.9952
315293	1DOMTR9	-2.5601	Adder	-3.01
315294	1DOMTR10	-3.1374	Adder	-3.69
315606	3AA2-053SOLA	1.8109	50/50	1.8109
315607	3AA1-063SOLA	1.2516	50/50	1.2516
315608	3AA2-088SOLA	1.1053	50/50	1.1053
316088	AB2-174 E	2.7675	Adder	3.26
316103	AB2-015 C	5.8275	50/50	5.8275
316104	AB2-015 E	4.7785	50/50	4.7785
316129	AC1-054 C	3.3411	Adder	3.93
316140	AB2-099 C (Suspended)	1.7636	50/50	1.7636
316141	AB2-099 E (Suspended)	0.7558	50/50	0.7558
900672	V4-068 E	0.5483	50/50	0.5483
917332	Z2-043 E	2.8924	50/50	2.8924
917342	Z2-044 E	0.2516	Adder	0.3
918492	AA1-063AE OP	3.7406	50/50	3.7406
919692	AA2-053 E OP	4.7129	50/50	4.7129
919702	AA2-057 E OP	2.4691	50/50	2.4691
920042	AA2-088 E OP	11.4303	50/50	11.4303
920591	AA2-165 C	0.1108	50/50	0.1108
920592	AA2-165 E	0.3394	50/50	0.3394
923573	AB1-173 E OP	0.5005	Adder	0.59
923991	AB2-040 C O1	3.4954	Adder	4.11
923992	AB2-040 E O1	2.8599	Adder	3.36
925785	AC1-054 E	1.5392	Adder	1.81
926201	AC1-098 C	9.3737	50/50	9.3737
926202	AC1-098 E	5.5843	50/50	5.5843
926211	AC1-099 C	3.1412	50/50	3.1412
926212	AC1-099 E	1.8448	50/50	1.8448
927145	AC1-208 C	9.0019	50/50	9.0019
927146	AC1-208 E	3.9810	50/50	3.9810
932631	AC2-084 C	13.3625	50/50	13.3625
932632	AC2-084 E	6.5815	50/50	6.5815

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938771	AE1-103 C	1.4933	Adder	1.76
938772	AE1-103 E	2.0622	Adder	2.43
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.5823	50/50	0.5823
941542	AE2-151 E (Withdrawn : 01/08/2021)	1.9872	50/50	1.9872
943171	AE2-346 C	4.2328	50/50	4.2328
943172	AE2-346 E	1.8140	50/50	1.8140
957521	AF2-046 C	34.5498	50/50	34.5498
957522	AF2-046 E	17.3787	50/50	17.3787
961091	AF2-400 C	0.3147	50/50	0.3147
961092	AF2-400 E	0.5163	50/50	0.5163
961681	AG1-008 C	34.6190	50/50	34.6190
961682	AG1-008 E	17.3095	50/50	17.3095
961931	AG1-036 C	3.4830	50/50	3.4830
961932	AG1-036 E	2.3220	50/50	2.3220
961941	AG1-037 C	1.5117	50/50	1.5117
961942	AG1-037 E	1.0078	50/50	1.0078
962331	AG1-082 C	6.0468	50/50	6.0468
962332	AG1-082 E	4.0312	50/50	4.0312
962341	AG1-083 C	6.0468	50/50	6.0468
962342	AG1-083 E	4.0312	50/50	4.0312
962351	AG1-084 C	5.9615	50/50	5.9615
962352	AG1-084 E	3.9743	50/50	3.9743
962361	AG1-085 C	5.9615	50/50	5.9615
962362	AG1-085 E	3.9743	50/50	3.9743
964493	AG1-312 BAT	8.3202	50/50	8.3202
964501	AG1-313 C O2	8.5502	50/50	8.5502
964502	AG1-313 E O2	5.7001	50/50	5.7001
964801	AG1-343 C	7.4690	50/50	7.4690
964802	AG1-343 E	5.8685	50/50	5.8685
965291	AG1-394 C	2.3208	50/50	2.3208
965292	AG1-394 E	1.5472	50/50	1.5472
965742	AG1-442 BAT	3.5039	50/50	3.5039
965752	AG1-443 BAT	3.5039	50/50	3.5039
966751	AG1-546 C	4.0842	Adder	9.07
966752	AG1-546 E	2.1915	Adder	4.86
966811	AG1-552 C	1.6559	50/50	1.6559
966812	AG1-552 E	0.7097	50/50	0.7097
WEC	WEC	0.0173	Confirmed LTF	0.0173
LGEE	LGEE	0.0371	Confirmed LTF	0.0371
CPL	CPL	0.1440	Confirmed LTF	0.1440
CBM-W2	CBM-W2	0.7526	Confirmed LTF	0.7526
NY	NY	0.0453	Confirmed LTF	0.0453
TVA	TVA	0.1442	Confirmed LTF	0.1442
O-066	O-066	0.6192	Confirmed LTF	0.6192
SIGE	SIGE	0.0162	Confirmed LTF	0.0162
CBM-S2	CBM-S2	2.0254	Confirmed LTF	2.0254
CBM-S1	CBM-S1	0.0361	Confirmed LTF	0.0361
G-007	G-007	0.0976	Confirmed LTF	0.0976
MEC	MEC	0.1033	Confirmed LTF	0.1033
LAGN	LAGN	0.1750	Confirmed LTF	0.1750
CBM-W1	CBM-W1	0.7010	Confirmed LTF	0.7010

13.5.14 Index 14

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173863788	314568	3EARLEYS	DVP	314569	6EARLEYS	DVP	1	DVP_P4-2: 217162	breaker	231.7	146.12	152.15	DC	13.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313719	3CHESTNUT	0.7624	50/50	0.7624
314539	3UNCAMP	3.5557	50/50	3.5557
314541	3WATKINS	0.5068	50/50	0.5068
314582	3KELFORD	0.9916	50/50	0.9916
314589	3MURPHYS	0.1592	50/50	0.1592
315115	1S HAMPT1	1.0923	50/50	1.0923
315126	1ROARAP2	0.8578	50/50	0.8578
315128	1ROARAP4	0.8186	50/50	0.8186
315606	3AA2-053SOLA	1.6732	50/50	1.6732
315607	3AA1-063SOLA	1.1243	50/50	1.1243
315608	3AA2-088SOLA	1.0818	50/50	1.0818
316103	AB2-015 C	5.8110	50/50	5.8110
316104	AB2-015 E	4.7650	50/50	4.7650
316140	AB2-099 C (Suspended)	1.8134	50/50	1.8134
316141	AB2-099 E (Suspended)	0.7772	50/50	0.7772
900672	V4-068 E	0.5529	50/50	0.5529
917332	Z2-043 E	2.9578	50/50	2.9578
917342	Z2-044 E	0.2245	Adder	0.26
918492	AA1-063AE OP	3.3600	50/50	3.3600
919692	AA2-053 E OP	4.3544	50/50	4.3544
919702	AA2-057 E OP	2.2809	50/50	2.2809
920042	AA2-088 E OP	11.1879	50/50	11.1879
920591	AA2-165 C	0.1023	50/50	0.1023
920592	AA2-165 E	0.3135	50/50	0.3135
926201	AC1-098 C	9.2440	50/50	9.2440
926202	AC1-098 E	5.5070	50/50	5.5070
926211	AC1-099 C	3.0977	50/50	3.0977
926212	AC1-099 E	1.8193	50/50	1.8193
927145	AC1-208 C	8.4142	50/50	8.4142
927146	AC1-208 E	3.7211	50/50	3.7211
932631	AC2-084 C	13.1776	50/50	13.1776
932632	AC2-084 E	6.4904	50/50	6.4904
938771	AE1-103 C	1.5185	Adder	1.79
938772	AE1-103 E	2.0970	Adder	2.47
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.6008	50/50	0.6008
941542	AE2-151 E (Withdrawn : 01/08/2021)	2.0502	50/50	2.0502
943171	AE2-346 C	4.3520	50/50	4.3520
943172	AE2-346 E	1.8652	50/50	1.8652
957521	AF2-046 C	35.0248	50/50	35.0248
957522	AF2-046 E	17.6177	50/50	17.6177

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.3138	50/50	0.3138
961092	AF2-400 E	0.5149	50/50	0.5149
961681	AG1-008 C	35.0950	50/50	35.0950
961682	AG1-008 E	17.5475	50/50	17.5475
961931	AG1-036 C	3.5621	50/50	3.5621
961932	AG1-036 E	2.3748	50/50	2.3748
961941	AG1-037 C	1.5543	50/50	1.5543
961942	AG1-037 E	1.0362	50/50	1.0362
962331	AG1-082 C	6.2172	50/50	6.2172
962332	AG1-082 E	4.1448	50/50	4.1448
962341	AG1-083 C	6.2172	50/50	6.2172
962342	AG1-083 E	4.1448	50/50	4.1448
962351	AG1-084 C	6.1507	50/50	6.1507
962352	AG1-084 E	4.1005	50/50	4.1005
962361	AG1-085 C	6.1507	50/50	6.1507
962362	AG1-085 E	4.1005	50/50	4.1005
964493	AG1-312 BAT	2.9725	Merchant Transmission	2.9725
964501	AG1-313 C O2	8.3727	50/50	8.3727
964502	AG1-313 E O2	5.5818	50/50	5.5818
964801	AG1-343 C	7.3573	50/50	7.3573
964802	AG1-343 E	5.7808	50/50	5.7808
965291	AG1-394 C	2.2681	50/50	2.2681
965292	AG1-394 E	1.5121	50/50	1.5121
966751	AG1-546 C	3.3287	Adder	7.39
966752	AG1-546 E	1.7861	Adder	3.96
966811	AG1-552 C	1.3619	50/50	1.3619
966812	AG1-552 E	0.5837	50/50	0.5837
WEC	WEC	0.0101	Confirmed LTF	0.0101
LGEE	LGEE	0.0220	Confirmed LTF	0.0220
CPL	CPL	0.0949	Confirmed LTF	0.0949
CBM-W2	CBM-W2	0.4659	Confirmed LTF	0.4659
NY	NY	0.0359	Confirmed LTF	0.0359
TVA	TVA	0.0910	Confirmed LTF	0.0910
O-066	O-066	0.4846	Confirmed LTF	0.4846
SIGE	SIGE	0.0114	Confirmed LTF	0.0114
CBM-S2	CBM-S2	1.3363	Confirmed LTF	1.3363
CBM-S1	CBM-S1	0.0228	Confirmed LTF	0.0228
G-007	G-007	0.0767	Confirmed LTF	0.0767
MEC	MEC	0.0620	Confirmed LTF	0.0620
LAGN	LAGN	0.1103	Confirmed LTF	0.1103
CBM-W1	CBM-W1	0.4066	Confirmed LTF	0.4066

13.5.15 Index 15

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168995771	314569	GEARLEYS	DVP	314575	6NUCO TP	DVP	1	DVP_P1-2: LN 2092	single	571.52	189.53	190.63	DC	6.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6257	80/20	2.6257
315293	1DOMTR9	13.5803	80/20	13.5803
315294	1DOMTR10	16.6425	80/20	16.6425
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMAN SOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9383	80/20	4.9383
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2098	80/20	4.2098
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5592	80/20	1.5592
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158
961941	AG1-037 C	0.8635	80/20	0.8635

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962271	AG1-075 C O2	4.6675	80/20	4.6675
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962491	AG1-098 C O2	4.3132	80/20	4.3132
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O2	6.2746	80/20	6.2746
964801	AG1-343 C	4.7135	80/20	4.7135
964931	AG1-357 C O2	6.6084	80/20	6.6084
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O2	3.3660	80/20	3.3660
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O2	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

13.5.16 Index 16

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163715617	314574	6EVERETS	DVP	304451	6GREENVILLE	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	189.11	190.29	DC	5.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.9855	Adder	3.51
314539	3UNCAMP	2.4187	Adder	2.85
314541	3WATKINS	0.2950	Adder	0.35
314572	3EMPORIA	0.1716	Adder	0.2
314582	3KELFORD	0.2963	50/50	0.2963
314589	3MURPHYS	0.0602	50/50	0.0602
314594	6PLYMOTH	0.0896	50/50	0.0896
314632	6AYDLETOLD	0.6586	Adder	0.77
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.5990	50/50	9.5990
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.5990	50/50	9.5990
315136	1ROSEMG1	1.5370	50/50	1.5370
315137	1ROSEMS1	0.9531	50/50	0.9531
315138	1ROSEMG2	0.7203	50/50	0.7203
315139	1GASTONA	2.1216	50/50	2.1216
315141	1GASTONB	2.1216	50/50	2.1216
315292	1DOMTR78	1.6763	50/50	1.6763
315293	1DOMTR9	8.6700	50/50	8.6700
315294	1DOMTR10	10.6250	50/50	10.6250
315601	1CONETOE2SOL	2.1704	50/50	2.1704
315602	1HOLLOMAN SOL	1.5332	50/50	1.5332
315606	3AA2-053SOLA	0.9398	50/50	0.9398
315611	6Z1-036WIND	0.6573	50/50	0.6573
315614	AA2-178 C	1.2997	50/50	1.2997
316088	AB2-174 E	2.7352	Adder	3.22
316097	AB2-100 E1	1.2133	Adder	1.43
316099	AB2-100 E2	1.2133	Adder	1.43
316103	AB2-015 C	3.5908	Adder	4.22
316104	AB2-015 E	2.9445	Adder	3.46
316140	AB2-099 C (Suspended)	0.5180	50/50	0.5180
316141	AB2-099 E (Suspended)	0.2220	50/50	0.2220
900672	V4-068 E	0.2092	50/50	0.2092
901082	W1-029 E	18.7397	Adder	22.05
913392	Y1-086 E	0.7676	Adder	0.9
916042	Z1-036 E (Suspended)	27.9147	50/50	27.9147
917122	Z2-027 E	0.3981	Adder	0.47
917332	Z2-043 E	0.8838	50/50	0.8838
917342	Z2-044 E	0.2085	Adder	0.25
917512	Z2-088 E OP1	12.8742	50/50	12.8742
918492	AA1-063AE OP	2.0182	Adder	2.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
918512	AA1-065 E OP	4.3514	50/50	4.3514
918532	AA1-067 E	1.5974	50/50	1.5974
919692	AA2-053 E OP	2.4457	50/50	2.4457
919702	AA2-057 E OP	1.3810	Adder	1.62
920042	AA2-088 E OP	5.1904	Adder	6.11
920592	AA2-165 E	0.1898	Adder	0.22
920692	AA2-178 E	3.5306	50/50	3.5306
922923	AB1-081 E OP	1.4211	Adder	1.67
923262	AB1-132 C OP (Suspended)	10.2690	50/50	10.2690
923263	AB1-132 E OP (Suspended)	4.4010	50/50	4.4010
923573	AB1-173 E OP	0.4656	Adder	0.55
923832	AB2-022 E	0.4333	Adder	0.51
923991	AB2-040 C O1	3.2516	Adder	3.83
923992	AB2-040 E O1	2.6604	Adder	3.13
924152	AB2-059 E OP	2.0132	Adder	2.37
925121	AB2-169 C	1.6064	50/50	1.6064
925122	AB2-169 E	9.1375	50/50	9.1375
925591	AC1-034 C	2.5313	Adder	2.98
925592	AC1-034 E	1.9096	Adder	2.25
926070	AC1-086 C	15.1223	50/50	15.1223
926071	AC1-086 E	6.8827	50/50	6.8827
926201	AC1-098 C	3.8972	50/50	3.8972
926202	AC1-098 E	2.3218	50/50	2.3218
926211	AC1-099 C	1.3060	50/50	1.3060
926212	AC1-099 E	0.7670	50/50	0.7670
927024	AC1-189 C	15.5186	50/50	15.5186
927025	AC1-189 E	7.7302	50/50	7.7302
927145	AC1-208 C	4.2602	Adder	5.01
927146	AC1-208 E	1.8840	Adder	2.22
932631	AC2-084 C	5.5556	50/50	5.5556
932632	AC2-084 E	2.7364	50/50	2.7364
933991	AD1-023 C	13.4949	50/50	13.4949
933992	AD1-023 E	7.3467	50/50	7.3467
934331	AD1-057 C O1	8.8818	50/50	8.8818
934332	AD1-057 E O1	4.7379	50/50	4.7379
934521	AD1-076 C	54.8301	50/50	54.8301
934522	AD1-076 E	27.9194	50/50	27.9194
936401	AD2-051 C O1	9.4142	50/50	9.4142
936402	AD2-051 E O1	4.0424	50/50	4.0424
938221	AE1-035 C	0.3834	50/50	0.3834
938222	AE1-035 E	1.1966	50/50	1.1966
938535	AE1-072 C	5.1769	Adder	6.09
938536	AE1-072 E	2.6669	Adder	3.14
938771	AE1-103 C	1.3869	Adder	1.63
938772	AE1-103 E	1.9153	Adder	2.25
940491	AE2-034 C	6.1786	50/50	6.1786
940492	AE2-034 E	2.6480	50/50	2.6480
940571	AE2-044 C	1.6579	Adder	1.95
940572	AE2-044 E	0.7105	Adder	0.84
941501	AE2-147 C	6.4620	Adder	7.6
941502	AE2-147 E	4.3080	Adder	5.07

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1618	50/50	0.1618
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5523	50/50	0.5523
942471	AE2-260 C O1	5.7670	Adder	6.78
942472	AE2-260 E O1	8.1798	Adder	9.62
943171	AE2-346 C	1.2432	50/50	1.2432
943172	AE2-346 E	0.5328	50/50	0.5328
944141	AF1-082	1.0658	Adder	1.25
944871	AF1-152 C	2.1540	Adder	2.53
944872	AF1-152 E	1.4360	Adder	1.69
945711	AF1-236 C O1	67.6412	50/50	67.6412
945712	AF1-236 E O1	41.7792	50/50	41.7792
946281	AF1-292 C	0.5921	Adder	0.7
946282	AF1-292 E	0.3992	Adder	0.47
957521	AF2-046 C	12.3552	50/50	12.3552
957522	AF2-046 E	6.2148	50/50	6.2148
957531	AF2-047 C	14.6816	50/50	14.6816
957532	AF2-047 E	7.3849	50/50	7.3849
957821	AF2-076 C	1.7985	Adder	2.12
957822	AF2-076 E	1.1990	Adder	1.41
957861	AF2-080 C	14.0946	50/50	14.0946
957862	AF2-080 E	6.2481	50/50	6.2481
959511	AF2-242 C	13.2102	50/50	13.2102
959512	AF2-242 E	10.2746	50/50	10.2746
960081	AF2-299 C	0.9979	Adder	1.17
960082	AF2-299 E	0.6653	Adder	0.78
961091	AF2-400 C	0.1939	Adder	0.23
961092	AF2-400 E	0.3181	Adder	0.37
961671	AG1-007 C	1.8117	50/50	1.8117
961672	AG1-007 E	1.0117	50/50	1.0117
961681	AG1-008 C	12.3800	50/50	12.3800
961682	AG1-008 E	6.1900	50/50	6.1900
961851	AG1-027 C	2.9209	Adder	6.48
961852	AG1-027 E	1.6147	Adder	3.58
961931	AG1-036 C	1.1069	50/50	1.1069
961932	AG1-036 E	0.7380	50/50	0.7380
961941	AG1-037 C	0.4440	50/50	0.4440
961942	AG1-037 E	0.2960	50/50	0.2960
962331	AG1-082 C	1.7760	50/50	1.7760
962332	AG1-082 E	1.1840	50/50	1.1840
962341	AG1-083 C	1.7760	50/50	1.7760
962342	AG1-083 E	1.1840	50/50	1.1840
962351	AG1-084 C	1.6569	50/50	1.6569
962352	AG1-084 E	1.1046	50/50	1.1046
962361	AG1-085 C	1.6569	50/50	1.6569
962362	AG1-085 E	1.1046	50/50	1.1046
962571	AG1-106 C	4.2054	50/50	4.2054
962572	AG1-106 E	1.9071	50/50	1.9071
964491	AG1-312 C O1	20.1914	50/50	20.1914
964492	AG1-312 E O1	5.0478	50/50	5.0478
964501	AG1-313 C O2	3.3796	50/50	3.3796
964502	AG1-313 E O2	2.2531	50/50	2.2531

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964801	AG1-343 C	3.6197	50/50	3.6197
964802	AG1-343 E	2.8440	50/50	2.8440
965291	AG1-394 C	1.2042	50/50	1.2042
965292	AG1-394 E	0.8028	50/50	0.8028
965631	AG1-431	39.1607	50/50	39.1607
965691	AG1-437 C O1	10.5492	50/50	10.5492
965692	AG1-437 E O1	7.0328	50/50	7.0328
965701	AG1-438 C O1	10.5492	50/50	10.5492
965702	AG1-438 E O1	7.0328	50/50	7.0328
965711	AG1-439 C O1	38.9340	50/50	38.9340
965712	AG1-439 E O1	25.9560	50/50	25.9560
965741	AG1-442 O1	6.1537	50/50	6.1537
965751	AG1-443 O1	6.1537	50/50	6.1537
965761	AG1-444 O1	20.7648	50/50	20.7648
966491	AG1-518 O2	1.3817	Adder	3.07
966621	AG1-532 C	0.2856	Adder	0.63
966622	AG1-532 E	0.1904	Adder	0.42
966751	AG1-546 C	2.7754	Adder	6.16
966752	AG1-546 E	1.4892	Adder	3.31
966801	AG1-551 C	4.5154	50/50	4.5154
966802	AG1-551 E	1.9352	50/50	1.9352
966811	AG1-552 C	0.5563	Adder	1.23
966812	AG1-552 E	0.2384	Adder	0.53
966931	AG1-431A	29.4220	50/50	29.4220
G-007A	G-007A	1.1364	Confirmed LTF	1.1364
VFT	VFT	3.0250	Confirmed LTF	3.0250
CALDERWOOD	CALDERWOOD	1.3349	Confirmed LTF	1.3349
PRAIRIE	PRAIRIE	4.5383	Confirmed LTF	4.5383
AC1-131	AC1-131	5.3107	LTF	5.3107
CHEOAH	CHEOAH	1.3689	Confirmed LTF	1.3689
CBM-N	CBM-N	0.5508	Confirmed LTF	0.5508
COTTONWOOD	COTTONWOOD	4.9854	Confirmed LTF	4.9854
HAMLET	HAMLET	3.1098	Confirmed LTF	3.1098
GIBSON	GIBSON	0.7851	Confirmed LTF	0.7851
BLUEG	BLUEG	2.4096	Confirmed LTF	2.4096
TRIMBLE	TRIMBLE	0.7641	Confirmed LTF	0.7641
CATAWBA	CATAWBA	1.4357	Confirmed LTF	1.4357

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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
168995789	314575	6NUCO TP	DVP	957820	AF2-076 TAP	DVP	1	DVP_P1-2: LN 2092	single	571.52	180.85	181.95	DC	6.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6257	80/20	2.6257
315293	1DOMTR9	13.5803	80/20	13.5803
315294	1DOMTR10	16.6425	80/20	16.6425
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMAN SOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9383	80/20	4.9383
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2098	80/20	4.2098
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5592	80/20	1.5592
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158
961941	AG1-037 C	0.8635	80/20	0.8635

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962271	AG1-075 C O2	4.6675	80/20	4.6675
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962491	AG1-098 C O2	4.3132	80/20	4.3132
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O2	6.2746	80/20	6.2746
964801	AG1-343 C	4.7135	80/20	4.7135
964931	AG1-357 C O2	6.6084	80/20	6.6084
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O2	3.3660	80/20	3.3660
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O2	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

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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
163260310	314583	6LAKEVEW	DVP	313725	6DRY BREAD	DVP	1	DVP_P7-1: LN 2058-2181	tower	459.0	173.69	175.26	DC	7.21

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313719	3CHESTNUT	1.1225	50/50	1.1225
314539	3UNCAMP	2.0614	Adder	2.43
314541	3WATKINS	0.2795	Adder	0.33
314582	3KELFORD	0.3267	50/50	0.3267
314589	3MURPHYS	0.0638	50/50	0.0638
314594	6PLYMOTH	0.0478	Adder	0.06
314623	3WITAKRS	0.2114	50/50	0.2114
315126	1ROARAP2	1.2818	50/50	1.2818
315128	1ROARAP4	1.2232	50/50	1.2232
315131	1EDGECEMA (Deactivation : 22/04/2019)	13.4751	50/50	13.4751
315132	1EDGECEMB (Deactivation : 22/04/2019)	13.4751	50/50	13.4751
315136	1ROSEMG1	4.2853	50/50	4.2853
315137	1ROSEMS1	2.6573	50/50	2.6573
315138	1ROSEMG2	2.0084	50/50	2.0084
315139	1GASTONA	6.4457	50/50	6.4457
315141	1GASTONB	6.4457	50/50	6.4457
315293	1DOMTR9	3.9969	Adder	4.7
315294	1DOMTR10	4.8981	Adder	5.76
315601	1CONETOE2SOL	1.5584	50/50	1.5584
315602	1HOLLOMANSOL	1.2830	50/50	1.2830
315606	3AA2-053SOLA	1.3781	50/50	1.3781
315607	3AA1-063SOLA	1.1475	50/50	1.1475
316020	AB2-059 C OP	1.7446	50/50	1.7446
316103	AB2-015 C	3.2649	Adder	3.84
316104	AB2-015 E	2.6772	Adder	3.15
316129	AC1-054 C	3.7303	Adder	4.39
316140	AB2-099 C (Suspended)	0.5027	50/50	0.5027
316141	AB2-099 E (Suspended)	0.2154	50/50	0.2154
900672	V4-068 E	0.2217	50/50	0.2217
917332	Z2-043 E	0.9745	50/50	0.9745
917342	Z2-044 E	0.5743	50/50	0.5743
917512	Z2-088 E OP1	9.2440	50/50	9.2440
918492	AA1-063AE OP	3.4294	50/50	3.4294
918512	AA1-065 E OP	3.6413	50/50	3.6413
918532	AA1-067 E	0.6289	50/50	0.6289
919692	AA2-053 E OP	3.5865	50/50	3.5865
919702	AA2-057 E OP	3.3585	50/50	3.3585
920042	AA2-088 E OP	5.7901	Adder	6.81
920591	AA2-165 C	0.1507	50/50	0.1507

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
920592	AA2-165 E	0.4616	50/50	0.4616
920692	AA2-178 E	1.8111	Adder	2.13
922922	AB1-081 C OP	1.4802	50/50	1.4802
922923	AB1-081 E OP	4.0210	50/50	4.0210
923262	AB1-132 C OP (Suspended)	31.1984	50/50	31.1984
923263	AB1-132 E OP (Suspended)	13.3708	50/50	13.3708
924152	AB2-059 E OP	5.6964	50/50	5.6964
925121	AB2-169 C	0.7606	50/50	0.7606
925122	AB2-169 E	4.3263	50/50	4.3263
925591	AC1-034 C	7.1623	50/50	7.1623
925592	AC1-034 E	5.4032	50/50	5.4032
925785	AC1-054 E	1.7185	Adder	2.02
926070	AC1-086 C	45.9434	50/50	45.9434
926071	AC1-086 E	20.9104	50/50	20.9104
926201	AC1-098 C	5.8961	50/50	5.8961
926202	AC1-098 E	3.5125	50/50	3.5125
926211	AC1-099 C	1.9758	50/50	1.9758
926212	AC1-099 E	1.1604	50/50	1.1604
927024	AC1-189 C	9.1421	50/50	9.1421
927025	AC1-189 E	4.5539	50/50	4.5539
927145	AC1-208 C	8.8075	50/50	8.8075
927146	AC1-208 E	3.8950	50/50	3.8950
932631	AC2-084 C	8.4050	50/50	8.4050
932632	AC2-084 E	4.1398	50/50	4.1398
933991	AD1-023 C	9.2859	50/50	9.2859
933992	AD1-023 E	5.0553	50/50	5.0553
934331	AD1-057 C O1	18.0326	50/50	18.0326
934332	AD1-057 E O1	9.6194	50/50	9.6194
934521	AD1-076 C	29.4730	Adder	34.67
934522	AD1-076 E	15.0076	Adder	17.66
936401	AD2-051 C O1	8.2520	50/50	8.2520
936402	AD2-051 E O1	3.5433	50/50	3.5433
938221	AE1-035 C	0.3208	50/50	0.3208
938222	AE1-035 E	1.0014	50/50	1.0014
940491	AE2-034 C	3.1694	Adder	3.73
940492	AE2-034 E	1.3583	Adder	1.6
940542	AE2-040 BAT	2.8642	50/50	2.8642
940571	AE2-044 C	4.6911	50/50	4.6911
940572	AE2-044 E	2.0105	50/50	2.0105
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1535	50/50	0.1535
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.5238	50/50	0.5238
943171	AE2-346 C	1.2065	50/50	1.2065
943172	AE2-346 E	0.5171	50/50	0.5171
943912	AF1-059 BAT	6.8210	Merchant Transmission	6.8210
944141	AF1-082	3.0157	50/50	3.0157
945711	AF1-236 C O1	34.6979	Adder	40.82
945712	AF1-236 E O1	21.4315	Adder	25.21
946012	AF1-266 BAT	15.1540	50/50	15.1540
957521	AF2-046 C	12.8463	50/50	12.8463

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957522	AF2-046 E	6.4617	50/50	6.4617
957531	AF2-047 C	7.5312	Adder	8.86
957532	AF2-047 E	3.7882	Adder	4.46
957861	AF2-080 C	8.3032	50/50	8.3032
957862	AF2-080 E	3.6808	50/50	3.6808
959511	AF2-242 C	5.8135	50/50	5.8135
959512	AF2-242 E	4.5216	50/50	4.5216
961091	AF2-400 C	0.1763	Adder	0.21
961092	AF2-400 E	0.2893	Adder	0.34
961671	AG1-007 C	1.5264	50/50	1.5264
961672	AG1-007 E	0.8524	50/50	0.8524
961681	AG1-008 C	12.8720	50/50	12.8720
961682	AG1-008 E	6.4360	50/50	6.4360
961931	AG1-036 C	1.1068	50/50	1.1068
961932	AG1-036 E	0.7379	50/50	0.7379
961941	AG1-037 C	0.4309	50/50	0.4309
961942	AG1-037 E	0.2873	50/50	0.2873
962331	AG1-082 C	1.7236	50/50	1.7236
962332	AG1-082 E	1.1490	50/50	1.1490
962341	AG1-083 C	1.7236	50/50	1.7236
962342	AG1-083 E	1.1490	50/50	1.1490
962351	AG1-084 C	1.5715	50/50	1.5715
962352	AG1-084 E	1.0477	50/50	1.0477
962361	AG1-085 C	1.5715	50/50	1.5715
962362	AG1-085 E	1.0477	50/50	1.0477
962571	AG1-106 C	12.7765	50/50	12.7765
962572	AG1-106 E	5.7940	50/50	5.7940
963312	AG1-180 BAT	1.5544	Merchant Transmission	1.5544
964491	AG1-312 C O1	16.5054	50/50	16.5054
964492	AG1-312 E O1	4.1264	50/50	4.1264
964501	AG1-313 C O2	4.3244	50/50	4.3244
964502	AG1-313 E O2	2.8829	50/50	2.8829
964801	AG1-343 C	4.0656	50/50	4.0656
964802	AG1-343 E	3.1944	50/50	3.1944
965291	AG1-394 C	0.6177	Adder	1.37
965292	AG1-394 E	0.4118	Adder	0.91
965631	AG1-431	10.6468	Adder	23.63
965691	AG1-437 C O1	7.7136	50/50	7.7136
965692	AG1-437 E O1	5.1424	50/50	5.1424
965701	AG1-438 C O1	7.7136	50/50	7.7136
965702	AG1-438 E O1	5.1424	50/50	5.1424
965711	AG1-439 C O1	27.9555	50/50	27.9555
965712	AG1-439 E O1	18.6370	50/50	18.6370
965721	AG1-440 C	1.3558	Adder	3.01
965722	AG1-440 E	0.9039	Adder	2.01
965731	AG1-441 C	1.3558	Adder	3.01
965732	AG1-441 E	0.9039	Adder	2.01
965741	AG1-442 O1	4.4996	50/50	4.4996
965751	AG1-443 O1	4.4996	50/50	4.4996
965761	AG1-444 O1	14.9096	50/50	14.9096
965771	AG1-445	0.7834	Adder	1.74
965781	AG1-446	0.7834	Adder	1.74

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966751	AG1-546 C	4.6287	Adder	10.27
966752	AG1-546 E	2.4836	Adder	5.51
966801	AG1-551 C	1.8784	50/50	1.8784
966802	AG1-551 E	0.8050	50/50	0.8050
966811	AG1-552 C	2.0352	50/50	2.0352
966812	AG1-552 E	0.8722	50/50	0.8722
966931	AG1-431A	7.9991	Adder	17.76
WEC	WEC	0.1496	Confirmed LTF	0.1496
LGEE	LGEE	0.3060	Confirmed LTF	0.3060
CPL	CPL	1.9649	Confirmed LTF	1.9649
CBM-W2	CBM-W2	6.7648	Confirmed LTF	6.7648
NY	NY	0.2085	Confirmed LTF	0.2085
TVA	TVA	1.2852	Confirmed LTF	1.2852
O-066	O-066	2.9276	Confirmed LTF	2.9276
SIGE	SIGE	0.1008	Confirmed LTF	0.1008
CBM-S2	CBM-S2	20.9113	Confirmed LTF	20.9113
CBM-S1	CBM-S1	0.3192	Confirmed LTF	0.3192
G-007	G-007	0.4599	Confirmed LTF	0.4599
MEC	MEC	0.9089	Confirmed LTF	0.9089
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	6.2529	Confirmed LTF	6.2529

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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
174674071	314623	3WITAKRS	DVP	313854	3CONSLDL	DVP	1	DVP_P1-3: 6CAROLNA-TX#4	single	165.44	104.44	106.5	DC	3.4

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	3.8222	80/20	3.8222
313719	3CHESTNUT	4.4841	80/20	4.4841
314572	3EMPORIA	0.1553	80/20	0.1553
314582	3KELFORD	0.4206	80/20	0.4206
314589	3MURPHYS	0.0452	80/20	0.0452
314623	3WITAKRS	0.9870	80/20	0.9870
315115	1S HAMPT1	0.5698	80/20	0.5698
315126	1ROARAP2	1.2111	80/20	1.2111
315128	1ROARAP4	1.1557	80/20	1.1557
315158	1KERR 1	0.1289	80/20	0.1289
315159	1KERR 2	0.3609	80/20	0.3609
315160	1KERR 3	0.3609	80/20	0.3609
315161	1KERR 4	0.3609	80/20	0.3609
315162	1KERR 5	0.3609	80/20	0.3609
315163	1KERR 6	0.3609	80/20	0.3609
315164	1KERR 7	0.3609	80/20	0.3609
315606	3AA2-053SOLA	1.2076	80/20	1.2076
315607	3AA1-063SOLA	1.0353	80/20	1.0353
315608	3AA2-088SOLA	0.5334	80/20	0.5334
316087	AB2-174 C	0.5482	80/20	0.5482
316103	AB2-015 C	3.1045	80/20	3.1045
316129	AC1-054 C	4.3588	80/20	4.3588
316140	AB2-099 C (Suspended)	0.2883	80/20	0.2883
920591	AA2-165 C	0.6020	80/20	0.6020
923991	AB2-040 C O1	4.1628	80/20	4.1628
925591	AC1-034 C	-4.6309	Adder	-5.45
926201	AC1-098 C	14.9870	80/20	14.9870
926211	AC1-099 C	5.0222	80/20	5.0222
927145	AC1-208 C	24.6763	80/20	24.6763
932631	AC2-084 C	21.3644	80/20	21.3644
936361	AD2-046 C O1	2.8063	80/20	2.8063
939181	AE1-148 C	2.7292	80/20	2.7292
940661	AE2-053 O1	1.0108	80/20	1.0108
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.0823	80/20	0.0823
943171	AE2-346 C	0.6919	80/20	0.6919
957521	AF2-046 C	8.7365	80/20	8.7365
961091	AF2-400 C	0.1676	80/20	0.1676
961681	AG1-008 C	8.7540	80/20	8.7540
961931	AG1-036 C	0.6868	80/20	0.6868
961941	AG1-037 C	0.2471	80/20	0.2471
962331	AG1-082 C	0.9884	80/20	0.9884

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962341	AG1-083 C	0.9884	80/20	0.9884
962351	AG1-084 C	0.8428	80/20	0.8428
962361	AG1-085 C	0.8428	80/20	0.8428
964501	AG1-313 C O2	3.3959	80/20	3.3959
964801	AG1-343 C	3.2161	80/20	3.2161
965291	AG1-394 C	1.1106	80/20	1.1106
965721	AG1-440 C	3.1667	80/20	3.1667
965731	AG1-441 C	3.1667	80/20	3.1667
965771	AG1-445	1.8296	80/20	1.8296
965781	AG1-446	1.8296	80/20	1.8296
966751	AG1-546 C	10.1242	80/20	10.1242
966811	AG1-552 C	1.9229	80/20	1.9229
G-007A	G-007A	0.1439	Confirmed LTF	0.1439
VFT	VFT	0.3806	Confirmed LTF	0.3806
CALDERWOOD	CALDERWOOD	0.2624	Confirmed LTF	0.2624
PRAIRIE	PRAIRIE	0.9066	Confirmed LTF	0.9066
CHEOAH	CHEOAH	0.2693	Confirmed LTF	0.2693
CBM-N	CBM-N	0.0684	Confirmed LTF	0.0684
COTTONWOOD	COTTONWOOD	0.9786	Confirmed LTF	0.9786
HAMLET	HAMLET	0.5937	Confirmed LTF	0.5937
GIBSON	GIBSON	0.1594	Confirmed LTF	0.1594
BLUEG	BLUEG	0.4896	Confirmed LTF	0.4896
TRIMBLE	TRIMBLE	0.1553	Confirmed LTF	0.1553
CATAWBA	CATAWBA	0.2831	Confirmed LTF	0.2831

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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
173863839	938770	AE1-103 TAP	DVP	314527	3HOLLAND	DVP	1	DVP_P4-2: 2202	breaker	335.0	123.73	124.3	DC	4.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	26.7645	50/50	26.7645
314541	3WATKINS	2.8546	50/50	2.8546
314589	3MURPHYS	0.2207	50/50	0.2207
315115	1S HAMPT1	5.9158	50/50	5.9158
315607	3AA1-063SOLA	4.7128	50/50	4.7128
315608	3AA2-088SOLA	3.6228	50/50	3.6228
316103	AB2-015 C	36.7470	50/50	36.7470
316104	AB2-015 E	30.1325	50/50	30.1325
316140	AB2-099 C (Suspended)	0.6183	50/50	0.6183
316141	AB2-099 E (Suspended)	0.2650	50/50	0.2650
900672	V4-068 E	0.7666	50/50	0.7666
918492	AA1-063AE OP	14.0849	50/50	14.0849
919692	AA2-053 E OP	1.7649	Adder	2.08
920042	AA2-088 E OP	37.4654	50/50	37.4654
938771	AE1-103 C	16.7647	50/50	16.7647
938772	AE1-103 E	23.1513	50/50	23.1513
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2745	Adder	0.32
943171	AE2-346 C	1.4839	50/50	1.4839
943172	AE2-346 E	0.6359	50/50	0.6359
957521	AF2-046 C	38.4230	50/50	38.4230
957522	AF2-046 E	19.3270	50/50	19.3270
961091	AF2-400 C	1.9843	50/50	1.9843
961092	AF2-400 E	3.2558	50/50	3.2558
961681	AG1-008 C	38.5000	50/50	38.5000
961682	AG1-008 E	19.2500	50/50	19.2500
961853	AG1-028 BAT	12.3516	50/50	12.3516
961931	AG1-036 C	2.2217	50/50	2.2217
961932	AG1-036 E	1.4811	50/50	1.4811
961941	AG1-037 C	0.5300	50/50	0.5300
961942	AG1-037 E	0.3533	50/50	0.3533
962331	AG1-082 C	2.1198	50/50	2.1198
962332	AG1-082 E	1.4132	50/50	1.4132
962341	AG1-083 C	2.1198	50/50	2.1198
962342	AG1-083 E	1.4132	50/50	1.4132
962351	AG1-084 C	0.4365	Adder	0.97
962352	AG1-084 E	0.2910	Adder	0.65
962361	AG1-085 C	0.4365	Adder	0.97
962362	AG1-085 E	0.2910	Adder	0.65
964501	AG1-313 C O2	1.1474	Adder	2.55
964502	AG1-313 E O2	0.7649	Adder	1.7
964801	AG1-343 C	19.6154	50/50	19.6154

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964802	AG1-343 E	15.4121	50/50	15.4121
965291	AG1-394 C	7.0424	50/50	7.0424
965292	AG1-394 E	4.6950	50/50	4.6950
WEC	WEC	0.0170	Confirmed LTF	0.0170
LGEE	LGEE	0.0352	Confirmed LTF	0.0352
CPL	CPL	0.3317	Confirmed LTF	0.3317
CBM-W2	CBM-W2	0.9408	Confirmed LTF	0.9408
NY	NY	0.0575	Confirmed LTF	0.0575
TVA	TVA	0.1890	Confirmed LTF	0.1890
O-066	O-066	0.7740	Confirmed LTF	0.7740
SIGE	SIGE	0.0187	Confirmed LTF	0.0187
CBM-S2	CBM-S2	3.4556	Confirmed LTF	3.4556
CBM-S1	CBM-S1	0.0460	Confirmed LTF	0.0460
G-007	G-007	0.1218	Confirmed LTF	0.1218
MEC	MEC	0.1144	Confirmed LTF	0.1144
LAGN	LAGN	0.2363	Confirmed LTF	0.2363
CBM-W1	CBM-W1	0.6870	Confirmed LTF	0.6870

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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
163260340	940480	AE2-033 TAP	DVP	314435	6SAPONY	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	164.37	165.65	DC	10.55

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
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
918512	AA1-065 E OP	3.1563	Adder	3.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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	7.9663	Adder	9.37
933992	AD1-023 E	4.3369	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
934522	AD1-076 E	15.0673	Adder	17.73
936265	AD2-033 C	7.3116	Adder	8.6

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
962271	AG1-075 C O2	67.4116	50/50	67.4116
962272	AG1-075 E O2	41.0834	50/50	41.0834
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962351	AG1-084 C	0.8099	Adder	1.8
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
962491	AG1-098 C O2	4.3424	Adder	9.64
962492	AG1-098 E O2	2.8949	Adder	6.43
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 O2	4.8852	Adder	10.84
963361	AG1-185 O2	2.3636	Adder	5.25
964491	AG1-312 C O1	7.5745	Adder	16.81
964492	AG1-312 E O1	1.8936	Adder	4.2
964501	AG1-313 C O2	6.3298	50/50	6.3298
964502	AG1-313 E O2	4.2199	50/50	4.2199
964801	AG1-343 C	2.6428	Adder	5.87
964802	AG1-343 E	2.0765	Adder	4.61
964931	AG1-357 C O2	6.6667	Adder	14.8
964932	AG1-357 E O2	4.4445	Adder	9.87
965291	AG1-394 C	0.9050	Adder	2.01
965292	AG1-394 E	0.6033	Adder	1.34
965451	AG1-413 C O2	10.6898	50/50	10.6898
965452	AG1-413 E O2	7.1265	50/50	7.1265
965591	AG1-427 C	4.0275	Adder	8.94
965592	AG1-427 E	2.6907	Adder	5.97
965601	AG1-428 C O2	8.9810	50/50	8.9810
965602	AG1-428 E O2	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
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
SIG	SIG	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

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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
168758459	957820	AF2-076 TAP	DVP	314537	6SUFFOLK	DVP	1	DVP_P1-2: LN 2092	single	571.52	185.18	186.28	DC	6.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	5.3764	80/20	5.3764
313527	AB2-043 C	0.1797	80/20	0.1797
313719	3CHESTNUT	1.2166	80/20	1.2166
314572	3EMPORIA	0.2919	80/20	0.2919
314582	3KELFORD	0.6058	80/20	0.6058
314589	3MURPHYS	0.0945	80/20	0.0945
314623	3WITAKRS	0.2162	80/20	0.2162
314704	3LAWRENC	0.1658	80/20	0.1658
315115	1S HAMPT1	0.4948	80/20	0.4948
315126	1ROARAP2	1.2875	80/20	1.2875
315128	1ROARAP4	1.2286	80/20	1.2286
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0045	80/20	9.0045
315136	1ROSEMG1	2.1445	80/20	2.1445
315137	1ROSEMS1	1.3298	80/20	1.3298
315138	1ROSEMG2	1.0051	80/20	1.0051
315139	1GASTONA	3.1370	80/20	3.1370
315141	1GASTONB	3.1370	80/20	3.1370
315158	1KERR 1	0.1949	80/20	0.1949
315159	1KERR 2	0.5458	80/20	0.5458
315160	1KERR 3	0.5458	80/20	0.5458
315161	1KERR 4	0.5458	80/20	0.5458
315162	1KERR 5	0.5458	80/20	0.5458
315163	1KERR 6	0.5458	80/20	0.5458
315164	1KERR 7	0.5458	80/20	0.5458
315292	1DOMTR78	2.6257	80/20	2.6257
315293	1DOMTR9	13.5803	80/20	13.5803
315294	1DOMTR10	16.6425	80/20	16.6425
315601	1CONETOE2SOL	1.7196	80/20	1.7196
315602	1HOLLOMAN SOL	3.2518	80/20	3.2518
315606	3AA2-053SOLA	1.6490	80/20	1.6490
315607	3AA1-063SOLA	1.1822	80/20	1.1822
315608	3AA2-088SOLA	0.6872	80/20	0.6872
315611	6Z1-036WIND	2.1843	80/20	2.1843
315614	AA2-178 C	3.1366	80/20	3.1366
316020	AB2-059 C OP	1.5978	80/20	1.5978
316087	AB2-174 C	0.8423	80/20	0.8423
316096	AB2-100 C1	0.5758	80/20	0.5758
316098	AB2-100 C2	0.5758	80/20	0.5758
316129	AC1-054 C	5.2403	80/20	5.2403

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316131	AB2-060 C	0.5087	80/20	0.5087
316140	AB2-099 C (Suspended)	1.0074	80/20	1.0074
920591	AA2-165 C	0.1633	80/20	0.1633
922922	AB1-081 C OP	1.3557	80/20	1.3557
923991	AB2-040 C O1	5.8555	80/20	5.8555
924301	AB2-077 C O1 (Suspended)	0.7260	80/20	0.7260
924311	AB2-078 C O1 (Suspended)	0.7260	80/20	0.7260
924321	AB2-079 C O1 (Suspended)	0.7260	80/20	0.7260
925121	AB2-169 C	1.8885	80/20	1.8885
925591	AC1-034 C	6.5600	80/20	6.5600
926070	AC1-086 C	22.3600	80/20	22.3600
926201	AC1-098 C	8.0404	80/20	8.0404
926211	AC1-099 C	2.6944	80/20	2.6944
927024	AC1-189 C	11.8698	80/20	11.8698
927145	AC1-208 C	10.1498	80/20	10.1498
932631	AC2-084 C	11.4618	80/20	11.4618
933991	AD1-023 C	28.1849	80/20	28.1849
934331	AD1-057 C O1	10.1494	80/20	10.1494
934521	AD1-076 C	113.8581	80/20	113.8581
936361	AD2-046 C O1	4.3133	80/20	4.3133
936401	AD2-051 C O1	19.8559	80/20	19.8559
936485	AD2-063 C	4.9383	80/20	4.9383
938221	AE1-035 C	0.8131	80/20	0.8131
939181	AE1-148 C	4.2098	80/20	4.2098
940481	AE2-033 C	4.4571	80/20	4.4571
940491	AE2-034 C	14.9108	80/20	14.9108
940571	AE2-044 C	4.2966	80/20	4.2966
940661	AE2-053 O1	1.5592	80/20	1.5592
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.3297	80/20	0.3297
942131	AE2-225 C	-1.0743	Adder	-1.26
942171	AE2-229 C	-0.8057	Adder	-0.95
942451	AE2-258	0.8499	80/20	0.8499
942471	AE2-260 C O1	8.2667	80/20	8.2667
943171	AE2-346 C	2.4178	80/20	2.4178
943611	AF1-032 C	-0.8773	Adder	-1.03
943911	AF1-059	8.1959	80/20	8.1959
944141	AF1-082	2.7621	80/20	2.7621
945711	AF1-236 C O1	163.2382	80/20	163.2382
946281	AF1-292 C	0.9810	80/20	0.9810
957491	AF2-043 C	-1.0743	Adder	-1.26
957521	AF2-046 C	20.4271	80/20	20.4271
957531	AF2-047 C	35.4310	80/20	35.4310
957821	AF2-076 C	25.4541	80/20	25.4541
957861	AF2-080 C	10.7806	80/20	10.7806
959511	AF2-242 C	13.0307	80/20	13.0307
960081	AF2-299 C	1.6533	80/20	1.6533
961671	AG1-007 C	1.4833	80/20	1.4833
961681	AG1-008 C	20.4680	80/20	20.4680
961931	AG1-036 C	2.0158	80/20	2.0158

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961941	AG1-037 C	0.8635	80/20	0.8635
962271	AG1-075 C O2	4.6675	80/20	4.6675
962331	AG1-082 C	3.4540	80/20	3.4540
962341	AG1-083 C	3.4540	80/20	3.4540
962351	AG1-084 C	3.3758	80/20	3.3758
962361	AG1-085 C	3.3758	80/20	3.3758
962491	AG1-098 C O2	4.3132	80/20	4.3132
962571	AG1-106 C	6.2181	80/20	6.2181
963301	AG1-179 C	3.0738	80/20	3.0738
963311	AG1-180	1.4976	80/20	1.4976
964491	AG1-312 C O1	42.7392	80/20	42.7392
964501	AG1-313 C O2	6.2746	80/20	6.2746
964801	AG1-343 C	4.7135	80/20	4.7135
964931	AG1-357 C O2	6.6084	80/20	6.6084
965291	AG1-394 C	1.4894	80/20	1.4894
965451	AG1-413 C O2	3.3660	80/20	3.3660
965591	AG1-427 C	3.9944	80/20	3.9944
965601	AG1-428 C O2	2.5661	80/20	2.5661
965631	AG1-431	94.5063	80/20	94.5063
965691	AG1-437 C O1	22.1316	80/20	22.1316
965701	AG1-438 C O1	22.1316	80/20	22.1316
965711	AG1-439 C O1	30.8475	80/20	30.8475
965721	AG1-440 C	4.2890	80/20	4.2890
965731	AG1-441 C	4.2890	80/20	4.2890
965741	AG1-442 O1	12.9101	80/20	12.9101
965751	AG1-443 O1	12.9101	80/20	12.9101
965761	AG1-444 O1	16.4520	80/20	16.4520
965771	AG1-445	2.4781	80/20	2.4781
965781	AG1-446	2.4781	80/20	2.4781
966621	AG1-532 C	0.8928	80/20	0.8928
966751	AG1-546 C	11.9536	80/20	11.9536
966801	AG1-551 C	3.8374	80/20	3.8374
966811	AG1-552 C	2.0442	80/20	2.0442
966931	AG1-431A	71.0040	80/20	71.0040
WEC	WEC	0.3330	Confirmed LTF	0.3330
LGEE	LGEE	0.6786	Confirmed LTF	0.6786
CPL	CPL	3.7381	Confirmed LTF	3.7381
CBM-W2	CBM-W2	14.1299	Confirmed LTF	14.1299
NY	NY	0.3019	Confirmed LTF	0.3019
TVA	TVA	2.6320	Confirmed LTF	2.6320
SIGE	SIGE	0.1896	Confirmed LTF	0.1896
CBM-S2	CBM-S2	40.4863	Confirmed LTF	40.4863
CBM-S1	CBM-S1	0.6593	Confirmed LTF	0.6593
MEC	MEC	1.9656	Confirmed LTF	1.9656
LAGN	LAGN	3.2847	Confirmed LTF	3.2847
AA2-074	AA2-074	2.4687	LTF	2.4687
CBM-W1	CBM-W1	14.0621	Confirmed LTF	14.0621

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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
173863789	961850	AG1-027 TAP	DVP	314536	3SUFFOLK	DVP	1	DVP_P4-2: 2202	breaker	349.0	148.4	148.94	DC	4.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	26.7645	50/50	26.7645
314541	3WATKINS	2.8546	50/50	2.8546
314589	3MURPHYS	0.2207	50/50	0.2207
315115	1S HAMPT1	5.9158	50/50	5.9158
315607	3AA1-063SOLA	4.7128	50/50	4.7128
315608	3AA2-088SOLA	3.6228	50/50	3.6228
316103	AB2-015 C	36.7470	50/50	36.7470
316104	AB2-015 E	30.1325	50/50	30.1325
316140	AB2-099 C (Suspended)	0.6183	50/50	0.6183
316141	AB2-099 E (Suspended)	0.2650	50/50	0.2650
900672	V4-068 E	0.7666	50/50	0.7666
918492	AA1-063AE OP	14.0849	50/50	14.0849
919692	AA2-053 E OP	1.7649	Adder	2.08
920042	AA2-088 E OP	37.4654	50/50	37.4654
938771	AE1-103 C	16.7647	50/50	16.7647
938772	AE1-103 E	23.1513	50/50	23.1513
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2745	Adder	0.32
943171	AE2-346 C	1.4839	50/50	1.4839
943172	AE2-346 E	0.6359	50/50	0.6359
957521	AF2-046 C	38.4230	50/50	38.4230
957522	AF2-046 E	19.3270	50/50	19.3270
961091	AF2-400 C	1.9843	50/50	1.9843
961092	AF2-400 E	3.2558	50/50	3.2558
961681	AG1-008 C	38.5000	50/50	38.5000
961682	AG1-008 E	19.2500	50/50	19.2500
961851	AG1-027 C	86.6570	50/50	86.6570
961852	AG1-027 E	47.9035	50/50	47.9035
961931	AG1-036 C	2.2217	50/50	2.2217
961932	AG1-036 E	1.4811	50/50	1.4811
961941	AG1-037 C	0.5300	50/50	0.5300
961942	AG1-037 E	0.3533	50/50	0.3533
962331	AG1-082 C	2.1198	50/50	2.1198
962332	AG1-082 E	1.4132	50/50	1.4132
962341	AG1-083 C	2.1198	50/50	2.1198
962342	AG1-083 E	1.4132	50/50	1.4132
962351	AG1-084 C	0.4365	Adder	0.97
962352	AG1-084 E	0.2910	Adder	0.65
962361	AG1-085 C	0.4365	Adder	0.97
962362	AG1-085 E	0.2910	Adder	0.65
964501	AG1-313 C O2	1.1474	Adder	2.55
964502	AG1-313 E O2	0.7649	Adder	1.7

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964801	AG1-343 C	19.6154	50/50	19.6154
964802	AG1-343 E	15.4121	50/50	15.4121
965291	AG1-394 C	7.0424	50/50	7.0424
965292	AG1-394 E	4.6950	50/50	4.6950
WEC	WEC	0.0170	Confirmed LTF	0.0170
LGEE	LGEE	0.0352	Confirmed LTF	0.0352
CPLE	CPLE	0.3317	Confirmed LTF	0.3317
CBM-W2	CBM-W2	0.9408	Confirmed LTF	0.9408
NY	NY	0.0575	Confirmed LTF	0.0575
TVA	TVA	0.1890	Confirmed LTF	0.1890
O-066	O-066	0.7740	Confirmed LTF	0.7740
SIGE	SIGE	0.0187	Confirmed LTF	0.0187
CBM-S2	CBM-S2	3.4556	Confirmed LTF	3.4556
CBM-S1	CBM-S1	0.0460	Confirmed LTF	0.0460
G-007	G-007	0.1218	Confirmed LTF	0.1218
MEC	MEC	0.1144	Confirmed LTF	0.1144
LAGN	LAGN	0.2363	Confirmed LTF	0.2363
CBM-W1	CBM-W1	0.6870	Confirmed LTF	0.6870

13.6 Contingency Descriptions - Secondary POI

Contingency Name	Contingency Definition
DVP_P1-2: LN 136	CONTINGENCY 'DVP_P1-2: LN 136' / 320 OPEN BRANCH FROM BUS 314551 TO BUS 314568 CKT 1 / 314551 3AHOSKIE 115 314568 3EARLEYS 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 314617 CKT 1 / 314551 3AHOSKIE 115 314617 3TUNIS 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 316140 CKT 1 / 314551 3AHOSKIE 115 316140 AB2-099 C 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 943171 CKT 1 / 314551 3AHOSKIE 115 943171 AE2-346 C 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 961941 CKT 1 / 314551 3AHOSKIE 115 961941 AG1-037 C 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 962331 CKT 1 / 314551 3AHOSKIE 115 962331 AG1-082 C 115 1 OPEN BRANCH FROM BUS 314551 TO BUS 962341 CKT 1 / 314551 3AHOSKIE 115 962341 AG1-083 C 115 1 OPEN BRANCH FROM BUS 316140 TO BUS 316141 CKT 1 / 316140 AB2-099 C 115 316141 AB2-099 E 115 1 END
DVP_P7-1: LN 22-90	CONTINGENCY 'DVP_P7-1: LN 22-90' /*. OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 314571 TO BUS 316125 CKT 1 /* 3EATON F 115.00 - AC1- 054 TAP 115.00 OPEN BRANCH FROM BUS 314702 TO BUS 316125 CKT 1 /* 3KERR 115.00 - AC1-054 TAP 115.00 OPEN BUS 314571 /* ISLAND: 3EATON F 115.00 OPEN BUS 316125 /* ISLAND: AC1-054 TAP 115.00 OPEN BUS 316126 /* ISLAND: AC1-054 MAIN115.00 OPEN BUS 316127 /* ISLAND: AC1-054 COL222.860 OPEN BUS 316128 /* ISLAND: AC1-054 COL122.860 OPEN BUS 316129 /* ISLAND: AC1-054 C 0.3850 OPEN BUS 925785 /* ISLAND: AC1-054 E 0.3850 OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END

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
PL:08:P22:102799	CONTINGENCY 'PL:08:P22:102799' /* HUMMEL STATION 500KV BUS DISCONNECT BUS 200080 /* /* SUNB TR#25 END
DVP_P1-3: 6CAROLNA-TX#4	CONTINGENCY 'DVP_P1-3: 6CAROLNA-TX#4' / 684 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 / 314559 3CAROLNA 115 314561 6CAROLNA 230 1 END
DVP_P4-2: L5T68	CONTINGENCY 'DVP_P4-2: L5T68' / 388 OPEN BRANCH FROM BUS 314536 TO BUS 961850 CKT 1 / 314536 3SUFFOLK 115 961850 AG1-027 TAP 115 1 OPEN BRANCH FROM BUS 314537 TO BUS 314536 CKT 2 / 314537 6SUFFOLK 230 314536 3SUFFOLK 115 2 END

Contingency Name	Contingency Definition
DVP_P4-2: 217162	CONTINGENCY 'DVP_P4-2: 217162' / 427 OPEN BRANCH FROM BUS 313709 TO BUS 313710 CKT 1 / 313709 6HOLLOMAN 230 313710 1HOLLOMAN 34.5 1 OPEN BRANCH FROM BUS 313709 TO BUS 313710 CKT 2 / 313709 6HOLLOMAN 230 313710 1HOLLOMAN 34.5 2 OPEN BRANCH FROM BUS 313709 TO BUS 314569 CKT Z1 / 313709 6HOLLOMAN 230 314569 6EARLEYS 230 Z1 OPEN BRANCH FROM BUS 313710 TO BUS 315602 CKT 1 / 313710 1HOLLOMAN 34.5 315602 1HOLLOMAN SOL 0.69 1 OPEN BRANCH FROM BUS 315602 TO BUS 918512 CKT 1 / 315602 1HOLLOMAN SOL 0.69 918512 AA1-065 E OP 0.69 1 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 2 / 314568 3EARLEYS 115 314569 6EARLEYS 230 2 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
DVP_P7-1: LN 81-2056-A	CONTINGENCY 'DVP_P7-1: LN 81-2056-A' /*. OPEN BRANCH FROM BUS 313858 TO BUS 927140 CKT 1 /* 3SO JUSTICE 115.00 - AC1-208 TAP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314578 CKT 1 /* 3CAROLNA 115.00 - 3HORNRTN 115.00 OPEN BRANCH FROM BUS 314578 TO BUS 314598 CKT 1 /* 3HORNRTN 115.00 - 3ROAN DP 115.00 OPEN BRANCH FROM BUS 314598 TO BUS 314628 CKT 1 /* 3ROAN DP 115.00 - 3DARLNGT DP115.00 OPEN BRANCH FROM BUS 314628 TO BUS 927140 CKT 1 /* 3DARLNGT DP115.00 - AC1-208 TAP 115.00 OPEN BUS 314578 /* ISLAND: 3HORNRTN 115.00 OPEN BUS 314598 /* ISLAND: 3ROAN DP 115.00 OPEN BUS 314628 /* ISLAND: 3DARLNGT DP115.00 OPEN BUS 927140 /* ISLAND: AC1-208 TAP 115.00 OPEN BUS 927141 /* ISLAND: AC1-208 MAIN115.00 OPEN BUS 927142 /* ISLAND: AC1-208 XFLV34.500 OPEN BUS 927143 /* ISLAND: AC1-208 XFTR0.3850 OPEN BUS 927144 /* ISLAND: AC1-208 COL 34.500 OPEN BUS 927145 /* ISLAND: AC1-208 C 0.3850 OPEN BUS 927146 /* ISLAND: AC1-208 E 0.3850 OPEN BRANCH FROM BUS 934330 TO BUS 314579 CKT 1 /* AD1-057 TAP 230.00 - 6HORNRTN 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 246-B	CONTINGENCY 'DVP_P1-2: LN 246-B' OPEN BRANCH FROM BUS 957820 TO BUS 314575 CKT 1 /* AF2-076 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 END
DVP_P4-2: 201262	CONTINGENCY 'DVP_P4-2: 201262' / 173 OPEN BRANCH FROM BUS 314569 TO BUS 936400 CKT 1 / 314569 6EARLEYS 230 936400 AD2-051 TAP 230 1 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 / 314568 3EARLEYS 115 314569 6EARLEYS 230 1 END
DVP_P1-2: LN 1028	CONTINGENCY 'DVP_P1-2: LN 1028' / 38 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 / 313722 3OCCONEECHEE 115 314559 3CAROLNA 115 1 END
DVP_P1-2: LN 2181	CONTINGENCY 'DVP_P1-2: LN 2181' 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
DVP_P1-2: LN 2201	CONTINGENCY 'DVP_P1-2: LN 2201' / 187 OPEN BRANCH FROM BUS 313725 TO BUS 314563 CKT 1 / 313725 6DRY BREAD 230 314563 6CLUBHSE 230 1 END

Contingency Name	Contingency Definition
PL:11:P22:000176	CONTINGENCY 'PL:11:P22:000176' /* BEPO BUS (STCI BUS ON PSSE) DISCONNECT BRANCH FROM BUS 200043 TO BUS 200050 CKT 1 /* STEELCTY-BETH CT7 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200049 CKT 1 /* STEELCTY-BETH CT6 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200048 CKT 1 /* STEELCTY-BETH CT5 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200046 CKT 1 /* STEELCTY-BETH CT3 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200045 CKT 1 /* STEELCTY-BETH CT2 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200044 CKT 1 /* STEELCTY-BETH CT1 500-13.8 DISCONNECT BRANCH FROM BUS 200043 TO BUS 200047 CKT 1 /* STEELCTY-BETH CT4 500-13.8 END
PL:08:P22:102801	CONTINGENCY 'PL:08:P22:102801' /* FREEDOM 500KV BUS DISCONNECT BUS 200082 /* /* FRDM BUS END
DVP_P1-2: LN 238-B	CONTINGENCY 'DVP_P1-2: LN 238-B' / 796 OPEN BRANCH FROM BUS 314563 TO BUS 940480 CKT 1 / 314563 6CLUBHSE 230 940480 AE2-033 TAP 230 1 OPEN BRANCH FROM BUS 314562 TO BUS 314563 CKT 1 / 314562 3CLUBHSE 115 314563 6CLUBHSE 230 1 END

Contingency Name	Contingency Definition
DVP_P4-2: 2202	CONTINGENCY 'DVP_P4-2: 2202' / 226 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 / 314559 3CAROLNA 115 314571 3EATON F 115 1 OPEN BRANCH FROM BUS 314571 TO BUS 316125 CKT 1 / 314571 3EATON F 115 316125 AC1-054 TAP 115 1 OPEN BRANCH FROM BUS 314702 TO BUS 316125 CKT 1 / 314702 3KERR 115 316125 AC1-054 TAP 115 1 OPEN BRANCH FROM BUS 314571 TO BUS 966751 CKT 1 / 314571 3EATON F 115 966751 AG1-546 C 115 1 OPEN BRANCH FROM BUS 316125 TO BUS 316126 CKT 1 / 316125 AC1-054 TAP 115 316126 AC1-054 MAIN 115 1 OPEN BRANCH FROM BUS 316126 TO BUS 316127 CKT 1 / 316126 AC1-054 MAIN 115 316127 AC1-054 COL2 22.9 1 OPEN BRANCH FROM BUS 316127 TO BUS 316128 CKT 1 / 316127 AC1-054 COL2 22.9 316128 AC1-054 COL1 22.9 1 OPEN BRANCH FROM BUS 316128 TO BUS 316129 CKT 1 / 316128 AC1-054 COL1 22.9 316129 AC1-054 C 0.38 1 OPEN BRANCH FROM BUS 316129 TO BUS 925785 CKT 1 / 316129 AC1-054 C 0.38 925785 AC1-054 E 0.38 1 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 / 313722 3OCCONEECHEE 115 314559 3CAROLNA 115 1 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 / 313723 3PECAN 115 314559 3CAROLNA 115 1 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 / 314559 3CAROLNA 115 314835 3CAROL_1 115 1 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 / 314559 3CAROLNA 115 314600 3PLHITP 115 1 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 / 314559 3CAROLNA 115 314561 6CAROLNA 230 1 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
DVP_P4-2: 246T247	CONTINGENCY 'DVP_P4-2: 246T247' /* SUFFOLK 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - AF2- 076 TAP 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 966490 CKT 1 /* 6SUFFOLK 230.00 - AG1- 518 TAP 230.00 END

Contingency Name	Contingency Definition
AEP_P2-2_#1377_05J.FERR 765_1	CONTINGENCY 'AEP_P2-2_#1377_05J.FERR 765_1' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
DVP_P1-3: 6EARLEYS-TX#3	CONTINGENCY 'DVP_P1-3: 6EARLEYS-TX#3' / 299 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 / 314568 3EARLEYS 115 314569 6EARLEYS 230 1 END
DVP_P1-3: 6EARLEYS-TX#4	CONTINGENCY 'DVP_P1-3: 6EARLEYS-TX#4' / 414 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 2 / 314568 3EARLEYS 115 314569 6EARLEYS 230 2 END
DVP_P1-2: LN 68-A	CONTINGENCY 'DVP_P1-2: LN 68-A' / 353 OPEN BRANCH FROM BUS 313737 TO BUS 314527 CKT 1 / 313737 3COPELD DP 115 314527 3HOLLAND 115 1 OPEN BRANCH FROM BUS 313737 TO BUS 961850 CKT 1 / 313737 3COPELD DP 115 961850 AG1-027 TAP 115 1 OPEN BRANCH FROM BUS 314527 TO BUS 938770 CKT 1 / 314527 3HOLLAND 115 938770 AE1-103 TAP 115 1 END
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 2058	CONTINGENCY 'DVP_P1-2: LN 2058' 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 END
DVP_P1-2: LN 2092	CONTINGENCY 'DVP_P1-2: LN 2092' OPEN BRANCH FROM BUS 313714 TO BUS 314662 CKT 1 /* 6PERQUIMANS 230.00 - 6S HERTFORD 230.00 OPEN BRANCH FROM BUS 314651 TO BUS 314662 CKT 1 /* 6WINFALL 230.00 - 6S HERTFORD 230.00 OPEN BUS 314662 /* ISLAND: 6S HERTFORD 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2012-B	CONTINGENCY 'DVP_P1-2: LN 2012-B' / 1410 OPEN BRANCH FROM BUS 314569 TO BUS 936400 CKT 1 / 314569 6EARLEYS 230 936400 AD2-051 TAP 230 1 END
DVP_P4-2: 201462	CONTINGENCY 'DVP_P4-2: 201462' / 2849 OPEN BRANCH FROM BUS 313857 TO BUS 314569 CKT 1 / 313857 6WINDSORDP 230 314569 6EARLEYS 230 1 OPEN BRANCH FROM BUS 313857 TO BUS 314574 CKT 1 / 313857 6WINDSORDP 230 314574 6EVERETS 230 1 OPEN BRANCH FROM BUS 314552 TO BUS 313857 CKT 1 / 314552 3WINDSORDP 115 313857 6WINDSORDP 230 1 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 2 / 314568 3EARLEYS 115 314569 6EARLEYS 230 2 END
DVP_P4-2: 24972-4	CONTINGENCY 'DVP_P4-2: 24972-4' / 1024 OPEN BRANCH FROM BUS 314282 TO BUS 314285 CKT 1 / 314282 6CARSON 230 314285 6CHRL249 230 1 OPEN BRANCH FROM BUS 314285 TO BUS 314316 CKT 1 / 314285 6CHRL249 230 314316 6LOCKS 230 1 OPEN BRANCH FROM BUS 314314 TO BUS 314316 CKT 2 / 314314 3LOCKS 115 314316 6LOCKS 230 2 OPEN BRANCH FROM BUS 314902 TO BUS 314282 CKT 1 / 314902 8CARSON 500 314282 6CARSON 230 1 OPEN BRANCH FROM BUS 314282 TO BUS 314455 CKT 1 / 314282 6CARSON 230 314455 6CARSO_1 230 1 END
DVP_P4-2: 2058T2167	CONTINGENCY 'DVP_P4-2: 2058T2167' /* HATHAWAY 230 KV 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 BRANCH FROM BUS 313845 TO BUS 314564 CKT 1 /* 6HATHAWAY 230.00 - 6EDGECOM 230.00 END

14 Affected Systems

14.1 TVA

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

14.2 Duke Energy Progress

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

15 Attachment 1: One Line Diagram