Generation Interconnection

Feasibility Study Report

for

Queue Project AG1-445

PALMER SPRING 115 KV

26 MW Capacity / 26 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.

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

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

3 General

The Interconnection Customer (IC) has proposed an uprate to a planned/existing Storage generating facility located in Mecklenburg, Virginia. This project is an increase to the Interconnection Customer's AG1-440 project, which will share the same point of interconnection. The AG1-445 queue position is a 26 MW battery storage uprate (26 MW Capacity uprate) to the previous project. The total installed facilities will have a capability of 101 MW with 71 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this uprate project is December 31, 2023. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-445
Project Name	PALMER SPRING 115 KV
State	Virginia
County	Mecklenburg
Transmission Owner	Dominion
MFO	101
MWE	26
MWC	26
Fuel	Storage
Basecase Study Year	2024

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

4 Point of Interconnection

AG1-445 will interconnect with the Dominion transmission system as an uprate to AG1-440 which is a direct connection at the Palmer Springs 115 kV substation.

5 Cost Summary

The AG1-445 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	$0
Total System Network Upgrade Costs	$64,332,450[1]
Total Costs	$64,332,450

This cost excludes a Federal Income Tax Gross Up charges. This tax may or may not be charged based on whether this project meets the eligibility requirements of IRS Notice 2016-36, 2016-25 I.R.B. (6/20/2016). If at a future date it is determined that the Federal Income Tax Gross charge is required, the Transmission Owner shall be reimbursed by the Interconnection Customer for such taxes.

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

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

6 Transmission Owner Scope of Work

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of AG1-445 to the Dominion Transmission System is detailed in the following sections. The associated one-line showing the generation project attachment facilities and primary direct and non-direct connection is shown in Attachment 1.

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

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

Description	Total Cost
Total Physical Interconnection Costs	$0

AG1-445 "Palmer Spring 115 kV" will interconnect with the Dominion transmission system as an uprate to AG1-440, sharing the POI and Attachment Facilities.

As AG1-445 is sharing the POI and Attachment Facilities with AG1-440, there are no associated interconnection costs for this project. Should the AG1-440 project withdraw from the Interconnection Queue,the AG1-445 project will assume the Attachment, Direct Connection, and Non-Direct Connection costs identified in the AG1-440 study report for connection to the Dominion system.

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

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

7 Schedule

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

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

These schedules will be more cleary identified in future study phases.

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

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-445 for compliance with NERC Reliability Criteria on the Dominion Transmission System. The system was assessed using the summer 2024 AG1 case provided to Dominion by PJM.

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

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

8.1 Power Flow Analysis

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

9 Interconnection Customer Requirements

9.1 System Protection

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

9.2 Compliance Issues and Interconnection Customer Requirements

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

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

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

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

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

9.3 Power Factor Requirements

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

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

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

10.2 Interconnected Transmission Owner Requirements

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

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

11 Summer Peak - Load Flow Analysis

The Queue Project AG1-445 was evaluated as a 26 MW (Capacity 26.0 MW) injection as an uprate to AG1-440 which is a direct connection at the Palmer Springs 115 kV substation in the Dominion area. Project AG1-445 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-445 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)

None

11.2 Multiple Facility Contingency

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
166985333	314681	3CHASCTY	115.0	DVP	314781	3BLACKBR	115.0	DVP	1	DVP_P7-1: LN 137-1041	tower	301.0	99.95	101.06	DC	3.35
166985335	314869	3BURLING	115.0	DVP	314682	3BUGGS I	115.0	DVP	1	DVP_P7-1: LN 137-1041	tower	301.0	99.22	100.33	DC	3.35

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
166985300	313705	3KERRDP	115.0	DVP	314702	3KERR	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	195.0	116.66	119.96	DC	6.45
168528920	313825	3PLYWOOD	115.0	DVP	314696	3SEDGE HILL	115.0	DVP	1	DVP_P1-2: LN 33	single	141.0	129.72	132.19	DC	3.49
168528922	313825	3PLYWOOD	115.0	DVP	314696	3SEDGE HILL	115.0	DVP	1	DVP_P1-2: LN 45	single	141.0	113.88	116.53	DC	3.74
169039804	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	single	239.888000488	143.66	145.77	DC	5.05
169039805	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 140	single	239.888000488	138.1	140.21	DC	5.05
169039806	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	single	226.539993286	117.21	119.29	DC	4.69
169039749	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	single	182.641998291	232.86	234.53	DC	3.05

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
169039751	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	176.81401062	171.93	173.41	DC	2.61
166985328	314665	3CLRK TAP	115.0	DVP	314699	3ISLND C	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	208.0	110.23	113.33	DC	6.45
166985332	314681	3CHASCTY	115.0	DVP	314781	3BLACKBR	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	116.05	117.16	DC	3.35
166985322	314682	3BUGGS I	115.0	DVP	314665	3CLRK TAP	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	208.0	111.58	114.68	DC	6.45
166985330	314683	3CLRKVILLE	115.0	DVP	314869	3BURLING	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	116.42	117.53	DC	3.35
166985331	314683	3CLRKVILLE	115.0	DVP	314869	3BURLING	115.0	DVP	1	DVP_P7-1: LN 137-1041	tower	301.0	100.32	101.43	DC	3.35
169251123	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P1-2: LN 235-A	single	182.641998291	321.21	322.85	DC	2.99
169251126	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	single	176.81401062	196.01	197.05	DC	1.84
169251134	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298	single	198.057998657	220.87	222.05	DC	2.34
169251193	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-3: 6SEDGE HILL-TX#2	single	226.727996826	171.42	173.0	DC	3.58
169251195	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-2: LN 31-A	single	226.727996826	127.56	128.72	DC	2.63
169251209	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	2	DVP_P1-3: 6SEDGE HILL-TX#1	single	256.055999756	151.33	152.72	DC	3.57
169251211	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	2	DVP_P1-2: LN 31-A	single	256.055999756	111.83	112.85	DC	2.6
166985312	314699	3ISLND C	115.0	DVP	313705	3KERRDP	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	202.0	113.51	116.7	DC	6.45
163844033	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P4-6: CAROLIN T122	breaker	199.0	227.5	232.07	DC	9.26
163844034	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P4-2: 13002	breaker	199.0	186.82	190.55	DC	7.4
163844035	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P4-2: 102802	breaker	199.0	186.82	190.55	DC	7.4
163844246	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P1-2: LN 90	single	199.0	142.25	146.04	DC	7.55
163844247	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	Base Case	single	191.0	132.54	135.58	DC	5.81
163844908	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P7-1: LN 22-90	tower	199.0	223.57	228.11	DC	9.22

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
166985310	314781	3BLACKBR	115.0	DVP	314788	3JONESTO	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	120.41	121.52	DC	3.35
166985311	314781	3BLACKBR	115.0	DVP	314788	3JONESTO	115.0	DVP	1	DVP_P7-1: LN 137-1041	tower	301.0	104.31	105.42	DC	3.35
166985316	314788	3JONESTO	115.0	DVP	314683	3CLRKVILLE	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	119.05	120.16	DC	3.35
166985317	314788	3JONESTO	115.0	DVP	314683	3CLRKVILLE	115.0	DVP	1	DVP_P7-1: LN 137-1041	tower	301.0	102.94	104.05	DC	3.35
166985334	314869	3BURLING	115.0	DVP	314682	3BUGGS I	115.0	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	115.33	116.44	DC	3.35

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
168528986	313755	3FLAT CREEK	115.0	DVP	314701	3LONEPN	115.0	DVP	1	DVP_P1-2: LN 1012-E	operation	203.979995728	129.56	130.17	DC	2.35
168528919	313825	3PLYWOOD	115.0	DVP	314696	3SEDGE HILL	115.0	DVP	1	DVP_P1-2: LN 33	operation	141.0	136.39	137.51	DC	3.49
169039801	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P1-2: LN 68-A	operation	239.888000488	193.89	196.0	DC	5.05
169039803	314559	3CAROLNA	115.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operation	226.539993286	147.36	149.43	DC	4.69
169040002	314561	6CAROLNA	230.0	DVP	314559	3CAROLNA	115.0	DVP	1	DVP_P1-2: LN 2201	operation	239.888000488	103.74	105.5	DC	4.2
169039747	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 2201	operation	182.641998291	289.9	291.57	DC	3.05
169039748	314562	3CLUBHSE	115.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	176.81401062	231.33	232.81	DC	2.61
169251379	314673	3PALMERSPRNG	115.0	DVP	314702	3KERR	115.0	DVP	1	DVP_P1-2: LN 90	operation	138.179992676	98.64	117.46	DC	26.0

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
169251121	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	DVP_P1-2: LN 235-A	operation	182.641998291	480.34	481.08	DC	2.99
169251124	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	2	Base Case	operation	176.81401062	303.35	303.82	DC	1.84
169251132	314691	3FARMVIL	115.0	DVP	314692	6FARMVIL	230.0	DVP	1	DVP_P1-2: LN 298	operation	198.057998657	359.17	359.71	DC	2.34
169251371	314691	3FARMVIL	115.0	DVP	314707	3MORAN	115.0	DVP	1	DVP_P1-2: LN 1012-E	operation	203.979995728	132.94	133.55	DC	2.35
169251191	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	1	DVP_P1-3: 6SEDGE HILL-TX#2	operation	226.727996826	249.5	250.21	DC	3.58
169251207	314696	3SEDGE HILL	115.0	DVP	314697	6SEDGE HILL	230.0	DVP	2	DVP_P1-3: 6SEDGE HILL-TX#1	operation	256.055999756	220.26	220.88	DC	3.57
163844241	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	DVP_P1-2: LN 90	operation	199.0	183.57	187.33	DC	7.55
163844242	314702	3KERR	115.0	DVP	304102	3GW KING TAP	115.0	CPLE	1	Base Case	operation	191.0	171.09	174.1	DC	5.81
169251315	314702	3KERR	115.0	DVP	314673	3PALMERSPRNG	115.0	DVP	1	DVP_P1-2: LN 45	operation	138.179992676	135.11	147.96	DC	17.71
169251317	314702	3KERR	115.0	DVP	314673	3PALMERSPRNG	115.0	DVP	1	Base Case	operation	120.319999695	103.88	119.59	DC	18.88
168528989	314707	3MORAN	115.0	DVP	313755	3FLAT CREEK	115.0	DVP	1	DVP_P1-2: LN 1012-E	operation	203.979995728	129.56	130.17	DC	2.35
169757153	939180	AE1-148 TAP	115.0	DVP	314702	3KERR	115.0	DVP	1	DVP_P1-2: LN 1026	operation	325.804016113	99.45	100.95	DC	4.88
169757154	939180	AE1-148 TAP	115.0	DVP	314702	3KERR	115.0	DVP	1	DVP_P1-2: LN 171	operation	325.804016113	99.45	100.95	DC	4.88

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
169251134	11	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 1	**DVP** **dom-089 (924) : Add additional 230/115 kV transformer at Farmville substation** **Project Type : CON** **Cost : $6,000,000** **Time Estimate : 16-18 Months**	$6,000,000
169251123,169251126	10	3FARMVIL 115.0 kV - 6FARMVIL 230.0 kV Ckt 2		
166985300	3	3KERRDP 115.0 kV - 3KERR 115.0 kV Ckt 1	**DVP** **dom-263 (1139) : Reconductor 9.4 miles of 115 kV line 193 from Kerr DP to Kerr Dam with 636 ACSR 150 C** **Project Type : FAC** **Cost : $5,640,000** **Time Estimate : 30-36 Months**	$5,640,000

ID	Idx	Facility	Upgrade Description	Cost
168528920,168528922	4	3PLYWOOD 115.0 kV - 3SEDGE HILL 115.0 kV Ckt 1	DVP dom-273 (1149) : Reconductor 6.65 miles of 115 kV line 151 from Plywood to Sedge Hill with 636 ACSR 150 C Project Type : FAC Cost : $3,990,000 Time Estimate : 30-36 Months	$3,990,000
169251209,169251211	13	3SEDGE HILL 115.0 kV - 6SEDGE HILL 230.0 kV Ckt 2	DVP dom-046 (874) : Add additional 230/115 kV transformer at Sedge Hill substation. Project Type : CON Cost : $6,000,000 Time Estimate : 16-18 Months	$6,000,000
169251193,169251195	12	3SEDGE HILL 115.0 kV - 6SEDGE HILL 230.0 kV Ckt 1		
166985322	8	3BUGGS I 115.0 kV - 3CLRK TAP 115.0 kV Ckt 1	DVP dom-332 (1208) : Reconductor 0.39 miles of 115 kV Line 193 from Clarksville to Buggs Island P.S. with 636 ACSR 150 C Project Type : FAC Cost : $234,000 Time Estimate : 30-36 Months	$234,000
169039806,169039805,169039804	5	3CAROLNA 115.0 kV - 6CAROLNA 230.0 kV Ckt 1	DVP n6113 (1032) : Add additional 230/115 kV transformer at Carolina substation. Project Type : CON Cost : $6,000,000 Time Estimate : 16-18 Months	$6,000,000
166985328	7	3CLRK TAP 115.0 kV - 3ISLND C 115.0 kV Ckt 1	DVP dom-333 (1209) : Reconductor 5.28 miles of 115 kV Line 193 from Clarksville to Island Creek D.P with 636 ACSR 150 C Project Type : FAC Cost : $3,168,000 Time Estimate : 30-36 Months	$3,168,000
166985316,166985317	17	3JONESTO 115.0 kV - 3CLRKVILLE 115.0 kV Ckt 1	DVP dom-372 (1248) : Reconductor 7.56 miles of 115 kV Line 36 from Jones Store to Clarksville with 768.2 ACSS 250 C. Project Type : FAC Cost : $4,536,000 Time Estimate : 30-36 Months	$4,536,000
166985334,166985335	2	3BURLING 115.0 kV - 3BUGGS I 115.0 kV Ckt 1	DVP dom-377 (1253) : Reconductor 1.31 miles of 115 kV Line 36 from Burlington Drive to Buggs Island with 768.2 ACSS 250 C. Replace Line Lead at Buggs Island terminal Project Type : FAC Cost : $786,000 Time Estimate : 30-36 Months	$786,000
169039749,169039751	6	3CLUBHSE 115.0 kV - 6CLUBHSE 230.0 kV Ckt 1	DVP n6114 (1033) : Add additional 230/115 kV transformer at Clubhouse substation. Project Type : CON Cost : $6,000,000 Time Estimate : 16-18 Months	$6,000,000

ID	Idx	Facility	Upgrade Description	Cost
166985332,166985333	1	3CHASCTY 115.0 kV - 3BLACKBR 115.0 kV Ckt 1	DVP dom-339 (1215) : Reconductor 2.47 miles of 115 kV Line 36 from Chase City to Black Branch with 768.2 ACSS 250 Project Type : FAC Cost : $1,482,000 Time Estimate : 30-36 Months	$1,482,000
166985330,166985331	9	3CLRKVILLE 115.0 kV - 3BURLING 115.0 kV Ckt 1	DVP dom-340 (1216) : Reconductor 2.58 miles of 115 kV Line 36 from Clarksville to Burlington DP with 768.2 ACSS 250 Project Type : FAC Cost : $1,548,000 Time Estimate : 30-36 Months	$1,548,000
166985312	14	3ISLND C 115.0 kV - 3KERRDP 115.0 kV Ckt 1	DVP dom-349 (1225) : Reconductor 2.19 miles of 115 kV Line 193 from Island Creek D.P. to Kerr D.P. with 636 ACSR 150 C Project Type : FAC Cost : $1,314,000 Time Estimate : 30-36 Months	$1,314,000
163844034,163844035,163844033,163844247,163844246,163844908	15	3KERR 115.0 kV - 3GW KING TAP 115.0 kV Ckt 1	DVP dom-002 (820) : 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 n6115 (821) : 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 dom-351 (1227) : For DEV portion, rebuild 4.7 miles of 115 kV Line 45 from Kerr Dam to GW King Tap with 2-768 ACSS. Project Type : FAC Cost : $7,041,450 Time Estimate : 30-36 Months DEP (CLPE) The external (i.e. Non-PJM) Transmission Owner, DEP, will not evaluate this violation until the impact study phase.	$13,164,450
166985310,166985311	16	3BLACKBR 115.0 kV - 3JONESTO 115.0 kV Ckt 1	DVP dom-370 (1246) : Reconductor 7.45 miles of 115 kV Line 36 from Black Branch to Jones Store with 768.2 ACSS 250 C. Project Type : FAC Cost : $4,470,000 Time Estimate : 30-36 Months	$4,470,000
			TOTAL COST	$64,332,450

11.6 Flow Gate Details

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

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
166985332	314681	3CHASCTY	DVP	314781	3BLACKBR	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	116.05	117.16	DC	3.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6786	50/50	0.6786
313853	3PONTONDP	0.5479	50/50	0.5479
314429	3JTRSVLE	0.3458	50/50	0.3458
314713	3PAMPLIN	1.1895	50/50	1.1895
316129	AC1-054 C	-3.5586	Adder	-4.19
316131	AB2-060 C	1.9221	50/50	1.9221
924022	AB2-043 E O1	3.8463	50/50	3.8463
924162	AB2-060 E OP	5.7331	50/50	5.7331
925611	AC1-036 C	0.2426	50/50	0.2426
925612	AC1-036 E	0.9209	50/50	0.9209
935221	AD1-157 C	0.1736	50/50	0.1736
935222	AD1-157 E	0.7334	50/50	0.7334
936265	AD2-033 C	14.6671	50/50	14.6671
936266	AD2-033 E	9.7781	50/50	9.7781
936485	AD2-063 C	18.7920	50/50	18.7920
936486	AD2-063 E	12.5280	50/50	12.5280
938371	AE1-056 C	4.7425	50/50	4.7425
938372	AE1-056 E	2.5913	50/50	2.5913
940662	AE2-053 BAT	2.9720	50/50	2.9720
942451	AE2-258	3.2090	50/50	3.2090
942461	AE2-259 C O1	4.1764	Adder	4.91

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942462	AE2-259 E O1	2.7843	Adder	3.28
943911	AF1-059	13.6212	50/50	13.6212
946301	AF1-294 C	3.4930	50/50	3.4930
946302	AF1-294 E	2.3287	50/50	2.3287
958211	AF2-115 C	2.0547	50/50	2.0547
958212	AF2-115 E	1.3698	50/50	1.3698
958801	AF2-171 C	12.4101	50/50	12.4101
958802	AF2-171 E	8.2734	50/50	8.2734
959311	AF2-222 C	17.2850	50/50	17.2850
959312	AF2-222 E	11.5809	50/50	11.5809
961791	AG1-021 C	1.6438	50/50	1.6438
961792	AG1-021 E	1.0958	50/50	1.0958
961891	AG1-030 C	13.6368	50/50	13.6368
961892	AG1-030 E	9.0912	50/50	9.0912
962041	AG1-048 C	10.2735	50/50	10.2735
962042	AG1-048 E	6.8490	50/50	6.8490
963171	AG1-166 C	1.6438	50/50	1.6438
963172	AG1-166 E	1.0958	50/50	1.0958
963181	AG1-167 C	1.6438	50/50	1.6438
963182	AG1-167 E	1.0958	50/50	1.0958
963191	AG1-168 C	1.6438	50/50	1.6438
963192	AG1-168 E	1.0958	50/50	1.0958
963201	AG1-169 C	1.6438	50/50	1.6438
963202	AG1-169 E	1.0958	50/50	1.0958
963211	AG1-170 C	1.6438	50/50	1.6438
963212	AG1-170 E	1.0958	50/50	1.0958
963301	AG1-179 C	3.4390	50/50	3.4390
963311	AG1-180	1.6756	50/50	1.6756
963321	AG1-181 C O1	18.7936	50/50	18.7936
963361	AG1-185 O1	9.0929	50/50	9.0929
963641	AG1-215 C	0.7671	50/50	0.7671
963642	AG1-215 E	1.1506	50/50	1.1506
964111	AG1-272 C	2.7573	50/50	2.7573
964112	AG1-272 E	0.8189	50/50	0.8189
964121	AG1-273 C	2.7573	50/50	2.7573
964122	AG1-273 E	0.8189	50/50	0.8189
964131	AG1-274 C	2.7573	50/50	2.7573
964132	AG1-274 E	0.8189	50/50	0.8189
964241	AG1-285 C O1	16.0687	50/50	16.0687
964242	AG1-285 E O1	10.7125	50/50	10.7125
964791	AG1-342 C	1.0172	Adder	2.26
964792	AG1-342 E	0.7992	Adder	1.77
964821	AG1-345 C	0.6599	50/50	0.6599
964822	AG1-345 E	0.4399	50/50	0.4399
965191	AG1-384 C	2.7573	50/50	2.7573
965192	AG1-384 E	0.8189	50/50	0.8189
965281	AG1-393 C	1.6438	50/50	1.6438
965282	AG1-393 E	1.0958	50/50	1.0958
965451	AG1-413 C O1	5.7258	50/50	5.7258
965452	AG1-413 E O1	3.8172	50/50	3.8172
965591	AG1-427 C	15.1685	50/50	15.1685
965592	AG1-427 E	10.1336	50/50	10.1336

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965601	AG1-428 C O1	2.8710	50/50	2.8710
965602	AG1-428 E O1	1.9106	50/50	1.9106
965641	AG1-432 C O1	4.4270	Adder	9.83
965642	AG1-432 E O1	2.9513	Adder	6.55
965772	AG1-445 BAT	3.3454	50/50	3.3454
965782	AG1-446 BAT	3.3454	50/50	3.3454
965831	AG1-451	0.7378	Adder	1.64
966753	AG1-546 BAT	1.7033	Merchant Transmission	1.7033
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.4427**	**Adder**	**0.98**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2951**	**Adder**	**0.66**
G-007A	G-007A	0.2062	Confirmed LTF	0.2062
VFT	VFT	0.5483	Confirmed LTF	0.5483
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
PRAIRIE	PRAIRIE	0.4314	Confirmed LTF	0.4314
CHEOAH	CHEOAH	0.1426	Confirmed LTF	0.1426
CBM-N	CBM-N	0.1008	Confirmed LTF	0.1008
COTTONWOOD	COTTONWOOD	0.4977	Confirmed LTF	0.4977
HAMLET	HAMLET	0.3182	Confirmed LTF	0.3182
GIBSON	GIBSON	0.0710	Confirmed LTF	0.0710
BLUEG	BLUEG	0.2153	Confirmed LTF	0.2153
TRIMBLE	TRIMBLE	0.0684	Confirmed LTF	0.0684
CATAWBA	CATAWBA	0.1614	Confirmed LTF	0.1614

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
166985334	314869	3BURLING	DVP	314682	3BUGGS I	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	115.33	116.44	DC	3.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6786	50/50	0.6786
313853	3PONTONDP	0.5479	50/50	0.5479
314429	3JTRSVLE	0.3458	50/50	0.3458
314713	3PAMPLIN	1.1895	50/50	1.1895
316129	AC1-054 C	-3.5586	Adder	-4.19
316131	AB2-060 C	1.9221	50/50	1.9221
924022	AB2-043 E O1	3.8463	50/50	3.8463
924162	AB2-060 E OP	5.7331	50/50	5.7331
924301	**AB2-077 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924302	**AB2-077 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	3.3240	50/50	3.3240
924312	AB2-078 E O1 (Suspended)	2.2160	50/50	2.2160
924321	AB2-079 C O1 (Suspended)	3.3240	50/50	3.3240
924322	AB2-079 E O1 (Suspended)	2.2160	50/50	2.2160
925611	AC1-036 C	0.2426	50/50	0.2426
925612	AC1-036 E	0.9209	50/50	0.9209
935221	AD1-157 C	0.1736	50/50	0.1736
935222	AD1-157 E	0.7334	50/50	0.7334
936265	AD2-033 C	14.6671	50/50	14.6671
936266	AD2-033 E	9.7781	50/50	9.7781
936485	AD2-063 C	18.7920	50/50	18.7920
936486	AD2-063 E	12.5280	50/50	12.5280
938371	AE1-056 C	4.7425	50/50	4.7425
938372	AE1-056 E	2.5913	50/50	2.5913
940662	AE2-053 BAT	2.9720	50/50	2.9720
942451	AE2-258	3.2090	50/50	3.2090
942461	AE2-259 C O1	4.1764	Adder	4.91
942462	AE2-259 E O1	2.7843	Adder	3.28
943911	AF1-059	13.6212	50/50	13.6212
946301	AF1-294 C	3.4930	50/50	3.4930
946302	AF1-294 E	2.3287	50/50	2.3287
958211	AF2-115 C	2.0547	50/50	2.0547
958212	AF2-115 E	1.3698	50/50	1.3698
958801	AF2-171 C	12.4101	50/50	12.4101
958802	AF2-171 E	8.2734	50/50	8.2734
959311	AF2-222 C	17.2850	50/50	17.2850
959312	AF2-222 E	11.5809	50/50	11.5809
961791	AG1-021 C	1.6438	50/50	1.6438
961792	AG1-021 E	1.0958	50/50	1.0958
961891	AG1-030 C	13.6368	50/50	13.6368
961892	AG1-030 E	9.0912	50/50	9.0912
962041	AG1-048 C	10.2735	50/50	10.2735
962042	AG1-048 E	6.8490	50/50	6.8490
963171	AG1-166 C	1.6438	50/50	1.6438
963172	AG1-166 E	1.0958	50/50	1.0958
963181	AG1-167 C	1.6438	50/50	1.6438
963182	AG1-167 E	1.0958	50/50	1.0958
963191	AG1-168 C	1.6438	50/50	1.6438
963192	AG1-168 E	1.0958	50/50	1.0958
963201	AG1-169 C	1.6438	50/50	1.6438
963202	AG1-169 E	1.0958	50/50	1.0958
963211	AG1-170 C	1.6438	50/50	1.6438
963212	AG1-170 E	1.0958	50/50	1.0958
963301	AG1-179 C	3.4390	50/50	3.4390
963311	AG1-180	1.6756	50/50	1.6756
963321	AG1-181 C O1	18.7936	50/50	18.7936
963361	AG1-185 O1	9.0929	50/50	9.0929
963641	AG1-215 C	0.7671	50/50	0.7671
963642	AG1-215 E	1.1506	50/50	1.1506

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964111	AG1-272 C	2.7573	50/50	2.7573
964112	AG1-272 E	0.8189	50/50	0.8189
964121	AG1-273 C	2.7573	50/50	2.7573
964122	AG1-273 E	0.8189	50/50	0.8189
964131	AG1-274 C	2.7573	50/50	2.7573
964132	AG1-274 E	0.8189	50/50	0.8189
964241	AG1-285 C O1	16.0687	50/50	16.0687
964242	AG1-285 E O1	10.7125	50/50	10.7125
964791	AG1-342 C	1.0172	Adder	2.26
964792	AG1-342 E	0.7992	Adder	1.77
964821	AG1-345 C	0.6599	50/50	0.6599
964822	AG1-345 E	0.4399	50/50	0.4399
965191	AG1-384 C	2.7573	50/50	2.7573
965192	AG1-384 E	0.8189	50/50	0.8189
965281	AG1-393 C	1.6438	50/50	1.6438
965282	AG1-393 E	1.0958	50/50	1.0958
965451	AG1-413 C O1	5.7258	50/50	5.7258
965452	AG1-413 E O1	3.8172	50/50	3.8172
965591	AG1-427 C	15.1685	50/50	15.1685
965592	AG1-427 E	10.1336	50/50	10.1336
965601	AG1-428 C O1	2.8710	50/50	2.8710
965602	AG1-428 E O1	1.9106	50/50	1.9106
965641	AG1-432 C O1	4.4270	Adder	9.83
965642	AG1-432 E O1	2.9513	Adder	6.55
965772	AG1-445 BAT	3.3454	50/50	3.3454
965782	AG1-446 BAT	3.3454	50/50	3.3454
965831	AG1-451	0.7378	Adder	1.64
966753	AG1-546 BAT	1.7033	Merchant Transmission	1.7033
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.4427**	**Adder**	**0.98**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2951**	**Adder**	**0.66**
G-007A	G-007A	0.2062	Confirmed LTF	0.2062
VFT	VFT	0.5483	Confirmed LTF	0.5483
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
PRAIRIE	PRAIRIE	0.4314	Confirmed LTF	0.4314
CHEOAH	CHEOAH	0.1426	Confirmed LTF	0.1426
CBM-N	CBM-N	0.1008	Confirmed LTF	0.1008
COTTONWOOD	COTTONWOOD	0.4977	Confirmed LTF	0.4977
HAMLET	HAMLET	0.3182	Confirmed LTF	0.3182
GIBSON	GIBSON	0.0710	Confirmed LTF	0.0710
BLUEG	BLUEG	0.2153	Confirmed LTF	0.2153
TRIMBLE	TRIMBLE	0.0684	Confirmed LTF	0.0684
CATAWBA	CATAWBA	0.1614	Confirmed LTF	0.1614

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
166985300	313705	3KERRDP	DVP	314702	3KERR	DVP	1	DVP_P7-1: LN 171-1009	tower	195.0	116.66	119.96	DC	6.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4229	50/50	0.4229
313853	3PONTONDP	0.2999	Adder	0.35
314713	3PAMPLIN	0.6573	Adder	0.77
315266	1PLYWOOD A	0.9917	50/50	0.9917
316118	AC1-105 C	2.4718	Adder	2.91
316129	AC1-054 C	-7.0449	Adder	-8.29
316131	AB2-060 C	1.1992	50/50	1.1992
924022	AB2-043 E O1	2.3969	50/50	2.3969
924162	AB2-060 E OP	3.5768	50/50	3.5768
924301	**AB2-077 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924302	**AB2-077 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924311	**AB2-078 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924312	**AB2-078 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924321	**AB2-079 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924322	**AB2-079 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
925611	AC1-036 C	0.1533	50/50	0.1533
925612	AC1-036 E	0.5817	50/50	0.5817
926274	AC1-105 E	1.2144	Adder	1.43
927261	AC1-222 C	1.2514	Adder	1.47
927262	AC1-222 E	1.1913	Adder	1.4
934311	AD1-055 C	0.8689	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
935222	AD1-157 E	0.4052	Adder	0.48
936265	AD2-033 C	9.2391	50/50	9.2391
936266	AD2-033 E	6.1594	50/50	6.1594
936485	AD2-063 C	11.7639	50/50	11.7639
936486	AD2-063 E	7.8426	50/50	7.8426
938371	AE1-056 C	2.6206	Adder	3.08
938372	AE1-056 E	1.4319	Adder	1.68
940662	AE2-053 BAT	5.6696	50/50	5.6696
942451	AE2-258	1.9998	50/50	1.9998
942461	AE2-259 C O1	2.8346	Adder	3.33
942462	AE2-259 E O1	1.8897	Adder	2.22
943901	AF1-058 C	0.7075	Adder	0.83
943902	AF1-058 E	0.4716	Adder	0.55

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943911	AF1-059	6.4092	Adder	7.54
946301	AF1-294 C	1.9120	Adder	2.25
946302	AF1-294 E	1.2746	Adder	1.5
958211	AF2-115 C	1.1247	Adder	1.32
958212	AF2-115 E	0.7498	Adder	0.88
958801	AF2-171 C	6.7878	Adder	7.99
958802	AF2-171 E	4.5252	Adder	5.32
959311	AF2-222 C	10.9430	50/50	10.9430
959312	AF2-222 E	7.3318	50/50	7.3318
960061	AF2-297 C	2.8299	Adder	3.33
960062	AF2-297 E	1.8866	Adder	2.22
961791	AG1-021 C	0.4769	Adder	1.06
961792	AG1-021 E	0.3179	Adder	0.71
961891	AG1-030 C	3.9256	Adder	8.71
961892	AG1-030 E	2.6170	Adder	5.81
962041	AG1-048 C	2.9804	Adder	6.62
962042	AG1-048 E	1.9869	Adder	4.41
962441	AG1-093 C O1	3.4935	Adder	7.75
962442	AG1-093 E O1	1.0632	Adder	2.36
963171	AG1-166 C	0.4769	Adder	1.06
963172	AG1-166 E	0.3179	Adder	0.71
963181	AG1-167 C	0.4769	Adder	1.06
963182	AG1-167 E	0.3179	Adder	0.71
963191	AG1-168 C	0.4769	Adder	1.06
963192	AG1-168 E	0.3179	Adder	0.71
963201	AG1-169 C	0.4769	Adder	1.06
963202	AG1-169 E	0.3179	Adder	0.71
963211	AG1-170 C	0.4769	Adder	1.06
963212	AG1-170 E	0.3179	Adder	0.71
963301	AG1-179 C	0.7641	Adder	1.7
963311	AG1-180	0.3723	Adder	0.83
963321	AG1-181 C O1	11.8437	50/50	11.8437
963361	AG1-185 O1	5.7303	50/50	5.7303
963641	AG1-215 C	0.2225	Adder	0.49
963642	AG1-215 E	0.3338	Adder	0.74
964111	AG1-272 C	1.7417	50/50	1.7417
964112	AG1-272 E	0.5173	50/50	0.5173
964121	AG1-273 C	1.7417	50/50	1.7417
964122	AG1-273 E	0.5173	50/50	0.5173
964131	AG1-274 C	1.7417	50/50	1.7417
964132	AG1-274 E	0.5173	50/50	0.5173
964241	AG1-285 C O1	10.0455	50/50	10.0455
964242	AG1-285 E O1	6.6970	50/50	6.6970
964261	AG1-287 C	0.2812	Adder	0.62
964262	AG1-287 E	0.1875	Adder	0.42
964471	AG1-310 C	0.3757	Adder	0.83
964472	AG1-310 E	0.1850	Adder	0.41
964791	AG1-342 C	1.1283	Adder	2.5
964792	AG1-342 E	0.8865	Adder	1.97
964821	AG1-345 C	0.1914	Adder	0.42
964822	AG1-345 E	0.1276	Adder	0.28
965191	AG1-384 C	1.7417	50/50	1.7417

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965192	AG1-384 E	0.5173	50/50	0.5173
965281	AG1-393 C	0.4769	Adder	1.06
965282	AG1-393 E	0.3179	Adder	0.71
965451	AG1-413 C O1	1.4279	Adder	3.17
965452	AG1-413 E O1	0.9519	Adder	2.11
965591	AG1-427 C	9.4847	50/50	9.4847
965592	AG1-427 E	6.3365	50/50	6.3365
965601	AG1-428 C O1	0.6379	Adder	1.42
965602	AG1-428 E O1	0.4245	Adder	0.94
965641	AG1-432 C O1	3.0047	Adder	6.67
965642	AG1-432 E O1	2.0031	Adder	4.45
965772	AG1-445 BAT	6.4462	50/50	6.4462
965782	AG1-446 BAT	6.4462	50/50	6.4462
965831	AG1-451	0.5008	Adder	1.11
966753	AG1-546 BAT	6.4143	50/50	6.4143
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.3005**	**Adder**	**0.67**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2003**	**Adder**	**0.44**
G-007A	G-007A	0.1654	Confirmed LTF	0.1654
VFT	VFT	0.4451	Confirmed LTF	0.4451
CALDERWOOD	CALDERWOOD	0.0984	Confirmed LTF	0.0984
PRAIRIE	PRAIRIE	0.2144	Confirmed LTF	0.2144
CHEOAH	CHEOAH	0.1026	Confirmed LTF	0.1026
CBM-N	CBM-N	0.0828	Confirmed LTF	0.0828
COTTONWOOD	COTTONWOOD	0.3360	Confirmed LTF	0.3360
HAMLET	HAMLET	0.3274	Confirmed LTF	0.3274
GIBSON	GIBSON	0.0229	Confirmed LTF	0.0229
BLUEG	BLUEG	0.0590	Confirmed LTF	0.0590
TRIMBLE	TRIMBLE	0.0178	Confirmed LTF	0.0178
CATAWBA	CATAWBA	0.1431	Confirmed LTF	0.1431

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
168528920	313825	3PLYWOOD	DVP	314696	3SEDGE HILL	DVP	1	DVP_P1-2: LN 33	single	141.0	129.72	132.19	DC	3.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4681	80/20	0.4681
314429	3JTRSVLE	0.2289	80/20	0.2289
314704	3LAWRENC	0.1364	80/20	0.1364
315158	1KERR 1	0.3575	80/20	0.3575
315159	1KERR 2	1.0009	80/20	1.0009
315160	1KERR 3	1.0009	80/20	1.0009

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315161	1KERR 4	1.0009	80/20	1.0009
315162	1KERR 5	1.0009	80/20	1.0009
315163	1KERR 6	1.0009	80/20	1.0009
315164	1KERR 7	1.0009	80/20	1.0009
315266	1PLYWOOD A	5.4698	80/20	5.4698
316129	AC1-054 C	4.6525	80/20	4.6525
316131	AB2-060 C	1.3253	80/20	1.3253
924301	**AB2-077 C O1 (Suspended)**	**2.1170**	**80/20**	**2.1170**
924311	**AB2-078 C O1 (Suspended)**	**2.1170**	**80/20**	**2.1170**
924321	**AB2-079 C O1 (Suspended)**	**2.1170**	**80/20**	**2.1170**
925611	AC1-036 C	0.1645	80/20	0.1645
927261	AC1-222 C	-1.8953	Adder	-2.23
934311	AD1-055 C	-1.3160	Adder	-1.55
935221	AD1-157 C	0.1134	80/20	0.1134
936265	AD2-033 C	9.9918	80/20	9.9918
936361	AD2-046 C O1	8.3312	80/20	8.3312
936485	AD2-063 C	12.8889	80/20	12.8889
938371	AE1-056 C	3.0974	80/20	3.0974
939181	AE1-148 C	8.2199	80/20	8.2199
940661	AE2-053 O1	3.0444	80/20	3.0444
942451	AE2-258	2.2133	80/20	2.2133
942461	AE2-259 C O1	3.0180	80/20	3.0180
943901	AF1-058 C	-1.0700	Adder	-1.26
943911	AF1-059	10.6461	80/20	10.6461
946301	AF1-294 C	2.3123	80/20	2.3123
958211	AF2-115 C	1.3602	80/20	1.3602
958801	AF2-171 C	8.2170	80/20	8.2170
959311	AF2-222 C	11.6900	80/20	11.6900
961791	AG1-021 C	1.0882	80/20	1.0882
961891	AG1-030 C	9.1206	80/20	9.1206
962041	AG1-048 C	6.8010	80/20	6.8010
963171	AG1-166 C	1.0882	80/20	1.0882
963181	AG1-167 C	1.0882	80/20	1.0882
963191	AG1-168 C	1.0882	80/20	1.0882
963201	AG1-169 C	1.0882	80/20	1.0882
963211	AG1-170 C	1.0882	80/20	1.0882
963301	AG1-179 C	2.9621	80/20	2.9621
963311	AG1-180	1.4432	80/20	1.4432
963321	AG1-181 C O1	12.7838	80/20	12.7838
963361	AG1-185 O1	6.1852	80/20	6.1852
963641	AG1-215 C	0.5078	80/20	0.5078
964111	AG1-272 C	1.8698	80/20	1.8698
964121	AG1-273 C	1.8698	80/20	1.8698
964131	AG1-274 C	1.8698	80/20	1.8698
964241	AG1-285 C O1	11.0408	80/20	11.0408
964821	AG1-345 C	0.4370	80/20	0.4370
965191	AG1-384 C	1.8698	80/20	1.8698
965281	AG1-393 C	1.0882	80/20	1.0882
965451	AG1-413 C O1	4.4752	80/20	4.4752
965591	AG1-427 C	10.4190	80/20	10.4190

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965601	AG1-428 C O1	2.4728	80/20	2.4728
965641	AG1-432 C O1	6.0360	80/20	6.0360
965721	AG1-440 C	6.0322	80/20	6.0322
965731	AG1-441 C	6.0322	80/20	6.0322
965771	AG1-445	3.4853	80/20	3.4853
965781	AG1-446	3.4853	80/20	3.4853
965831	AG1-451	1.0060	80/20	1.0060
966751	AG1-546 C	9.6048	80/20	9.6048
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.6036**	**80/20**	**0.6036**
G-007A	G-007A	0.0288	Confirmed LTF	0.0288
VFT	VFT	0.0710	Confirmed LTF	0.0710
CALDERWOOD	CALDERWOOD	0.0934	Confirmed LTF	0.0934
NY	NY	0.0011	Confirmed LTF	0.0011
PRAIRIE	PRAIRIE	0.4391	Confirmed LTF	0.4391
CHEOAH	CHEOAH	0.0936	Confirmed LTF	0.0936
CBM-N	CBM-N	0.0120	Confirmed LTF	0.0120
COTTONWOOD	COTTONWOOD	0.3654	Confirmed LTF	0.3654
HAMLET	HAMLET	0.0635	Confirmed LTF	0.0635
GIBSON	GIBSON	0.0917	Confirmed LTF	0.0917
BLUEG	BLUEG	0.2951	Confirmed LTF	0.2951
TRIMBLE	TRIMBLE	0.0946	Confirmed LTF	0.0946
CATAWBA	CATAWBA	0.0644	Confirmed LTF	0.0644

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
169039804	314559	3CAROLNA	DVP	314561	6CAROLNA	DVP	1	DVP_P1-2: LN 68-A	single	239.89	143.66	145.77	DC	5.05

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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962331	AG1-082 C	1.2773	80/20	1.2773
962341	AG1-083 C	1.2773	80/20	1.2773
962351	AG1-084 C	0.7200	80/20	0.7200
962361	AG1-085 C	0.7200	80/20	0.7200
963171	AG1-166 C	0.6774	80/20	0.6774
963181	AG1-167 C	0.6774	80/20	0.6774
963191	AG1-168 C	0.6774	80/20	0.6774
963201	AG1-169 C	0.6774	80/20	0.6774
963211	AG1-170 C	0.6774	80/20	0.6774
963301	AG1-179 C	2.9574	80/20	2.9574
963311	AG1-180	1.4409	80/20	1.4409
963321	AG1-181 C O1	7.6889	80/20	7.6889
963361	AG1-185 O1	3.7201	80/20	3.7201
963641	AG1-215 C	0.3161	80/20	0.3161
964111	AG1-272 C	1.1289	80/20	1.1289
964121	AG1-273 C	1.1289	80/20	1.1289
964131	AG1-274 C	1.1289	80/20	1.1289
964241	AG1-285 C O1	6.5573	80/20	6.5573
964501	AG1-313 C O1	7.6739	80/20	7.6739
964791	AG1-342 C	1.4230	80/20	1.4230
964801	AG1-343 C	9.7545	80/20	9.7545
964821	AG1-345 C	0.2719	80/20	0.2719
965191	AG1-384 C	1.1289	80/20	1.1289
965281	AG1-393 C	0.6774	80/20	0.6774
965291	AG1-394 C	3.4868	80/20	3.4868
965451	AG1-413 C O1	3.7213	80/20	3.7213
965591	AG1-427 C	6.1907	80/20	6.1907
965601	AG1-428 C O1	2.4689	80/20	2.4689
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
CPLE	CPLE	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

11.6.6 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
169039749	314562	3CLUBHSE	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 2201	single	182.64	232.86	234.53	DC	3.05

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
CPLE	CPLE	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
166985328	314665	3CLRK TAP	DVP	314699	3ISLND C	DVP	1	DVP_P7-1: LN 171-1009	tower	208.0	110.23	113.33	DC	6.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4229	50/50	0.4229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.2999	Adder	0.35
314713	3PAMPLIN	0.6573	Adder	0.77
315266	1PLYWOOD A	0.9917	50/50	0.9917
316118	AC1-105 C	2.4718	Adder	2.91
316129	AC1-054 C	-7.0449	Adder	-8.29
316131	AB2-060 C	1.1992	50/50	1.1992
924022	AB2-043 E O1	2.3969	50/50	2.3969
924162	AB2-060 E OP	3.5768	50/50	3.5768
924301	**AB2-077 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924302	**AB2-077 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924311	**AB2-078 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924312	**AB2-078 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924321	**AB2-079 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924322	**AB2-079 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
925611	AC1-036 C	0.1533	50/50	0.1533
925612	AC1-036 E	0.5817	50/50	0.5817
926274	AC1-105 E	1.2144	Adder	1.43
927261	AC1-222 C	1.2514	Adder	1.47
927262	AC1-222 E	1.1913	Adder	1.4
934311	AD1-055 C	0.8689	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
935222	AD1-157 E	0.4052	Adder	0.48
936265	AD2-033 C	9.2391	50/50	9.2391
936266	AD2-033 E	6.1594	50/50	6.1594
936485	AD2-063 C	11.7639	50/50	11.7639
936486	AD2-063 E	7.8426	50/50	7.8426
938371	AE1-056 C	2.6206	Adder	3.08
938372	AE1-056 E	1.4319	Adder	1.68
940662	AE2-053 BAT	5.6696	50/50	5.6696
942451	AE2-258	1.9998	50/50	1.9998
942461	AE2-259 C O1	2.8346	Adder	3.33
942462	AE2-259 E O1	1.8897	Adder	2.22
943901	AF1-058 C	0.7075	Adder	0.83
943902	AF1-058 E	0.4716	Adder	0.55
943911	AF1-059	6.4092	Adder	7.54
946301	AF1-294 C	1.9120	Adder	2.25
946302	AF1-294 E	1.2746	Adder	1.5
958211	AF2-115 C	1.1247	Adder	1.32
958212	AF2-115 E	0.7498	Adder	0.88
958801	AF2-171 C	6.7878	Adder	7.99
958802	AF2-171 E	4.5252	Adder	5.32
959311	AF2-222 C	10.9430	50/50	10.9430
959312	AF2-222 E	7.3318	50/50	7.3318
960061	AF2-297 C	2.8299	Adder	3.33
960062	AF2-297 E	1.8866	Adder	2.22
961791	AG1-021 C	0.4769	Adder	1.06
961792	AG1-021 E	0.3179	Adder	0.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961891	AG1-030 C	3.9256	Adder	8.71
961892	AG1-030 E	2.6170	Adder	5.81
962041	AG1-048 C	2.9804	Adder	6.62
962042	AG1-048 E	1.9869	Adder	4.41
962441	AG1-093 C O1	3.4935	Adder	7.75
962442	AG1-093 E O1	1.0632	Adder	2.36
963171	AG1-166 C	0.4769	Adder	1.06
963172	AG1-166 E	0.3179	Adder	0.71
963181	AG1-167 C	0.4769	Adder	1.06
963182	AG1-167 E	0.3179	Adder	0.71
963191	AG1-168 C	0.4769	Adder	1.06
963192	AG1-168 E	0.3179	Adder	0.71
963201	AG1-169 C	0.4769	Adder	1.06
963202	AG1-169 E	0.3179	Adder	0.71
963211	AG1-170 C	0.4769	Adder	1.06
963212	AG1-170 E	0.3179	Adder	0.71
963301	AG1-179 C	0.7641	Adder	1.7
963311	AG1-180	0.3723	Adder	0.83
963321	AG1-181 C O1	11.8437	50/50	11.8437
963361	AG1-185 O1	5.7303	50/50	5.7303
963641	AG1-215 C	0.2225	Adder	0.49
963642	AG1-215 E	0.3338	Adder	0.74
964111	AG1-272 C	1.7417	50/50	1.7417
964112	AG1-272 E	0.5173	50/50	0.5173
964121	AG1-273 C	1.7417	50/50	1.7417
964122	AG1-273 E	0.5173	50/50	0.5173
964131	AG1-274 C	1.7417	50/50	1.7417
964132	AG1-274 E	0.5173	50/50	0.5173
964241	AG1-285 C O1	10.0455	50/50	10.0455
964242	AG1-285 E O1	6.6970	50/50	6.6970
964261	AG1-287 C	0.2812	Adder	0.62
964262	AG1-287 E	0.1875	Adder	0.42
964471	AG1-310 C	0.3757	Adder	0.83
964472	AG1-310 E	0.1850	Adder	0.41
964791	AG1-342 C	1.1283	Adder	2.5
964792	AG1-342 E	0.8865	Adder	1.97
964821	AG1-345 C	0.1914	Adder	0.42
964822	AG1-345 E	0.1276	Adder	0.28
965191	AG1-384 C	1.7417	50/50	1.7417
965192	AG1-384 E	0.5173	50/50	0.5173
965281	AG1-393 C	0.4769	Adder	1.06
965282	AG1-393 E	0.3179	Adder	0.71
965451	AG1-413 C O1	1.4279	Adder	3.17
965452	AG1-413 E O1	0.9519	Adder	2.11
965591	AG1-427 C	9.4847	50/50	9.4847
965592	AG1-427 E	6.3365	50/50	6.3365
965601	AG1-428 C O1	0.6379	Adder	1.42
965602	AG1-428 E O1	0.4245	Adder	0.94
965641	AG1-432 C O1	3.0047	Adder	6.67
965642	AG1-432 E O1	2.0031	Adder	4.45
965772	AG1-445 BAT	6.4462	50/50	6.4462
965782	AG1-446 BAT	6.4462	50/50	6.4462

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965831	AG1-451	0.5008	Adder	1.11
966753	AG1-546 BAT	6.4143	50/50	6.4143
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.3005**	**Adder**	**0.67**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2003**	**Adder**	**0.44**
G-007A	G-007A	0.1654	Confirmed LTF	0.1654
VFT	VFT	0.4451	Confirmed LTF	0.4451
CALDERWOOD	CALDERWOOD	0.0984	Confirmed LTF	0.0984
PRAIRIE	PRAIRIE	0.2144	Confirmed LTF	0.2144
CHEOAH	CHEOAH	0.1026	Confirmed LTF	0.1026
CBM-N	CBM-N	0.0828	Confirmed LTF	0.0828
COTTONWOOD	COTTONWOOD	0.3360	Confirmed LTF	0.3360
HAMLET	HAMLET	0.3274	Confirmed LTF	0.3274
GIBSON	GIBSON	0.0229	Confirmed LTF	0.0229
BLUEG	BLUEG	0.0590	Confirmed LTF	0.0590
TRIMBLE	TRIMBLE	0.0178	Confirmed LTF	0.0178
CATAWBA	CATAWBA	0.1431	Confirmed LTF	0.1431

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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
166985322	314682	3BUGGS I	DVP	314665	3CLRK TAP	DVP	1	DVP_P7-1: LN 171-1009	tower	208.0	111.58	114.68	DC	6.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4229	50/50	0.4229
313853	3PONTONDP	0.2999	Adder	0.35
314713	3PAMPLIN	0.6573	Adder	0.77
315266	1PLYWOOD A	0.9917	50/50	0.9917
316118	AC1-105 C	2.4718	Adder	2.91
316129	AC1-054 C	-7.0449	Adder	-8.29
316131	AB2-060 C	1.1992	50/50	1.1992
924022	AB2-043 E O1	2.3969	50/50	2.3969
924162	AB2-060 E OP	3.5768	50/50	3.5768
924301	**AB2-077 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924302	**AB2-077 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924311	**AB2-078 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924312	**AB2-078 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924321	AB2-079 C O1 (Suspended)	1.9992	50/50	1.9992
924322	AB2-079 E O1 (Suspended)	1.3328	50/50	1.3328
925611	AC1-036 C	0.1533	50/50	0.1533
925612	AC1-036 E	0.5817	50/50	0.5817
926274	AC1-105 E	1.2144	Adder	1.43
927261	AC1-222 C	1.2514	Adder	1.47
927262	AC1-222 E	1.1913	Adder	1.4
934311	AD1-055 C	0.8689	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
935222	AD1-157 E	0.4052	Adder	0.48
936265	AD2-033 C	9.2391	50/50	9.2391
936266	AD2-033 E	6.1594	50/50	6.1594
936485	AD2-063 C	11.7639	50/50	11.7639
936486	AD2-063 E	7.8426	50/50	7.8426
938371	AE1-056 C	2.6206	Adder	3.08
938372	AE1-056 E	1.4319	Adder	1.68
940662	AE2-053 BAT	5.6696	50/50	5.6696
942451	AE2-258	1.9998	50/50	1.9998
942461	AE2-259 C O1	2.8346	Adder	3.33
942462	AE2-259 E O1	1.8897	Adder	2.22
943901	AF1-058 C	0.7075	Adder	0.83
943902	AF1-058 E	0.4716	Adder	0.55
943911	AF1-059	6.4092	Adder	7.54
946301	AF1-294 C	1.9120	Adder	2.25
946302	AF1-294 E	1.2746	Adder	1.5
958211	AF2-115 C	1.1247	Adder	1.32
958212	AF2-115 E	0.7498	Adder	0.88
958801	AF2-171 C	6.7878	Adder	7.99
958802	AF2-171 E	4.5252	Adder	5.32
959311	AF2-222 C	10.9430	50/50	10.9430
959312	AF2-222 E	7.3318	50/50	7.3318
960061	AF2-297 C	2.8299	Adder	3.33
960062	AF2-297 E	1.8866	Adder	2.22
961791	AG1-021 C	0.4769	Adder	1.06
961792	AG1-021 E	0.3179	Adder	0.71
961891	AG1-030 C	3.9256	Adder	8.71
961892	AG1-030 E	2.6170	Adder	5.81
962041	AG1-048 C	2.9804	Adder	6.62
962042	AG1-048 E	1.9869	Adder	4.41
962441	AG1-093 C O1	3.4935	Adder	7.75
962442	AG1-093 E O1	1.0632	Adder	2.36
963171	AG1-166 C	0.4769	Adder	1.06
963172	AG1-166 E	0.3179	Adder	0.71
963181	AG1-167 C	0.4769	Adder	1.06
963182	AG1-167 E	0.3179	Adder	0.71
963191	AG1-168 C	0.4769	Adder	1.06
963192	AG1-168 E	0.3179	Adder	0.71
963201	AG1-169 C	0.4769	Adder	1.06
963202	AG1-169 E	0.3179	Adder	0.71
963211	AG1-170 C	0.4769	Adder	1.06
963212	AG1-170 E	0.3179	Adder	0.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963301	AG1-179 C	0.7641	Adder	1.7
963311	AG1-180	0.3723	Adder	0.83
963321	AG1-181 C O1	11.8437	50/50	11.8437
963361	AG1-185 O1	5.7303	50/50	5.7303
963641	AG1-215 C	0.2225	Adder	0.49
963642	AG1-215 E	0.3338	Adder	0.74
964111	AG1-272 C	1.7417	50/50	1.7417
964112	AG1-272 E	0.5173	50/50	0.5173
964121	AG1-273 C	1.7417	50/50	1.7417
964122	AG1-273 E	0.5173	50/50	0.5173
964131	AG1-274 C	1.7417	50/50	1.7417
964132	AG1-274 E	0.5173	50/50	0.5173
964241	AG1-285 C O1	10.0455	50/50	10.0455
964242	AG1-285 E O1	6.6970	50/50	6.6970
964261	AG1-287 C	0.2812	Adder	0.62
964262	AG1-287 E	0.1875	Adder	0.42
964471	AG1-310 C	0.3757	Adder	0.83
964472	AG1-310 E	0.1850	Adder	0.41
964791	AG1-342 C	1.1283	Adder	2.5
964792	AG1-342 E	0.8865	Adder	1.97
964821	AG1-345 C	0.1914	Adder	0.42
964822	AG1-345 E	0.1276	Adder	0.28
965191	AG1-384 C	1.7417	50/50	1.7417
965192	AG1-384 E	0.5173	50/50	0.5173
965281	AG1-393 C	0.4769	Adder	1.06
965282	AG1-393 E	0.3179	Adder	0.71
965451	AG1-413 C O1	1.4279	Adder	3.17
965452	AG1-413 E O1	0.9519	Adder	2.11
965591	AG1-427 C	9.4847	50/50	9.4847
965592	AG1-427 E	6.3365	50/50	6.3365
965601	AG1-428 C O1	0.6379	Adder	1.42
965602	AG1-428 E O1	0.4245	Adder	0.94
965641	AG1-432 C O1	3.0047	Adder	6.67
965642	AG1-432 E O1	2.0031	Adder	4.45
965772	AG1-445 BAT	6.4462	50/50	6.4462
965782	AG1-446 BAT	6.4462	50/50	6.4462
965831	AG1-451	0.5008	Adder	1.11
966753	AG1-546 BAT	6.4143	50/50	6.4143
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.3005**	**Adder**	**0.67**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2003**	**Adder**	**0.44**
G-007A	G-007A	0.1654	Confirmed LTF	0.1654
VFT	VFT	0.4451	Confirmed LTF	0.4451
CALDERWOOD	CALDERWOOD	0.0984	Confirmed LTF	0.0984
PRAIRIE	PRAIRIE	0.2144	Confirmed LTF	0.2144
CHEOAH	CHEOAH	0.1026	Confirmed LTF	0.1026
CBM-N	CBM-N	0.0828	Confirmed LTF	0.0828
COTTONWOOD	COTTONWOOD	0.3360	Confirmed LTF	0.3360
HAMLET	HAMLET	0.3274	Confirmed LTF	0.3274
GIBSON	GIBSON	0.0229	Confirmed LTF	0.0229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
BLUEG	BLUEG	0.0590	Confirmed LTF	0.0590
TRIMBLE	TRIMBLE	0.0178	Confirmed LTF	0.0178
CATAWBA	CATAWBA	0.1431	Confirmed LTF	0.1431

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
166985330	314683	3CLRKVILLE	DVP	314869	3BURLING	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	116.42	117.53	DC	3.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6786	50/50	0.6786
313853	3PONTONDP	0.5479	50/50	0.5479
314429	3JTRSVLE	0.3458	50/50	0.3458
314713	3PAMPLIN	1.1895	50/50	1.1895
316129	AC1-054 C	-3.5586	Adder	-4.19
316131	AB2-060 C	1.9221	50/50	1.9221
924022	AB2-043 E O1	3.8463	50/50	3.8463
924162	AB2-060 E OP	5.7331	50/50	5.7331
924301	**AB2-077 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924302	**AB2-077 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924311	**AB2-078 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924312	**AB2-078 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924321	**AB2-079 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924322	**AB2-079 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
925611	AC1-036 C	0.2426	50/50	0.2426
925612	AC1-036 E	0.9209	50/50	0.9209
935221	AD1-157 C	0.1736	50/50	0.1736
935222	AD1-157 E	0.7334	50/50	0.7334
936265	AD2-033 C	14.6671	50/50	14.6671
936266	AD2-033 E	9.7781	50/50	9.7781
936485	AD2-063 C	18.7920	50/50	18.7920
936486	AD2-063 E	12.5280	50/50	12.5280
938371	AE1-056 C	4.7425	50/50	4.7425
938372	AE1-056 E	2.5913	50/50	2.5913
940662	AE2-053 BAT	2.9720	50/50	2.9720
942451	AE2-258	3.2090	50/50	3.2090
942461	AE2-259 C O1	4.1764	Adder	4.91
942462	AE2-259 E O1	2.7843	Adder	3.28
943911	AF1-059	13.6212	50/50	13.6212

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946301	AF1-294 C	3.4930	50/50	3.4930
946302	AF1-294 E	2.3287	50/50	2.3287
958211	AF2-115 C	2.0547	50/50	2.0547
958212	AF2-115 E	1.3698	50/50	1.3698
958801	AF2-171 C	12.4101	50/50	12.4101
958802	AF2-171 E	8.2734	50/50	8.2734
959311	AF2-222 C	17.2850	50/50	17.2850
959312	AF2-222 E	11.5809	50/50	11.5809
961791	AG1-021 C	1.6438	50/50	1.6438
961792	AG1-021 E	1.0958	50/50	1.0958
961891	AG1-030 C	13.6368	50/50	13.6368
961892	AG1-030 E	9.0912	50/50	9.0912
962041	AG1-048 C	10.2735	50/50	10.2735
962042	AG1-048 E	6.8490	50/50	6.8490
963171	AG1-166 C	1.6438	50/50	1.6438
963172	AG1-166 E	1.0958	50/50	1.0958
963181	AG1-167 C	1.6438	50/50	1.6438
963182	AG1-167 E	1.0958	50/50	1.0958
963191	AG1-168 C	1.6438	50/50	1.6438
963192	AG1-168 E	1.0958	50/50	1.0958
963201	AG1-169 C	1.6438	50/50	1.6438
963202	AG1-169 E	1.0958	50/50	1.0958
963211	AG1-170 C	1.6438	50/50	1.6438
963212	AG1-170 E	1.0958	50/50	1.0958
963301	AG1-179 C	3.4390	50/50	3.4390
963311	AG1-180	1.6756	50/50	1.6756
963321	AG1-181 C O1	18.7936	50/50	18.7936
963361	AG1-185 O1	9.0929	50/50	9.0929
963641	AG1-215 C	0.7671	50/50	0.7671
963642	AG1-215 E	1.1506	50/50	1.1506
964111	AG1-272 C	2.7573	50/50	2.7573
964112	AG1-272 E	0.8189	50/50	0.8189
964121	AG1-273 C	2.7573	50/50	2.7573
964122	AG1-273 E	0.8189	50/50	0.8189
964131	AG1-274 C	2.7573	50/50	2.7573
964132	AG1-274 E	0.8189	50/50	0.8189
964241	AG1-285 C O1	16.0687	50/50	16.0687
964242	AG1-285 E O1	10.7125	50/50	10.7125
964791	AG1-342 C	1.0172	Adder	2.26
964792	AG1-342 E	0.7992	Adder	1.77
964821	AG1-345 C	0.6599	50/50	0.6599
964822	AG1-345 E	0.4399	50/50	0.4399
965191	AG1-384 C	2.7573	50/50	2.7573
965192	AG1-384 E	0.8189	50/50	0.8189
965281	AG1-393 C	1.6438	50/50	1.6438
965282	AG1-393 E	1.0958	50/50	1.0958
965451	AG1-413 C O1	5.7258	50/50	5.7258
965452	AG1-413 E O1	3.8172	50/50	3.8172
965591	AG1-427 C	15.1685	50/50	15.1685
965592	AG1-427 E	10.1336	50/50	10.1336
965601	AG1-428 C O1	2.8710	50/50	2.8710
965602	AG1-428 E O1	1.9106	50/50	1.9106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965641	AG1-432 C O1	4.4270	Adder	9.83
965642	AG1-432 E O1	2.9513	Adder	6.55
965772	AG1-445 BAT	3.3454	50/50	3.3454
965782	AG1-446 BAT	3.3454	50/50	3.3454
965831	AG1-451	0.7378	Adder	1.64
966753	AG1-546 BAT	1.7033	Merchant Transmission	1.7033
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.4427**	**Adder**	**0.98**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2951**	**Adder**	**0.66**
G-007A	G-007A	0.2062	Confirmed LTF	0.2062
VFT	VFT	0.5483	Confirmed LTF	0.5483
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
PRAIRIE	PRAIRIE	0.4314	Confirmed LTF	0.4314
CHEOAH	CHEOAH	0.1426	Confirmed LTF	0.1426
CBM-N	CBM-N	0.1008	Confirmed LTF	0.1008
COTTONWOOD	COTTONWOOD	0.4977	Confirmed LTF	0.4977
HAMLET	HAMLET	0.3182	Confirmed LTF	0.3182
GIBSON	GIBSON	0.0710	Confirmed LTF	0.0710
BLUEG	BLUEG	0.2153	Confirmed LTF	0.2153
TRIMBLE	TRIMBLE	0.0684	Confirmed LTF	0.0684
CATAWBA	CATAWBA	0.1614	Confirmed LTF	0.1614

11.6.10 Index 10

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
169251123	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	2	DVP_P1-2: LN 235-A	single	182.64	321.21	322.85	DC	2.99

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	2.1970	80/20	2.1970
313527	AB2-043 C	0.6200	80/20	0.6200
314429	3JTRSVLE	1.1615	80/20	1.1615
314572	3EMPORIA	0.1428	80/20	0.1428
314704	3LAWRENC	0.1773	80/20	0.1773
315158	1KERR 1	0.3023	80/20	0.3023
315159	1KERR 2	0.8464	80/20	0.8464
315160	1KERR 3	0.8464	80/20	0.8464
315161	1KERR 4	0.8464	80/20	0.8464
315162	1KERR 5	0.8464	80/20	0.8464
315163	1KERR 6	0.8464	80/20	0.8464
315164	1KERR 7	0.8464	80/20	0.8464
315266	1PLYWOOD A	0.5826	80/20	0.5826
316087	AB2-174 C	0.3670	80/20	0.3670
316118	AC1-105 C	3.1833	80/20	3.1833

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316129	AC1-054 C	4.1416	80/20	4.1416
316131	AB2-060 C	1.8663	80/20	1.8663
923991	AB2-040 C O1	2.3927	80/20	2.3927
924301	**AB2-077 C O1 (Suspended)**	**2.4036**	**80/20**	**2.4036**
924311	**AB2-078 C O1 (Suspended)**	**2.4036**	**80/20**	**2.4036**
924321	**AB2-079 C O1 (Suspended)**	**2.4036**	**80/20**	**2.4036**
925611	AC1-036 C	0.4665	80/20	0.4665
927261	AC1-222 C	1.3197	80/20	1.3197
934311	AD1-055 C	0.9163	80/20	0.9163
935221	AD1-157 C	0.7121	80/20	0.7121
936265	AD2-033 C	24.7775	80/20	24.7775
936361	AD2-046 C O1	7.7284	80/20	7.7284
936485	AD2-063 C	23.4252	80/20	23.4252
938371	AE1-056 C	19.4582	80/20	19.4582
939181	AE1-148 C	7.7609	80/20	7.7609
940661	AE2-053 O1	2.8744	80/20	2.8744
942451	AE2-258	2.9317	80/20	2.9317
942461	AE2-259 C O1	36.8346	80/20	36.8346
943901	AF1-058 C	0.7463	80/20	0.7463
943911	AF1-059	13.9793	80/20	13.9793
946281	AF1-292 C	0.5181	80/20	0.5181
946301	AF1-294 C	11.7333	80/20	11.7333
958211	AF2-115 C	6.9020	80/20	6.9020
958801	AF2-171 C	41.2074	80/20	41.2074
959311	AF2-222 C	36.0450	80/20	36.0450
960061	AF2-297 C	2.9851	80/20	2.9851
960081	AF2-299 C	0.8732	80/20	0.8732
961791	AG1-021 C	5.5216	80/20	5.5216
961891	AG1-030 C	37.7604	80/20	37.7604
962041	AG1-048 C	34.5098	80/20	34.5098
962441	AG1-093 C O1	8.4888	80/20	8.4888
963171	AG1-166 C	5.5216	80/20	5.5216
963181	AG1-167 C	5.5216	80/20	5.5216
963191	AG1-168 C	5.5216	80/20	5.5216
963201	AG1-169 C	5.5216	80/20	5.5216
963211	AG1-170 C	5.5216	80/20	5.5216
963301	AG1-179 C	3.8659	80/20	3.8659
963311	AG1-180	1.8835	80/20	1.8835
963321	AG1-181 C O1	32.7592	80/20	32.7592
963361	AG1-185 O1	15.8498	80/20	15.8498
963641	AG1-215 C	2.5767	80/20	2.5767
964111	AG1-272 C	5.3022	80/20	5.3022
964121	AG1-273 C	5.3022	80/20	5.3022
964131	AG1-274 C	5.3022	80/20	5.3022
964241	AG1-285 C O1	18.3810	80/20	18.3810
964261	AG1-287 C	0.5597	80/20	0.5597
964471	AG1-310 C	0.7473	80/20	0.7473
964791	AG1-342 C	3.0915	80/20	3.0915
964821	AG1-345 C	2.2020	80/20	2.2020
965191	AG1-384 C	5.3022	80/20	5.3022

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965281	AG1-393 C	5.5216	80/20	5.5216
965451	AG1-413 C O1	5.8764	80/20	5.8764
965591	AG1-427 C	17.6058	80/20	17.6058
965601	AG1-428 C O1	3.2273	80/20	3.2273
965641	AG1-432 C O1	73.6692	80/20	73.6692
965721	AG1-440 C	5.1777	80/20	5.1777
965731	AG1-441 C	5.1777	80/20	5.1777
965771	AG1-445	2.9916	80/20	2.9916
965781	AG1-446	2.9916	80/20	2.9916
965831	AG1-451	12.2782	80/20	12.2782
966621	AG1-532 C	0.4715	80/20	0.4715
966751	AG1-546 C	8.6364	80/20	8.6364
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**7.3669**	**80/20**	**7.3669**
WEC	WEC	0.0813	Confirmed LTF	0.0813
LGEE	LGEE	0.1659	Confirmed LTF	0.1659
CPLE	CPLE	1.2422	Confirmed LTF	1.2422
CBM-W2	CBM-W2	4.0768	Confirmed LTF	4.0768
NY	NY	0.1233	Confirmed LTF	0.1233
TVA	TVA	0.7980	Confirmed LTF	0.7980
SIGE	SIGE	0.0565	Confirmed LTF	0.0565
CBM-S2	CBM-S2	13.8748	Confirmed LTF	13.8748
CBM-S1	CBM-S1	0.1953	Confirmed LTF	0.1953
MEC	MEC	0.5180	Confirmed LTF	0.5180
LAGN	LAGN	0.9958	Confirmed LTF	0.9958
CBM-W1	CBM-W1	3.3508	Confirmed LTF	3.3508

11.6.11 Index 11

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
169251134	314691	3FARMVIL	DVP	314692	6FARMVIL	DVP	1	DVP_P1-2: LN 298	single	198.06	220.87	222.05	DC	2.34

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.5190	80/20	0.5190
314429	3JTRSVLE	1.0409	80/20	1.0409
314704	3LAWRENC	0.1400	80/20	0.1400
315158	1KERR 1	0.2388	80/20	0.2388
315159	1KERR 2	0.6685	80/20	0.6685
315160	1KERR 3	0.6685	80/20	0.6685
315161	1KERR 4	0.6685	80/20	0.6685
315162	1KERR 5	0.6685	80/20	0.6685
315163	1KERR 6	0.6685	80/20	0.6685
315164	1KERR 7	0.6685	80/20	0.6685
316118	AC1-105 C	1.9644	80/20	1.9644

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316129	AC1-054 C	3.1577	80/20	3.1577
316131	AB2-060 C	1.5710	80/20	1.5710
924301	**AB2-077 C O1 (Suspended)**	**2.0004**	**80/20**	**2.0004**
924311	**AB2-078 C O1 (Suspended)**	**2.0004**	**80/20**	**2.0004**
924321	**AB2-079 C O1 (Suspended)**	**2.0004**	**80/20**	**2.0004**
925611	AC1-036 C	0.4104	80/20	0.4104
935221	AD1-157 C	0.6410	80/20	0.6410
936265	AD2-033 C	21.6637	80/20	21.6637
936361	AD2-046 C O1	6.1935	80/20	6.1935
936485	AD2-063 C	20.1177	80/20	20.1177
938371	AE1-056 C	17.5166	80/20	17.5166
939181	AE1-148 C	6.2354	80/20	6.2354
940661	AE2-053 O1	2.3094	80/20	2.3094
942451	AE2-258	2.4541	80/20	2.4541
942461	AE2-259 C O1	33.4608	80/20	33.4608
943911	AF1-059	11.3951	80/20	11.3951
946301	AF1-294 C	10.5152	80/20	10.5152
958211	AF2-115 C	6.1854	80/20	6.1854
958801	AF2-171 C	36.9198	80/20	36.9198
959311	AF2-222 C	31.8180	80/20	31.8180
961791	AG1-021 C	4.9483	80/20	4.9483
961891	AG1-030 C	33.6627	80/20	33.6627
962041	AG1-048 C	30.9270	80/20	30.9270
962441	AG1-093 C O1	5.2385	80/20	5.2385
963171	AG1-166 C	4.9483	80/20	4.9483
963181	AG1-167 C	4.9483	80/20	4.9483
963191	AG1-168 C	4.9483	80/20	4.9483
963201	AG1-169 C	4.9483	80/20	4.9483
963211	AG1-170 C	4.9483	80/20	4.9483
963301	AG1-179 C	3.0910	80/20	3.0910
963311	AG1-180	1.5060	80/20	1.5060
963321	AG1-181 C O1	28.6883	80/20	28.6883
963361	AG1-185 O1	13.8802	80/20	13.8802
963641	AG1-215 C	2.3092	80/20	2.3092
964111	AG1-272 C	4.6644	80/20	4.6644
964121	AG1-273 C	4.6644	80/20	4.6644
964131	AG1-274 C	4.6644	80/20	4.6644
964241	AG1-285 C O1	15.6870	80/20	15.6870
964791	AG1-342 C	2.2108	80/20	2.2108
964821	AG1-345 C	1.9730	80/20	1.9730
965191	AG1-384 C	4.6644	80/20	4.6644
965281	AG1-393 C	4.9483	80/20	4.9483
965451	AG1-413 C O1	4.7901	80/20	4.7901
965591	AG1-427 C	15.0419	80/20	15.0419
965601	AG1-428 C O1	2.5804	80/20	2.5804
965641	AG1-432 C O1	66.9216	80/20	66.9216
965721	AG1-440 C	4.0478	80/20	4.0478
965731	AG1-441 C	4.0478	80/20	4.0478
965771	AG1-445	2.3387	80/20	2.3387
965781	AG1-446	2.3387	80/20	2.3387

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965831	AG1-451	11.1536	80/20	11.1536
966751	AG1-546 C	6.5405	80/20	6.5405
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**6.6922**	**80/20**	**6.6922**
WEC	WEC	0.0236	Confirmed LTF	0.0236
LGEE	LGEE	0.0496	Confirmed LTF	0.0496
CPLE	CPLE	0.2361	Confirmed LTF	0.2361
CBM-W2	CBM-W2	0.9498	Confirmed LTF	0.9498
NY	NY	0.0321	Confirmed LTF	0.0321
TVA	TVA	0.1736	Confirmed LTF	0.1736
SIGE	SIGE	0.0158	Confirmed LTF	0.0158
CBM-S2	CBM-S2	2.5056	Confirmed LTF	2.5056
CBM-S1	CBM-S1	0.0441	Confirmed LTF	0.0441
MEC	MEC	0.1367	Confirmed LTF	0.1367
LAGN	LAGN	0.2135	Confirmed LTF	0.2135
CBM-W1	CBM-W1	0.9954	Confirmed LTF	0.9954

11.6.12 Index 12

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
169251193	314696	3SEDGE HILL	DVP	314697	6SEDGE HILL	DVP	1	DVP_P1-3: 6SEDGE HILL-TX#2	single	226.73	171.42	173.0	DC	3.58

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	0.5805	80/20	0.5805
246844	05SMG2	1.5779	80/20	1.5779
246845	05SMG3	0.9892	80/20	0.9892
246846	05SMG4	1.5534	80/20	1.5534
246847	05SMG5	0.6050	80/20	0.6050
247284	05LEESVG	0.7296	80/20	0.7296
313527	AB2-043 C	0.6460	80/20	0.6460
314429	3JTRSVLE	0.2980	80/20	0.2980
314704	3LAWRENC	0.1696	80/20	0.1696
315156	1HALLBR1	1.3548	80/20	1.3548
315158	1KERR 1	0.3699	80/20	0.3699
315159	1KERR 2	1.0357	80/20	1.0357
315160	1KERR 3	1.0357	80/20	1.0357
315161	1KERR 4	1.0357	80/20	1.0357
315162	1KERR 5	1.0357	80/20	1.0357
315163	1KERR 6	1.0357	80/20	1.0357
315164	1KERR 7	1.0357	80/20	1.0357
315266	1PLYWOOD A	3.6058	80/20	3.6058
316118	AC1-105 C	17.1934	80/20	17.1934
316123	AC1-075 C	2.2966	80/20	2.2966

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316129	AC1-054 C	4.6827	80/20	4.6827
316131	AB2-060 C	1.8286	80/20	1.8286
924301	**AB2-077 C O1 (Suspended)**	**2.6800**	**80/20**	**2.6800**
924311	**AB2-078 C O1 (Suspended)**	**2.6800**	**80/20**	**2.6800**
924321	**AB2-079 C O1 (Suspended)**	**2.6800**	**80/20**	**2.6800**
925611	AC1-036 C	0.2218	80/20	0.2218
925661	AC1-042 C	2.1728	80/20	2.1728
926023	AC1-080 C	0.7675	80/20	0.7675
926645	AC1-145 C	0.4081	80/20	0.4081
927261	AC1-222 C	12.1290	80/20	12.1290
934311	AD1-055 C	8.4214	80/20	8.4214
935221	AD1-157 C	0.1446	80/20	0.1446
936265	AD2-033 C	13.5587	80/20	13.5587
936361	AD2-046 C O1	9.1138	80/20	9.1138
936485	AD2-063 C	17.6553	80/20	17.6553
938371	AE1-056 C	3.9510	80/20	3.9510
939181	AE1-148 C	9.0914	80/20	9.0914
939941	AE1-230 C	0.9802	80/20	0.9802
940661	AE2-053 O1	3.3672	80/20	3.3672
941801	AE2-185 C	4.9010	80/20	4.9010
941821	AE2-187 C	4.9010	80/20	4.9010
942451	AE2-258	3.0548	80/20	3.0548
942461	AE2-259 C O1	3.4716	80/20	3.4716
942671	AE2-283 C	5.3911	80/20	5.3911
942751	AE2-291 C	19.2878	80/20	19.2878
942761	AE2-292 C O1	24.0152	80/20	24.0152
943901	AF1-058 C	6.8587	80/20	6.8587
943911	AF1-059	14.0170	80/20	14.0170
945081	AF1-173	1.8992	80/20	1.8992
946301	AF1-294 C	3.0108	80/20	3.0108
958211	AF2-115 C	1.7711	80/20	1.7711
958801	AF2-171 C	10.7010	80/20	10.7010
959311	AF2-222 C	15.7000	80/20	15.7000
960061	AF2-297 C	27.4349	80/20	27.4349
961121	AF2-403	1.0891	80/20	1.0891
961791	AG1-021 C	1.4168	80/20	1.4168
961891	AG1-030 C	12.0555	80/20	12.0555
962041	AG1-048 C	8.8552	80/20	8.8552
962441	AG1-093 C O1	45.8491	80/20	45.8491
963171	AG1-166 C	1.4168	80/20	1.4168
963181	AG1-167 C	1.4168	80/20	1.4168
963191	AG1-168 C	1.4168	80/20	1.4168
963201	AG1-169 C	1.4168	80/20	1.4168
963211	AG1-170 C	1.4168	80/20	1.4168
963301	AG1-179 C	3.7689	80/20	3.7689
963311	AG1-180	1.8363	80/20	1.8363
963321	AG1-181 C O1	17.3096	80/20	17.3096
963361	AG1-185 O1	8.3749	80/20	8.3749
963601	AG1-209 C	0.3812	80/20	0.3812
963641	AG1-215 C	0.6612	80/20	0.6612

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964111	AG1-272 C	2.5210	80/20	2.5210
964121	AG1-273 C	2.5210	80/20	2.5210
964131	AG1-274 C	2.5210	80/20	2.5210
964141	AG1-275 C	1.6337	80/20	1.6337
964151	AG1-276 C	1.6337	80/20	1.6337
964241	AG1-285 C O1	15.1590	80/20	15.1590
964251	AG1-286 C	0.6223	80/20	0.6223
964261	AG1-287 C	5.1440	80/20	5.1440
964471	AG1-310 C	6.8684	80/20	6.8684
964791	AG1-342 C	10.6934	80/20	10.6934
964821	AG1-345 C	0.5693	80/20	0.5693
965191	AG1-384 C	2.5210	80/20	2.5210
965281	AG1-393 C	1.4168	80/20	1.4168
965451	AG1-413 C O1	5.8922	80/20	5.8922
965591	AG1-427 C	14.2996	80/20	14.2996
965601	AG1-428 C O1	3.1464	80/20	3.1464
965641	AG1-432 C O1	6.9432	80/20	6.9432
965721	AG1-440 C	6.1934	80/20	6.1934
965731	AG1-441 C	6.1934	80/20	6.1934
965771	AG1-445	3.5784	80/20	3.5784
965781	AG1-446	3.5784	80/20	3.5784
965831	AG1-451	1.1572	80/20	1.1572
966691	AG1-539 C	10.0851	80/20	10.0851
966751	AG1-546 C	9.6117	80/20	9.6117
966761	AG1-547 C	4.4300	80/20	4.4300
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.6943**	**80/20**	**0.6943**
WEC	WEC	0.0164	Confirmed LTF	0.0164
LGEE	LGEE	0.0509	Confirmed LTF	0.0509
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
NY	NY	0.0547	Confirmed LTF	0.0547
PRAIRIE	PRAIRIE	0.0827	Confirmed LTF	0.0827
SIGE	SIGE	0.0181	Confirmed LTF	0.0181
CHEOAH	CHEOAH	0.1496	Confirmed LTF	0.1496
COTTONWOOD	COTTONWOOD	0.4284	Confirmed LTF	0.4284
HAMLET	HAMLET	0.6809	Confirmed LTF	0.6809
CATAWBA	CATAWBA	0.3041	Confirmed LTF	0.3041
CBM-W1	CBM-W1	0.7290	Confirmed LTF	0.7290

11.6.13 Index 13

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
169251209	314696	3SEDGE HILL	DVP	314697	6SEDGE HILL	DVP	2	DVP_P1-3: 6SEDGE HILL-TX#1	single	256.06	151.33	152.72	DC	3.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
246843	05SMG1	0.5788	80/20	0.5788
246844	05SMG2	1.5733	80/20	1.5733
246845	05SMG3	0.9864	80/20	0.9864
246846	05SMG4	1.5489	80/20	1.5489
246847	05SMG5	0.6032	80/20	0.6032
247284	05LEESVG	0.7274	80/20	0.7274
313527	AB2-043 C	0.6441	80/20	0.6441
314429	3JTRSVLE	0.2972	80/20	0.2972
314704	3LAWRENC	0.1691	80/20	0.1691
315156	1HALLBR1	1.3508	80/20	1.3508
315158	1KERR 1	0.3688	80/20	0.3688
315159	1KERR 2	1.0326	80/20	1.0326
315160	1KERR 3	1.0326	80/20	1.0326
315161	1KERR 4	1.0326	80/20	1.0326
315162	1KERR 5	1.0326	80/20	1.0326
315163	1KERR 6	1.0326	80/20	1.0326
315164	1KERR 7	1.0326	80/20	1.0326
315266	1PLYWOOD A	3.5951	80/20	3.5951
316118	AC1-105 C	17.1420	80/20	17.1420
316123	AC1-075 C	2.2897	80/20	2.2897
316129	AC1-054 C	4.6689	80/20	4.6689
316131	AB2-060 C	1.8231	80/20	1.8231
924301	**AB2-077 C O1 (Suspended)**	**2.6719**	**80/20**	**2.6719**
924311	**AB2-078 C O1 (Suspended)**	**2.6719**	**80/20**	**2.6719**
924321	**AB2-079 C O1 (Suspended)**	**2.6719**	**80/20**	**2.6719**
925611	AC1-036 C	0.2212	80/20	0.2212
925661	AC1-042 C	2.1663	80/20	2.1663
926023	AC1-080 C	0.7652	80/20	0.7652
926645	AC1-145 C	0.4069	80/20	0.4069
927261	AC1-222 C	12.0926	80/20	12.0926
934311	AD1-055 C	8.3962	80/20	8.3962
935221	AD1-157 C	0.1442	80/20	0.1442
936265	AD2-033 C	13.5182	80/20	13.5182
936361	AD2-046 C O1	9.0864	80/20	9.0864
936485	AD2-063 C	17.6022	80/20	17.6022
938371	AE1-056 C	3.9394	80/20	3.9394
939181	AE1-148 C	9.0639	80/20	9.0639
939941	AE1-230 C	0.9773	80/20	0.9773
940661	AE2-053 O1	3.3570	80/20	3.3570
941801	AE2-185 C	4.8863	80/20	4.8863
941821	AE2-187 C	4.8863	80/20	4.8863
942451	AE2-258	3.0456	80/20	3.0456
942461	AE2-259 C O1	3.4614	80/20	3.4614
942671	AE2-283 C	5.3749	80/20	5.3749
942751	AE2-291 C	19.2303	80/20	19.2303
942761	AE2-292 C O1	23.9436	80/20	23.9436
943901	AF1-058 C	6.8382	80/20	6.8382
943911	AF1-059	13.9753	80/20	13.9753
945081	AF1-173	1.8934	80/20	1.8934
946301	AF1-294 C	3.0019	80/20	3.0019

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
958211	AF2-115 C	1.7658	80/20	1.7658
958801	AF2-171 C	10.6686	80/20	10.6686
959311	AF2-222 C	15.6530	80/20	15.6530
960061	AF2-297 C	27.3528	80/20	27.3528
961121	AF2-403	1.0858	80/20	1.0858
961791	AG1-021 C	1.4126	80/20	1.4126
961891	AG1-030 C	12.0195	80/20	12.0195
962041	AG1-048 C	8.8290	80/20	8.8290
962441	AG1-093 C O1	45.7120	80/20	45.7120
963171	AG1-166 C	1.4126	80/20	1.4126
963181	AG1-167 C	1.4126	80/20	1.4126
963191	AG1-168 C	1.4126	80/20	1.4126
963201	AG1-169 C	1.4126	80/20	1.4126
963211	AG1-170 C	1.4126	80/20	1.4126
963301	AG1-179 C	3.7578	80/20	3.7578
963311	AG1-180	1.8309	80/20	1.8309
963321	AG1-181 C O1	17.2581	80/20	17.2581
963361	AG1-185 O1	8.3499	80/20	8.3499
963601	AG1-209 C	0.3800	80/20	0.3800
963641	AG1-215 C	0.6592	80/20	0.6592
964111	AG1-272 C	2.5135	80/20	2.5135
964121	AG1-273 C	2.5135	80/20	2.5135
964131	AG1-274 C	2.5135	80/20	2.5135
964141	AG1-275 C	1.6288	80/20	1.6288
964151	AG1-276 C	1.6288	80/20	1.6288
964241	AG1-285 C O1	15.1132	80/20	15.1132
964251	AG1-286 C	0.6204	80/20	0.6204
964261	AG1-287 C	5.1287	80/20	5.1287
964471	AG1-310 C	6.8479	80/20	6.8479
964791	AG1-342 C	10.6614	80/20	10.6614
964821	AG1-345 C	0.5676	80/20	0.5676
965191	AG1-384 C	2.5135	80/20	2.5135
965281	AG1-393 C	1.4126	80/20	1.4126
965451	AG1-413 C O1	5.8747	80/20	5.8747
965591	AG1-427 C	14.2570	80/20	14.2570
965601	AG1-428 C O1	3.1371	80/20	3.1371
965641	AG1-432 C O1	6.9228	80/20	6.9228
965721	AG1-440 C	6.1749	80/20	6.1749
965731	AG1-441 C	6.1749	80/20	6.1749
965771	AG1-445	3.5677	80/20	3.5677
965781	AG1-446	3.5677	80/20	3.5677
965831	AG1-451	1.1538	80/20	1.1538
966691	AG1-539 C	10.0550	80/20	10.0550
966751	AG1-546 C	9.5834	80/20	9.5834
966761	AG1-547 C	4.4167	80/20	4.4167
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.6923**	**80/20**	**0.6923**
WEC	WEC	0.0161	Confirmed LTF	0.0161
LGEE	LGEE	0.0503	Confirmed LTF	0.0503
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
NY	NY	0.0553	Confirmed LTF	0.0553
PRAIRIE	PRAIRIE	0.0827	Confirmed LTF	0.0827

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
SIGE	SIGE	0.0180	Confirmed LTF	0.0180
CHEOAH	CHEOAH	0.1496	Confirmed LTF	0.1496
COTTONWOOD	COTTONWOOD	0.4284	Confirmed LTF	0.4284
HAMLET	HAMLET	0.6791	Confirmed LTF	0.6791
CATAWBA	CATAWBA	0.3035	Confirmed LTF	0.3035
CBM-W1	CBM-W1	0.7150	Confirmed LTF	0.7150

11.6.14 Index 14

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
166985312	314699	3ISLND C	DVP	313705	3KERRDP	DVP	1	DVP_P7-1: LN 171-1009	tower	202.0	113.51	116.7	DC	6.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.4229	50/50	0.4229
313853	3PONTONDP	0.2999	Adder	0.35
314713	3PAMPLIN	0.6573	Adder	0.77
315266	1PLYWOOD A	0.9917	50/50	0.9917
316118	AC1-105 C	2.4718	Adder	2.91
316129	AC1-054 C	-7.0449	Adder	-8.29
316131	AB2-060 C	1.1992	50/50	1.1992
924022	AB2-043 E O1	2.3969	50/50	2.3969
924162	AB2-060 E OP	3.5768	50/50	3.5768
924301	**AB2-077 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924302	**AB2-077 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924311	**AB2-078 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924312	**AB2-078 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
924321	**AB2-079 C O1 (Suspended)**	**1.9992**	**50/50**	**1.9992**
924322	**AB2-079 E O1 (Suspended)**	**1.3328**	**50/50**	**1.3328**
925611	AC1-036 C	0.1533	50/50	0.1533
925612	AC1-036 E	0.5817	50/50	0.5817
926274	AC1-105 E	1.2144	Adder	1.43
927261	AC1-222 C	1.2514	Adder	1.47
927262	AC1-222 E	1.1913	Adder	1.4
934311	AD1-055 C	0.8689	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
935222	AD1-157 E	0.4052	Adder	0.48
936265	AD2-033 C	9.2391	50/50	9.2391
936266	AD2-033 E	6.1594	50/50	6.1594
936485	AD2-063 C	11.7639	50/50	11.7639

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936486	AD2-063 E	7.8426	50/50	7.8426
938371	AE1-056 C	2.6206	Adder	3.08
938372	AE1-056 E	1.4319	Adder	1.68
940662	AE2-053 BAT	5.6696	50/50	5.6696
942451	AE2-258	1.9998	50/50	1.9998
942461	AE2-259 C O1	2.8346	Adder	3.33
942462	AE2-259 E O1	1.8897	Adder	2.22
943901	AF1-058 C	0.7075	Adder	0.83
943902	AF1-058 E	0.4716	Adder	0.55
943911	AF1-059	6.4092	Adder	7.54
946301	AF1-294 C	1.9120	Adder	2.25
946302	AF1-294 E	1.2746	Adder	1.5
958211	AF2-115 C	1.1247	Adder	1.32
958212	AF2-115 E	0.7498	Adder	0.88
958801	AF2-171 C	6.7878	Adder	7.99
958802	AF2-171 E	4.5252	Adder	5.32
959311	AF2-222 C	10.9430	50/50	10.9430
959312	AF2-222 E	7.3318	50/50	7.3318
960061	AF2-297 C	2.8299	Adder	3.33
960062	AF2-297 E	1.8866	Adder	2.22
961791	AG1-021 C	0.4769	Adder	1.06
961792	AG1-021 E	0.3179	Adder	0.71
961891	AG1-030 C	3.9256	Adder	8.71
961892	AG1-030 E	2.6170	Adder	5.81
962041	AG1-048 C	2.9804	Adder	6.62
962042	AG1-048 E	1.9869	Adder	4.41
962441	AG1-093 C O1	3.4935	Adder	7.75
962442	AG1-093 E O1	1.0632	Adder	2.36
963171	AG1-166 C	0.4769	Adder	1.06
963172	AG1-166 E	0.3179	Adder	0.71
963181	AG1-167 C	0.4769	Adder	1.06
963182	AG1-167 E	0.3179	Adder	0.71
963191	AG1-168 C	0.4769	Adder	1.06
963192	AG1-168 E	0.3179	Adder	0.71
963201	AG1-169 C	0.4769	Adder	1.06
963202	AG1-169 E	0.3179	Adder	0.71
963211	AG1-170 C	0.4769	Adder	1.06
963212	AG1-170 E	0.3179	Adder	0.71
963301	AG1-179 C	0.7641	Adder	1.7
963311	AG1-180	0.3723	Adder	0.83
963321	AG1-181 C O1	11.8437	50/50	11.8437
963361	AG1-185 O1	5.7303	50/50	5.7303
963641	AG1-215 C	0.2225	Adder	0.49
963642	AG1-215 E	0.3338	Adder	0.74
964111	AG1-272 C	1.7417	50/50	1.7417
964112	AG1-272 E	0.5173	50/50	0.5173
964121	AG1-273 C	1.7417	50/50	1.7417
964122	AG1-273 E	0.5173	50/50	0.5173
964131	AG1-274 C	1.7417	50/50	1.7417
964132	AG1-274 E	0.5173	50/50	0.5173
964241	AG1-285 C O1	10.0455	50/50	10.0455
964242	AG1-285 E O1	6.6970	50/50	6.6970

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964261	AG1-287 C	0.2812	Adder	0.62
964262	AG1-287 E	0.1875	Adder	0.42
964471	AG1-310 C	0.3757	Adder	0.83
964472	AG1-310 E	0.1850	Adder	0.41
964791	AG1-342 C	1.1283	Adder	2.5
964792	AG1-342 E	0.8865	Adder	1.97
964821	AG1-345 C	0.1914	Adder	0.42
964822	AG1-345 E	0.1276	Adder	0.28
965191	AG1-384 C	1.7417	50/50	1.7417
965192	AG1-384 E	0.5173	50/50	0.5173
965281	AG1-393 C	0.4769	Adder	1.06
965282	AG1-393 E	0.3179	Adder	0.71
965451	AG1-413 C O1	1.4279	Adder	3.17
965452	AG1-413 E O1	0.9519	Adder	2.11
965591	AG1-427 C	9.4847	50/50	9.4847
965592	AG1-427 E	6.3365	50/50	6.3365
965601	AG1-428 C O1	0.6379	Adder	1.42
965602	AG1-428 E O1	0.4245	Adder	0.94
965641	AG1-432 C O1	3.0047	Adder	6.67
965642	AG1-432 E O1	2.0031	Adder	4.45
965772	AG1-445 BAT	6.4462	50/50	6.4462
965782	AG1-446 BAT	6.4462	50/50	6.4462
965831	AG1-451	0.5008	Adder	1.11
966753	AG1-546 BAT	6.4143	50/50	6.4143
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.3005**	**Adder**	**0.67**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2003**	**Adder**	**0.44**
G-007A	G-007A	0.1654	Confirmed LTF	0.1654
VFT	VFT	0.4451	Confirmed LTF	0.4451
CALDERWOOD	CALDERWOOD	0.0984	Confirmed LTF	0.0984
PRAIRIE	PRAIRIE	0.2144	Confirmed LTF	0.2144
CHEOAH	CHEOAH	0.1026	Confirmed LTF	0.1026
CBM-N	CBM-N	0.0828	Confirmed LTF	0.0828
COTTONWOOD	COTTONWOOD	0.3360	Confirmed LTF	0.3360
HAMLET	HAMLET	0.3274	Confirmed LTF	0.3274
GIBSON	GIBSON	0.0229	Confirmed LTF	0.0229
BLUEG	BLUEG	0.0590	Confirmed LTF	0.0590
TRIMBLE	TRIMBLE	0.0178	Confirmed LTF	0.0178
CATAWBA	CATAWBA	0.1431	Confirmed LTF	0.1431

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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
163844033	314702	3KERR	DVP	304102	3GW KING TAP	CPLE	1	DVP_P4-6: CAROLINT122	breaker	199.0	227.5	232.07	DC	9.26

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

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

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

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ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
166985310	314781	3BLACKBR	DVP	314788	3JONESTO	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	120.41	121.52	DC	3.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6786	50/50	0.6786

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313853	3PONTONDP	0.5479	50/50	0.5479
314429	3JTRSVLE	0.3458	50/50	0.3458
314713	3PAMPLIN	1.1895	50/50	1.1895
316129	AC1-054 C	-3.5586	Adder	-4.19
316131	AB2-060 C	1.9221	50/50	1.9221
924022	AB2-043 E O1	3.8463	50/50	3.8463
924162	AB2-060 E OP	5.7331	50/50	5.7331
924301	**AB2-077 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924302	**AB2-077 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924311	**AB2-078 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924312	**AB2-078 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924321	**AB2-079 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924322	**AB2-079 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
925611	AC1-036 C	0.2426	50/50	0.2426
925612	AC1-036 E	0.9209	50/50	0.9209
935221	AD1-157 C	0.1736	50/50	0.1736
935222	AD1-157 E	0.7334	50/50	0.7334
936265	AD2-033 C	14.6671	50/50	14.6671
936266	AD2-033 E	9.7781	50/50	9.7781
936485	AD2-063 C	18.7920	50/50	18.7920
936486	AD2-063 E	12.5280	50/50	12.5280
938371	AE1-056 C	4.7425	50/50	4.7425
938372	AE1-056 E	2.5913	50/50	2.5913
940662	AE2-053 BAT	2.9720	50/50	2.9720
942451	AE2-258	3.2090	50/50	3.2090
942461	AE2-259 C O1	4.1764	Adder	4.91
942462	AE2-259 E O1	2.7843	Adder	3.28
943911	AF1-059	13.6212	50/50	13.6212
946301	AF1-294 C	3.4930	50/50	3.4930
946302	AF1-294 E	2.3287	50/50	2.3287
958211	AF2-115 C	2.0547	50/50	2.0547
958212	AF2-115 E	1.3698	50/50	1.3698
958801	AF2-171 C	12.4101	50/50	12.4101
958802	AF2-171 E	8.2734	50/50	8.2734
959311	AF2-222 C	17.2850	50/50	17.2850
959312	AF2-222 E	11.5809	50/50	11.5809
961791	AG1-021 C	1.6438	50/50	1.6438
961792	AG1-021 E	1.0958	50/50	1.0958
961891	AG1-030 C	13.6368	50/50	13.6368
961892	AG1-030 E	9.0912	50/50	9.0912
962041	AG1-048 C	10.2735	50/50	10.2735
962042	AG1-048 E	6.8490	50/50	6.8490
963171	AG1-166 C	1.6438	50/50	1.6438
963172	AG1-166 E	1.0958	50/50	1.0958
963181	AG1-167 C	1.6438	50/50	1.6438
963182	AG1-167 E	1.0958	50/50	1.0958
963191	AG1-168 C	1.6438	50/50	1.6438

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963192	AG1-168 E	1.0958	50/50	1.0958
963201	AG1-169 C	1.6438	50/50	1.6438
963202	AG1-169 E	1.0958	50/50	1.0958
963211	AG1-170 C	1.6438	50/50	1.6438
963212	AG1-170 E	1.0958	50/50	1.0958
963301	AG1-179 C	3.4390	50/50	3.4390
963311	AG1-180	1.6756	50/50	1.6756
963321	AG1-181 C O1	18.7936	50/50	18.7936
963361	AG1-185 O1	9.0929	50/50	9.0929
963641	AG1-215 C	0.7671	50/50	0.7671
963642	AG1-215 E	1.1506	50/50	1.1506
964111	AG1-272 C	2.7573	50/50	2.7573
964112	AG1-272 E	0.8189	50/50	0.8189
964121	AG1-273 C	2.7573	50/50	2.7573
964122	AG1-273 E	0.8189	50/50	0.8189
964131	AG1-274 C	2.7573	50/50	2.7573
964132	AG1-274 E	0.8189	50/50	0.8189
964241	AG1-285 C O1	16.0687	50/50	16.0687
964242	AG1-285 E O1	10.7125	50/50	10.7125
964791	AG1-342 C	1.0172	Adder	2.26
964792	AG1-342 E	0.7992	Adder	1.77
964821	AG1-345 C	0.6599	50/50	0.6599
964822	AG1-345 E	0.4399	50/50	0.4399
965191	AG1-384 C	2.7573	50/50	2.7573
965192	AG1-384 E	0.8189	50/50	0.8189
965281	AG1-393 C	1.6438	50/50	1.6438
965282	AG1-393 E	1.0958	50/50	1.0958
965451	AG1-413 C O1	5.7258	50/50	5.7258
965452	AG1-413 E O1	3.8172	50/50	3.8172
965591	AG1-427 C	15.1685	50/50	15.1685
965592	AG1-427 E	10.1336	50/50	10.1336
965601	AG1-428 C O1	2.8710	50/50	2.8710
965602	AG1-428 E O1	1.9106	50/50	1.9106
965641	AG1-432 C O1	4.4270	Adder	9.83
965642	AG1-432 E O1	2.9513	Adder	6.55
965772	AG1-445 BAT	3.3454	50/50	3.3454
965782	AG1-446 BAT	3.3454	50/50	3.3454
965831	AG1-451	0.7378	Adder	1.64
966753	AG1-546 BAT	1.7033	Merchant Transmission	1.7033
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.4427**	**Adder**	**0.98**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2951**	**Adder**	**0.66**
G-007A	G-007A	0.2062	Confirmed LTF	0.2062
VFT	VFT	0.5483	Confirmed LTF	0.5483
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
PRAIRIE	PRAIRIE	0.4314	Confirmed LTF	0.4314
CHEOAH	CHEOAH	0.1426	Confirmed LTF	0.1426
CBM-N	CBM-N	0.1008	Confirmed LTF	0.1008
COTTONWOOD	COTTONWOOD	0.4977	Confirmed LTF	0.4977
HAMLET	HAMLET	0.3182	Confirmed LTF	0.3182

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
GIBSON	GIBSON	0.0710	Confirmed LTF	0.0710
BLUEG	BLUEG	0.2153	Confirmed LTF	0.2153
TRIMBLE	TRIMBLE	0.0684	Confirmed LTF	0.0684
CATAWBA	CATAWBA	0.1614	Confirmed LTF	0.1614

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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
166985316	314788	3JONESTO	DVP	314683	3CLRKVILLE	DVP	1	DVP_P7-1: LN 171-1009	tower	301.0	119.05	120.16	DC	3.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313527	AB2-043 C	0.6786	50/50	0.6786
313853	3PONTONDP	0.5479	50/50	0.5479
314429	3JTRSVLE	0.3458	50/50	0.3458
314713	3PAMPLIN	1.1895	50/50	1.1895
316129	AC1-054 C	-3.5586	Adder	-4.19
316131	AB2-060 C	1.9221	50/50	1.9221
924022	AB2-043 E O1	3.8463	50/50	3.8463
924162	AB2-060 E OP	5.7331	50/50	5.7331
924301	**AB2-077 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924302	**AB2-077 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924311	**AB2-078 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924312	**AB2-078 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
924321	**AB2-079 C O1 (Suspended)**	**3.3240**	**50/50**	**3.3240**
924322	**AB2-079 E O1 (Suspended)**	**2.2160**	**50/50**	**2.2160**
925611	AC1-036 C	0.2426	50/50	0.2426
925612	AC1-036 E	0.9209	50/50	0.9209
935221	AD1-157 C	0.1736	50/50	0.1736
935222	AD1-157 E	0.7334	50/50	0.7334
936265	AD2-033 C	14.6671	50/50	14.6671
936266	AD2-033 E	9.7781	50/50	9.7781
936485	AD2-063 C	18.7920	50/50	18.7920
936486	AD2-063 E	12.5280	50/50	12.5280
938371	AE1-056 C	4.7425	50/50	4.7425
938372	AE1-056 E	2.5913	50/50	2.5913
940662	AE2-053 BAT	2.9720	50/50	2.9720
942451	AE2-258	3.2090	50/50	3.2090
942461	AE2-259 C O1	4.1764	Adder	4.91
942462	AE2-259 E O1	2.7843	Adder	3.28

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943911	AF1-059	13.6212	50/50	13.6212
946301	AF1-294 C	3.4930	50/50	3.4930
946302	AF1-294 E	2.3287	50/50	2.3287
958211	AF2-115 C	2.0547	50/50	2.0547
958212	AF2-115 E	1.3698	50/50	1.3698
958801	AF2-171 C	12.4101	50/50	12.4101
958802	AF2-171 E	8.2734	50/50	8.2734
959311	AF2-222 C	17.2850	50/50	17.2850
959312	AF2-222 E	11.5809	50/50	11.5809
961791	AG1-021 C	1.6438	50/50	1.6438
961792	AG1-021 E	1.0958	50/50	1.0958
961891	AG1-030 C	13.6368	50/50	13.6368
961892	AG1-030 E	9.0912	50/50	9.0912
962041	AG1-048 C	10.2735	50/50	10.2735
962042	AG1-048 E	6.8490	50/50	6.8490
963171	AG1-166 C	1.6438	50/50	1.6438
963172	AG1-166 E	1.0958	50/50	1.0958
963181	AG1-167 C	1.6438	50/50	1.6438
963182	AG1-167 E	1.0958	50/50	1.0958
963191	AG1-168 C	1.6438	50/50	1.6438
963192	AG1-168 E	1.0958	50/50	1.0958
963201	AG1-169 C	1.6438	50/50	1.6438
963202	AG1-169 E	1.0958	50/50	1.0958
963211	AG1-170 C	1.6438	50/50	1.6438
963212	AG1-170 E	1.0958	50/50	1.0958
963301	AG1-179 C	3.4390	50/50	3.4390
963311	AG1-180	1.6756	50/50	1.6756
963321	AG1-181 C O1	18.7936	50/50	18.7936
963361	AG1-185 O1	9.0929	50/50	9.0929
963641	AG1-215 C	0.7671	50/50	0.7671
963642	AG1-215 E	1.1506	50/50	1.1506
964111	AG1-272 C	2.7573	50/50	2.7573
964112	AG1-272 E	0.8189	50/50	0.8189
964121	AG1-273 C	2.7573	50/50	2.7573
964122	AG1-273 E	0.8189	50/50	0.8189
964131	AG1-274 C	2.7573	50/50	2.7573
964132	AG1-274 E	0.8189	50/50	0.8189
964241	AG1-285 C O1	16.0687	50/50	16.0687
964242	AG1-285 E O1	10.7125	50/50	10.7125
964791	AG1-342 C	1.0172	Adder	2.26
964792	AG1-342 E	0.7992	Adder	1.77
964821	AG1-345 C	0.6599	50/50	0.6599
964822	AG1-345 E	0.4399	50/50	0.4399
965191	AG1-384 C	2.7573	50/50	2.7573
965192	AG1-384 E	0.8189	50/50	0.8189
965281	AG1-393 C	1.6438	50/50	1.6438
965282	AG1-393 E	1.0958	50/50	1.0958
965451	AG1-413 C O1	5.7258	50/50	5.7258
965452	AG1-413 E O1	3.8172	50/50	3.8172
965591	AG1-427 C	15.1685	50/50	15.1685
965592	AG1-427 E	10.1336	50/50	10.1336
965601	AG1-428 C O1	2.8710	50/50	2.8710

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965602	AG1-428 E O1	1.9106	50/50	1.9106
965641	AG1-432 C O1	4.4270	Adder	9.83
965642	AG1-432 E O1	2.9513	Adder	6.55
965772	AG1-445 BAT	3.3454	50/50	3.3454
965782	AG1-446 BAT	3.3454	50/50	3.3454
965831	AG1-451	0.7378	Adder	1.64
966753	AG1-546 BAT	1.7033	Merchant Transmission	1.7033
966861	**AG1-557 C O1 (Withdrawn : 12/14/2020)**	**0.4427**	**Adder**	**0.98**
966862	**AG1-557 E O1 (Withdrawn : 12/14/2020)**	**0.2951**	**Adder**	**0.66**
G-007A	G-007A	0.2062	Confirmed LTF	0.2062
VFT	VFT	0.5483	Confirmed LTF	0.5483
CALDERWOOD	CALDERWOOD	0.1387	Confirmed LTF	0.1387
PRAIRIE	PRAIRIE	0.4314	Confirmed LTF	0.4314
CHEOAH	CHEOAH	0.1426	Confirmed LTF	0.1426
CBM-N	CBM-N	0.1008	Confirmed LTF	0.1008
COTTONWOOD	COTTONWOOD	0.4977	Confirmed LTF	0.4977
HAMLET	HAMLET	0.3182	Confirmed LTF	0.3182
GIBSON	GIBSON	0.0710	Confirmed LTF	0.0710
BLUEG	BLUEG	0.2153	Confirmed LTF	0.2153
TRIMBLE	TRIMBLE	0.0684	Confirmed LTF	0.0684
CATAWBA	CATAWBA	0.1614	Confirmed LTF	0.1614

11.7 Queue Dependencies

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

Queue Number	Project Name	Status
AA1-063	Huntsville (Cabin Creek) 69kV	Withdrawn
AA2-053	Carolina-Jackson 115kV	In Service
AA2-088	Boykins-Handsome 115kV	In Service
AA2-165	Hornertown-Whitakers 115kV	In Service
AB1-081	Anaconda-Mayo Dunbar 115kV	In Service
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB2-015	Franklin 115kV	Engineering and Procurement
AB2-040	Brink 115kV	Engineering and Procurement
AB2-043	Chase City 115kV	Under Construction
AB2-059	Benson-Dunbar 115kV	Partially in Service - Under Construction
AB2-060	Chase City-Lunenburg 115kV	In Service
AB2-077	Buggs Island-Chase City 115kV	Suspended
AB2-078	Buggs Island-Chase City 115kV	Suspended
AB2-079	Buggs Island-Chase City 115kV	Suspended
AB2-099	Ahoskie 34.5kV	Suspended
AB2-100	Clubhouse-Lakeview 230kV	Under Construction
AB2-174	Emporia-Trego 115kV	In Service
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Engineering and Procurement
AC1-036	Twittys Creek 34.5kV	Partially in Service - Under Construction
AC1-042	Altavista-Mt. Airy 69kV	Engineering and Procurement
AC1-054	Kerr Dam–Eatons Ferry 115 kV	Engineering and Procurement
AC1-075	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-080	Perth-Hickory Grove 115kV	Engineering and Procurement
AC1-086	Thelma 230kV	Active
AC1-098	Dawson-South Justice 115kV	Engineering and Procurement
AC1-099	Dawson-South Justice 115kV	Engineering and Procurement
AC1-105	Halifax-Mt. Laurel 115kV	Engineering and Procurement
AC1-145	Gretna DP 69 kV	Engineering and Procurement
AC1-208	Cox-Whitakers 115kV	Engineering and Procurement
AC1-222	Crystal Hill-Halifax 115kV	Engineering and Procurement
AC2-084	Dawson-South Justice 115kV	Active
AD1-055	Crystal Hill-Halifax 115 kV	Engineering and Procurement
AD1-057	Hornertown-Hathaway 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
AD2-063	Central-Chase City 115kV	Active
AE1-056	Red House-South Creek 115 kV	Active
AE1-103	Holland-Union Camp 115 kV	Active

Queue Number	Project Name	Status
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE1-230	Shockoe 69 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-151	Earleys 34.5kV	Withdrawn
AE2-185	Gladys DP-Stonemill Switching Station 69 kV	Active
AE2-187	Shockoe DP-Chatham 69 kV	Active
AE2-258	Chase City 115 kV	Active
AE2-259	Curdsville-Willis Mtn 115 kV	Active
AE2-283	Gladys-Stone Mill 69 kV	Active
AE2-291	Grit DP-Perth 115 kV	Active
AE2-292	Grit DP-Perth 115 kV	Active
AE2-346	Ahoskie 34.5 kV	Active
AF1-058	Welco 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-173	Gretna DP-Shockoe DP 69 kV	Active
AF1-292	Fields 34.5kV	Active
AF1-294	Jetersville-Ponton 115 kV	Active
AF2-046	Tunis-Mapleton 115 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
AF2-297	Sedge Hill 115 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-400	Franklin 13.2 kV	Engineering and Procurement
AF2-403	Shockoe DP-Chatham 69 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-021	Jetersville-Ponton 115 kV	Active
AG1-030	Victoria DP-Martin DP 115 kV	Active
AG1-036	Tunis 34.5 kV	Active
AG1-037	Ahoskie 34.5 kV	Active
AG1-048	Jetersville-Ponton 115 kV	Active
AG1-082	Ahoskie 34.5 kV	Active
AG1-083	Ahoskie 34.5 kV	Active
AG1-084	Earlys 34.5 kV	Active
AG1-085	Earlys 34.5	Active
AG1-093	Halifax-Chase City 115 kV	Active
AG1-106	Thelma 230 kV	Active
AG1-166	Lone Pine 115 kV	Active
AG1-167	Lone Pine 115 kV	Active
AG1-168	Lone Pine 115 kV	Active
AG1-169	Lone Pine 115 kV	Active
AG1-170	Lone Pine 115 kV	Active
AG1-179	Brunswick 69 kV	Active
AG1-180	Brunswick 69 kV	Active
AG1-181	Pamplin-Chase City 115 kV	Active
AG1-185	Pamplin-Chase City 115 kV	Active
AG1-209	Gretna 12.5 kV	Active
AG1-215	Fort Pickett 13.2 kV	Active
AG1-272	Twitty's Creek 115 kV	Active
AG1-273	Twitty's Creek 115 kV	Active

Queue Number	Project Name	Status
AG1-274	Twitty's Creek 115 kV	Active
AG1-275	Gladys DP-Stone Mill 69 kV	Active
AG1-276	Gladys DP-Stone Mill 69 kV	Active
AG1-285	Chase City-Central 115 kV	Active
AG1-286	Johnson Mountain 138 kV	Active
AG1-287	South Boston 12.5 kV	Active
AG1-310	Crystal Hill-Perth 115 kV	Active
AG1-313	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	Danieltown 69 kV	Active
AG1-432	Curdsville DP-Willis Mt. 115 kV	Active
AG1-440	Palmer Springs 115 kV	Active
AG1-441	Palmer Springs 115 kV	Active
AG1-445	Palmer Spring 115 kV	Active
AG1-446	Palmer Springs 115 kV	Active
AG1-451	Curdsville DP-Willis Mt. 115 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-539	Grit DP-Perth 115 kV	Active
AG1-546	Ebony-Elams Road 115 kV	Active
AG1-547	Mount Airy-Chatham 69 kV	Active
AG1-552	Carolina 13.2 kV	Active
AG1-557	Curdsville DP 115 kV	Withdrawn

11.8 Contingency Descriptions

Contingency Name	Contingency Definition
DVP_P1-2: LN 31-A	CONTINGENCY 'DVP_P1-2: LN 31-A' OPEN BRANCH FROM BUS 314666 TO BUS 314712 CKT 1 /* 3ALTVSTA 115.00 - 3OTTER R 115.00 OPEN BRANCH FROM BUS 314694 TO BUS 314712 CKT 1 /* 3GRIT 115.00 - 3OTTER R 115.00 OPEN BRANCH FROM BUS 314694 TO BUS 942750 CKT 1 /* 3GRIT 115.00 - AE2-291 TAP 115.00 OPEN BUS 314694 /* ISLAND: 3GRIT 115.00 OPEN BUS 314712 /* ISLAND: 3OTTER R 115.00 END
DVP_P1-3: 6SEDGE HILL-TX#1	CONTINGENCY 'DVP_P1-3: 6SEDGE HILL-TX#1' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 1 /* 3SEDGE HILL 115.00 - 6SEDGE HILL 230.00 END
DVP_P4-2: 102802	CONTINGENCY 'DVP_P4-2: 102802' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END

Contingency Name	Contingency Definition
DVP_P4-6: CAROLIN T122	CONTINGENCY 'DVP_P4-6: CAROLIN T122' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 315126 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP2 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 315128 CKT 1 /* 3CAROLNA 115.00 - 1ROARAP4 14.400 OPEN BUS 315126 /* ISLAND: 1ROARAP2 14.400 OPEN BUS 315128 /* ISLAND: 1ROARAP4 14.400 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314578 CKT 1 /* 3CAROLNA 115.00 - 3HORNRTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 OPEN BUS 314559 /* 3CAROLNA 115.00 KV OPEN BUS 314835 /* ISLAND: 3CAROL_1 115.00 END
DVP_P1-2: LN 1012-E	CONTINGENCY 'DVP_P1-2: LN 1012-E' OPEN BRANCH FROM BUS 964240 TO BUS 314681 CKT 1 /* AG1-285 TAP 115.00 - 3CHASCTY 115.00 END
DVP_P1-2: LN 90	CONTINGENCY 'DVP_P1-2: LN 90' OPEN BRANCH FROM BUS 314265 TO BUS 314584 CKT 1 /* 3FIVEFORKSDP115.00 - 3LITTLTN 115.00 OPEN BRANCH FROM BUS 314265 TO BUS 314673 CKT 1 /* 3FIVEFORKSDP115.00 - 3PALMERSPRNG115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314585 CKT 1 /* 3CAROLNA 115.00 - 3L GASTN 115.00 OPEN BRANCH FROM BUS 314584 TO BUS 314585 CKT 1 /* 3LITTLTN 115.00 - 3L GASTN 115.00 OPEN BUS 314265 /* ISLAND: 3FIVEFORKSDP115.00 OPEN BUS 314584 /* ISLAND: 3LITTLTN 115.00 OPEN BUS 314585 /* ISLAND: 3L GASTN 115.00 END

Contingency Name	Contingency Definition
DVP_P7-1: LN 137-1041	CONTINGENCY 'DVP_P7-1: LN 137-1041' /* . OPEN BRANCH FROM BUS 313849 TO BUS 939180 CKT 1 /* 3RIDGERD 115.00 - AE1-148 TAP 115.00 OPEN BRANCH FROM BUS 314702 TO BUS 939180 CKT 1 /* 3KERR 115.00 - AE1-148 TAP 115.00 OPEN BUS 939180 /* ISLAND: AE1-148 TAP 115.00 OPEN BUS 939181 /* ISLAND: AE1-148 C 115.00 OPEN BUS 939182 /* ISLAND: AE1-148 E 115.00 OPEN BRANCH FROM BUS 313757 TO BUS 314674 CKT 1 /* 3CLOUD 115.00 - 3BOYDTON 115.00 OPEN BRANCH FROM BUS 314255 TO BUS 314674 CKT 1 /* 3BOYDPLK 115.00 - 3BOYDTON 115.00 OPEN BUS 314674 /* ISLAND: 3BOYDTON 115.00 END
DVP_P1-2: LN 1026	CONTINGENCY 'DVP_P1-2: LN 1026' OPEN BRANCH FROM BUS 313806 TO BUS 314255 CKT 1 /* 3HERBERT 115.00 - 3BOYDPLK 115.00 END
DVP_P1-2: LN 2201	CONTINGENCY 'DVP_P1-2: LN 2201' OPEN BRANCH FROM BUS 313725 TO BUS 314563 CKT 1 /* 6DRY BREAD 230.00 - 6CLUBHSE 230.00 END
DVP_P1-2: LN 45	CONTINGENCY 'DVP_P1-2: LN 45' OPEN BUS 304099 /* ISLAND: 3WARREN TAP 115.00 OPEN BUS 304100 /* ISLAND: 3HEND
DVP_P1-2: LN 235-A	CONTINGENCY 'DVP_P1-2: LN 235-A' OPEN BRANCH FROM BUS 313802 TO BUS 314268 CKT 1 /* 6PRINCE EDW 230.00 - 6BRIERY 230.00 OPEN BRANCH FROM BUS 313802 TO BUS 314692 CKT 1 /* 6PRINCE EDW 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314268 TO BUS 964840 CKT 1 /* 6BRIERY 230.00 - AG1-347 TAP 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 1 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 313802 /* ISLAND: 6PRINCE EDW 230.00 OPEN BUS 314268 /* ISLAND: 6BRIERY 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 298	CONTINGENCY 'DVP_P1-2: LN 298' OPEN BRANCH FROM BUS 314677 TO BUS 314692 CKT 1 /* 6BUCKING 230.00 - 6FARMVIL 230.00 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314691 TO BUS 314692 CKT 2 /* 3FARMVIL 115.00 - 6FARMVIL 230.00 OPEN BUS 314677 /* ISLAND: 6BUCKING 230.00 OPEN BUS 924032 /* ISLAND: AB2-045 E 230.00 OPEN BUS 932511 /* ISLAND: AC2-071 C 230.00 OPEN BUS 932512 /* ISLAND: AC2-071 E 230.00 END
DVP_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_P1-2: LN 33	CONTINGENCY 'DVP_P1-2: LN 33' OPEN BRANCH FROM BUS 314267 TO BUS 314669 CKT 1 /* 3CHASCTY2 115.00 - 3BARNS J 115.00 OPEN BRANCH FROM BUS 314669 TO BUS 314684 CKT 1 /* 3BARNS J 115.00 - 3MT LREL 115.00 OPEN BRANCH FROM BUS 314684 TO BUS 316115 CKT 1 /* 3MT LREL 115.00 - AC1-105 TAP 115.00 OPEN BRANCH FROM BUS 314696 TO BUS 316115 CKT 1 /* 3SEDGE HILL 115.00 - AC1-105 TAP 115.00 OPEN BUS 314669 /* ISLAND: 3BARNS J 115.00 OPEN BUS 314684 /* ISLAND: 3MT LREL 115.00 OPEN BUS 316115 /* ISLAND: AC1-105 TAP 115.00 OPEN BUS 316116 /* ISLAND: AC1-105 MAIN115.00 OPEN BUS 316117 /* ISLAND: AC1-105 COL 34.500 OPEN BUS 316118 /* ISLAND: AC1-105 C 0.5750 OPEN BUS 926274 /* ISLAND: AC1-105 E 0.5750 END
DVP_P1-3: 6SEDGE HILL-TX#2	CONTINGENCY 'DVP_P1-3: 6SEDGE HILL-TX#2' OPEN BRANCH FROM BUS 314696 TO BUS 314697 CKT 2 /* 3SEDGE HILL 115.00 - 6SEDGE HILL 230.00 END
DVP_P1-2: LN 140	CONTINGENCY 'DVP_P1-2: LN 140' OPEN BRANCH FROM BUS 313720 TO BUS 314526 CKT 1 /* 3NEWSOMS 115.00 - 3HANDSOM 115.00 OPEN BRANCH FROM BUS 314526 TO BUS 314534 CKT 1 /* 3HANDSOM 115.00 - 3S HAMPT 115.00 OPEN BUS 314526 /* ISLAND: 3HANDSOM 115.00 END
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	

Contingency Name	Contingency Definition
DVP_P4-2: 13002	CONTINGENCY 'DVP_P4-2: 13002' /* CAROLINA 115 KV OPEN BRANCH FROM BUS 314559 TO BUS 314600 CKT 1 /* 3CAROLNA 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314595 TO BUS 314600 CKT 1 /* 3PL HILL 115.00 - 3PLHITP 115.00 OPEN BRANCH FROM BUS 314600 TO BUS 314615 CKT 1 /* 3PLHITP 115.00 - 3SKIPPERS 115.00 OPEN BUS 314595 /* ISLAND: 3PL HILL 115.00 OPEN BUS 314600 /* ISLAND: 3PLHITP 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314571 CKT 1 /* 3CAROLNA 115.00 - 3EATON F 115.00 OPEN BRANCH FROM BUS 313722 TO BUS 314559 CKT 1 /* 3OCCONEECHEE115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 313723 TO BUS 314559 CKT 1 /* 3PECAN 115.00 - 3CAROLNA 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314835 CKT 1 /* 3CAROLNA 115.00 - 3CAROL_1 115.00 OPEN BRANCH FROM BUS 314559 TO BUS 314561 CKT 1 /* 3CAROLNA 115.00 - 6CAROLNA 230.00 END
DVP_P1-2: LN 171	CONTINGENCY 'DVP_P1-2: LN 171' OPEN BRANCH FROM BUS 313806 TO BUS 314681 CKT 1 /* 3HERBERT 115.00 - 3CHASCTY 115.00 END
DVP_P7-1: LN 171-1009	CONTINGENCY 'DVP_P7-1: LN 171-1009' /* . OPEN BRANCH FROM BUS 313806 TO BUS 314681 CKT 1 /* 3HERBERT 115.00 - 3CHASCTY 115.00 OPEN BRANCH FROM BUS 313849 TO BUS 314267 CKT 1 /* 3RIDGERD 115.00 - 3CHASCTY2 115.00 END

12 Short Circuit Analysis

The following Breakers are overdutied

None

12.1 System Reinforcements - Short Circuit

None

13 Affected Systems

13.1 TVA

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

13.2 Duke Energy Progress

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

14 Attachment 1: One Line Diagram