



**Generation Interconnection
Feasibility Study Report
for
Queue Project AF2-303
EDGECOMBE 230 KV
115 MW Capacity / 190 MW Energy**

July 2020

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1 Introduction

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

2 Preface

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

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

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

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

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

3 General

The Interconnection Customer (IC), has proposed a Solar; Storage generating facility located in Edgecombe County, North Carolina. The installed facilities will have a total capability of 190 MW with 115 MW of this output being recognized by PJM as Capacity. The Capacity Interconnection Rights associated with this request are being transferred from the deactivated Edgecomb NUG. The proposed in-service date for this project is August 03, 2023. This study does not imply a TO commitment to this in-service date.

Queue Number	AF2-303
Project Name	EDGECOMBE 230 KV
State	North Carolina
County	Edgecombe
Transmission Owner	Dominion
MFO	190
MWE	190
MWC	115
Fuel	Solar; Storage
Basecase Study Year	2023

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

4 Point of Interconnection

4.1 Primary Point of Interconnection

AF2-303 “Edgecombe 230 kV” will interconnect with the Dominion’s transmission system via an existing substation Edgecombe 230 kV substation. This is the primary Point of Interconnection (POI) chose by the IC with the ITO’s transmission system. The IC is responsible for securing right-of-way, permits and constructing the proposed attachment line from the battery energy storage facility site to the existing switching station. Attachment 1 shows a one-line diagram of the proposed interconnection facilities. The IC may not install any facilities on Dominion’s right-of-way without first obtaining the necessary approval from Dominion Energy.

4.2 Secondary Point of Interconnection

The IC requested that a secondary POI of direct connection at “Hathaway 230 kV” be reviewed for network impacts. This report does not provide costs for the physical interconnection of the secondary point of interconnection. It was just analyzed for network impacts. Results are shown in the Network Impacts – Secondary Point of Interconnection section of this report.

5 Cost Summary

The AF2-303 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 3,300,000
Total System Network Upgrade Costs	\$ 723,166,000
Total Costs	\$ 726,466,000

This cost excludes a Federal Income Tax Gross Up charges. This tax may or may not be charged based on whether this project meets the eligibility requirements of IRS Notice 88-129. 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.

6 Transmission Owner Scope of Work

Dominion assessed the impact of the proposed Queue Project AF2-303 was evaluated as a 115 MW Capacity (190.0 MW Energy) injection at the Edgecombe 230 kV substation in the Dominion Transmission System, for compliance with NERC Reliability Criteria on Dominion Transmission System. The system was assessed using the summer 2023 AF2 case provided to Dominion by PJM. When performing a generation analysis, Dominion's main analysis will be load flow study results under single contingency (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.

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of the AF2-303 generation project to the Dominion Transmission System is detailed in the following sections. The associated one-line with the generation project attachment facilities and primary direct and non-direct connection are 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 phases. 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
Attachment Facilities Substation (Metering)	\$ 600,000
Attachment Facilities Transmission (One-Span)	\$ 1,500,000

Description	Total Cost
Additional Substation Breakers (1) and Associated Equipment	\$ 1,200,000
Total Physical Interconnection Costs	\$ 3,300,000

To accommodate the proposed AF2-303 Project, Dominion Energy will add a new 230 kV breaker to the existing Edgcombe substation to allow for the proposed interconnection, and will install one span of overhead 230 kV line to the point of interconnection (“POI”) including 230 kV interconnection metering.

It is estimated to take 24-30 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. See Attachment One.

7 Schedule

The schedule for the required Network Impact Reinforcements will be more clearly identified in future study phases. The estimate elapsed time to complete each of the required reinforcements is identified in the “System Reinforcements” section of the report.

8 Transmission Owner Analysis

8.1 Power Flow Analysis

PJM performed a power flow analysis of the transmission system using a 2023 summer peak load flow model and the results were verified by Dominion. Additionally, Dominion performed an analysis of its transmission system and no 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 noted above. This includes over/under voltage protection, over/under frequency protection, and zero sequence voltage protection relays.
3. The purchase and installation of supervisory control and data acquisition ("SCADA") equipment to provide information in a compatible format to the Dominion Transmission System Control Center.
4. Compliance with the Dominion and PJM generator power factor and voltage control requirements.

The GSU(s) associated with the IC queue request shall meet the grounding requirements as noted in Dominion's "Dominion's Facility Interconnection Requirements" document located at:

<https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>.

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

9.3 Power Factor Requirements

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

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

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

10.2 Meteorological Data Reporting Requirements

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

- Back panel temperature (Fahrenheit)
- Irradiance (Watts/meter²)
- Ambient air temperature (Fahrenheit) - (Accepted, not required)
- Wind speed (meters/second) – (Accepted, not required)
- Wind direction (decimal degrees from true north) – (Accepted, not required)

10.3 Interconnected Transmission Owner Requirements

See Section 3.4.6 “Metering and telecommunications” of Dominion’s “Dominion’s Facility Interconnection Requirements” document located at: <https://www.dominionenergy.com/company/moving-energy/electric-transmission-access>.

11 Summer Peak - Load Flow Analysis - Primary POI

The Queue Project AF2-303 was evaluated as a 75.0 MW (Capacity 0.0 MW) injection at the Edgcombe 230 kV substation in the Dominion area. For the primary POI, the Edgcombe NUG Units are in the model and AF2-303 is modeled only as the additional energy (i.e. 75 MW Energy) because the primary POI is the same bus as the existing Edgcombe NUG units. Project AF2-303 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF2-303 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	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC DC	MW IMPACT
97458052	313844	3HATHAWAY	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P4-2: 254T2141	breaker	301.0	98.23	101.95	DC	11.19

11.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC DC	MW IMPACT
95879007	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P4_#11112_05J.FERR 765_A1	breaker	402.0	115.02	115.63	DC	5.41
95879009	242631	05EDAN1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P4_#11111_05J.FERR 765_B1	breaker	402.0	109.18	109.8	DC	5.54
97459093	313844	3HATHAWAY	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	301.0	122.93	129.6	DC	20.05
97804550	314282	6CARSON	230.0	DVP	314331	6POE	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	830.0	101.89	102.39	DC	9.15
97804420	314299	6HARROWG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	138.14	138.76	DC	7.42
97804415	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	138.16	138.78	DC	7.42
96976512	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT11ST	115.0	CPL E	1	DVP_P7-1: LN 2058-2181	tower	93.0	522.61	539.51	DC	15.71
97804452	314561	6CAROLN A	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 218T2160	breaker	459.0	131.6	132.87	DC	11.0
97804453	314561	6CAROLN A	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 2020T2144	breaker	459.0	123.34	124.01	DC	5.79
97804611	314561	6CAROLN A	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	DVP_P4-2: 23872	breaker	671.0	103.48	103.99	DC	7.49
97804612	314561	6CAROLN A	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	DVP_P4-2: 238T2002	breaker	671.0	103.2	103.7	DC	7.48

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADING %	POST PROJE CT LOADING %	AC DC	MW IMPACT
96976517	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P7-1: LN 2058-2181	tower	478.0	187.94	190.58	DC	12.63
97804375	314583	6LAKEVIEW	230.0	DVP	314561	6CAROLINA	230.0	DVP	1	DVP_P4-2: 23872	breaker	459.0	161.77	164.23	DC	11.41
97457931	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	DVP_P4-2: 23872034	breaker	349.0	160.59	161.28	DC	4.51
97804613	314599	6ROA VAL	230.0	DVP	314266	6NORTHAMPTON	230.0	DVP	1	DVP_P4-2: 23872	breaker	671.0	103.45	103.96	DC	7.49
97804614	314599	6ROA VAL	230.0	DVP	314266	6NORTHAMPTON	230.0	DVP	1	DVP_P4-2: 23872002	breaker	671.0	103.15	103.66	DC	7.48
97457926	314614	3TRWBRD G2	115.0	DVP	314596	3POPLR C	115.0	DVP	1	DVP_P4-2: 23872034	breaker	350.0	161.76	162.45	DC	4.51
97804603	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 23872	breaker	699.0	106.95	107.43	DC	7.49
97804604	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 23872002	breaker	699.0	106.66	107.14	DC	7.48
97804469	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P4-2: 201262	breaker	830.0	128.91	129.61	DC	12.79
97804470	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P4-2: 201272014	breaker	830.0	127.65	128.37	DC	13.23
98578871	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	133.15	134.09	DC	17.39
98578872	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 56-2012-B	tower	830.0	130.75	131.47	DC	13.2

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADING %	POST PROJE CT LOADING %	AC DC	MW IMPACT
95879205	242620	05DANVL2	138.0	AEP	242631	05EDAN 1	138.0	AEP	1	Base Case	operation	275.0	123.81	124.72	DC	4.71
95879279	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P1-2_#1377	operation	402.0	109.13	109.75	DC	5.54
98090692	313701	6CHINQUAPI N	230.0	DVP	314609	6TARBORO	230.0	DVP	1	DVP_P1-2: LN 218	operation	441.799987793	124.74	127.54	DC	12.4
97458307	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P1-2: LN 2056-A	operation	165.440002441	148.49	150.92	DC	7.59
97458312	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	Base Case	operation	165.440002441	112.44	113.93	DC	4.68
96976141	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT23 OT	230.0	CPL E	1	DVP_P1-2: LN 2181	operation	478.0	149.86	156.65	DC	32.41

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
98090329	313845	6HATHAWAY	230.0	DVP	314591	6NASH	230.0	DVP	1	DVP_P 1-2: LN 2058	operati on	449.320007324	163.44	170.99	DC	33.88
97458265	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	154.0	156.44	DC	7.6
97458270	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	Base Case	operati on	165.440002441	122.6	124.1	DC	4.68
97458414	313858	3SO JUSTICE	115.0	DVP	314577	3COX DP	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	118.36	120.79	DC	7.57
98090737	314266	6NORTHAMP TON	230.0	DVP	936400	AD2-051 TAP	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	571.520019531	120.67	121.26	DC	7.48
98090317	314435	6SAPO NY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	678.679992676	185.29	186.19	DC	13.55
98090322	314435	6SAPO NY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	operati on	678.679992676	146.78	147.55	DC	11.53
96976077	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT11 5T	115.0	CPL E	1	DVP_P 1-2: LN 2058	operati on	93.0	278.22	280.06	DC	3.8
98090475	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P 1-2: LN 2092	operati on	375.059997559	150.58	151.4	DC	5.81
98090695	314561	6CAROLNA	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	548.020019531	126.24	126.86	DC	7.48
98090367	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	678.679992676	166.28	167.19	DC	13.56
98090372	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	Base Case	operati on	678.679992676	129.33	130.1	DC	11.54
98090434	314564	6EDGECOM	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P 1-2: LN 218	operati on	441.799987793	128.44	142.78	DC	63.38
98090108	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P 1-2: LN 2092	operati on	571.520019531	279.69	280.62	DC	11.69
98090115	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	operati on	571.520019531	149.87	150.61	DC	9.33
98090120	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	DVP_P 1-2: LN 2092	operati on	571.520019531	273.29	274.21	DC	11.69
98090127	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	Base Case	operati on	571.520019531	143.47	144.2	DC	9.33
97458445	314577	3COX DP	115.0	DVP	313719	3CHESTNUT	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	111.59	114.02	DC	7.57
98090599	314579	6HORNRTN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	441.799987793	136.85	138.65	DC	15.01
98090280	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	375.059997559	202.15	205.67	DC	13.14
98090284	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	Base Case	operati on	375.059997559	158.56	161.56	DC	11.25

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADING %	POST PROJE CT LOADING %	AC/DC	MW IMPACT
98090291	314583	6LAKEVEW	230.0	DVP	314561	6CAROLNA	230.0	DVP	1	DVP_P 1-2: LN 238-B	operation	375.059997559	196.39	199.93	DC	13.31
98090301	314583	6LAKEVEW	230.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operation	375.059997559	105.66	106.41	DC	6.25
98090713	314583	6LAKEVEW	230.0	DVP	314579	6HORNRTN	230.0	DVP	1	DVP_P 1-2: LN 238-A	operation	441.799987793	119.52	122.9	DC	14.94
96976147	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P 1-2: LN 2058	operation	478.0	148.32	155.42	DC	33.88
98090830	314594	6PLYMOTH	230.0	DVP	314203	6MACKEYS	230.0	DVP	1	DVP_P 1-2: LN 246	operation	789.599975586	102.51	103.55	DC	8.15
98090701	314599	6ROA VAL	230.0	DVP	314266	6NORTHAMP TON	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	548.020019531	126.21	126.83	DC	7.48
98090766	314609	6TARBORO	230.0	DVP	314610	6TOTDP4	230.0	DVP	1	DVP_P 1-2: LN 218	operation	441.799987793	114.94	117.74	DC	12.4
98090774	314610	6TOTDP4	230.0	DVP	314564	6EDGECOM	230.0	DVP	1	DVP_P 1-2: LN 218	operation	441.799987793	113.42	116.23	DC	12.4
98090825	314616	6TRWBRDG	230.0	DVP	314594	6PLYMOTH	230.0	DVP	1	DVP_P 1-2: LN 246	operation	789.599975586	104.81	105.84	DC	8.15
97458256	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operation	165.440002441	154.06	156.5	DC	7.6
97458261	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	Base Case	operation	165.440002441	122.6	124.1	DC	4.68
98090174	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P 1-2: LN 246	operation	375.059997559	224.17	227.68	DC	13.11
98090178	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	375.059997559	179.07	182.08	DC	11.22
98090795	927020	AC1-189 TAP	230.0	DVP	313701	6CHINQUAPI N	230.0	DVP	1	DVP_P 1-2: LN 218	operation	441.799987793	109.97	112.77	DC	12.37
98090483	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P 1-2: LN 238-A	operation	441.799987793	149.77	151.57	DC	15.01
98090492	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	Base Case	operation	441.799987793	95.9	100.17	DC	18.83
98090667	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	571.520019531	130.34	130.93	DC	7.48
98090440	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P 1-2: LN 2012-B	operation	678.679992676	154.86	155.71	DC	12.73
98090445	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	operation	678.679992676	148.38	149.15	DC	11.54
98090096	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P 1-2: LN 2092	operation	571.520019531	289.23	290.16	DC	11.69
98090103	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	Base Case	operation	571.520019531	157.47	158.21	DC	9.33

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADING %	POST PROJE CT LOADING %	AC DC	MW IMPACT
98090084	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	297.05	297.97	DC	11.69
98090091	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	operation	571.520019531	165.08	165.82	DC	9.33

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
95879007,95879009	2	05EDAN 1 138.0 kV - 05DANVL2 138.0 kV Ckt 1	<u>AEP</u> n6124 (518) : PJM Network Upgrade n6124. Increasing the Danville East Danville 138 kV circuit summer rating to 572/572/572 MVA will still require us to rebuild the line. The network project has a projected in-service date of 06/01/2021. Project Type : FAC Cost : \$9,000,000 Time Estimate : Months	\$9,000,000
97804415	5	6POE 230.0 kV - 6HARROWG 230.0 kV Ckt 1	<u>DVP</u> dom-037 (1126) : Rebuild 12.3 miles of 230 kV Line 2003 from Poe to Harrowgate with 2-636 ACSR. Project Type : FAC Cost : \$30,750,000 Time Estimate : 30-36 Months	\$30,750,000
97804611,97804612	8	6CAROLNA 230.0 kV - 6ROA VAL 230.0 kV Ckt 1	<u>DVP</u> dom-107 (1196) : Rebuild 4.06 miles of 230 kV Line 2060 from Carolina to Roanoke Valley with 2-636 ACSR. Project Type : FAC Cost : \$10,150,000 Time Estimate : 30-36 Months	\$10,150,000
98578872,97804470,98578871,97804469	15	AE2-033 TAP 230.0 kV - 6SAPONY 230.0 kV Ckt 1	<u>DVP</u> dom-050 (1139) : Rebuild 2.47 miles of 230 kV Line 238 from AE2-033 TAP to Sapony with 2-795 150C ACSR. Project Type : FAC Cost : \$3,705,000 Time Estimate : 30-36 Months	\$3,705,000
97457926	13	3TRWBRDG2 115.0 kV - 3POPLR C 115.0 kV Ckt 1	<u>DVP</u> dom-254 (1376) : Reconductor 7.4 miles of 115 kV Line 25 from Trowbridge to Poplar Chapel with 2-768.2 ACSS 250C. Upgrade Breaker Lead, Wavetrap, Relay (Secondary CT) and Line Lead at Trowbridge 115 kV. Upgrade Line Lead at Poplar Chapel 115 kV. Project Type : FAC Cost : \$4,710,000 Time Estimate : 36-40 Months	\$4,710,000
97804550	3	6CARSON 230.0 kV - 6POE 230.0 kV Ckt 1	<u>DVP</u> dom-120 (1209) : Rebuild 12.68 miles of 230 kV Line 2002 from Carson to Poe with 2-636 ACSR. Project Type : FAC Cost : \$31,700,000 Time Estimate : 30-36 Months	\$31,700,000

ID	Idx	Facility	Upgrade Description	Cost
97804453,97804452	7	6CAROLNA 230.0 kV - 6LAKEVEW 230.0 kV Ckt 1	<u>DVP</u> dom-220 (1342) : Rebuild 1.37 miles of 230 kV Line 2141 from Carolina to Lakeview with 2-636 ACSR. Project Type : FAC Cost : \$2,055,000 Time Estimate : 30-36 Months	\$2,055,000
97457931	11	3POPLR C 115.0 kV - 3EVERETS 115.0 kV Ckt 1	<u>DVP</u> dom-175 (1249) : Reconductor 13.4 miles of 115 kV Line 25 from Poplar Chapel to Everetts with 2-636 ACSR. Replace Wavetrap, relay, circuit breaker switch, and circuit breaker lead at Everetts. Project Type : FAC Cost : \$8,510,000 Time Estimate : 30-36 Months	\$8,510,000
97804375	10	6LAKEVEW 230.0 kV - 6CAROLNA 230.0 kV Ckt 1	<u>DVP</u> dom-061 (1150) : Rebuild 1.37 miles of 230 kV Line 2141 from Lakeview to Carolina with 2-636 ACSR. Project Type : FAC Cost : \$1,781,000 Time Estimate : 30-36 Months	\$1,781,000
97804613,97804614	12	6ROA VAL 230.0 kV - 6NORTHAMPTO N 230.0 kV Ckt 1	<u>DVP</u> dom-106 (1195) : Rebuild 2.87 miles of 230 kV Line 2012 from Roanoke Valley to Northhampton with 2-636 ACSR. Project Type : FAC Cost : \$7,175,000 Time Estimate : 30-36 Months	\$7,175,000
96976512	6	3BTLEBRO 115.0 kV - 3ROCKYMT115T 115.0 kV Ckt 1	<u>CPLE</u> NonPJMArea (944) : The external (i.e. Non-PJM) Transmission Owner, CPLE, will not evaluate this violation until the impact study phase. <u>DVP</u> dom-007 (1096) : Build new 500 kV line between Everetts and Suffolk. Project Type : CON Cost : \$570,000,000 Time Estimate : 48-60 Months	\$570,100,000
97458052,97459093	1	3HATHAWAY 115.0 kV - 3BTLEBRO 115.0 kV Ckt 1	n6118 (1281) : Upgrading the breaker leads at DVPs terminal will bring the rating to 239/239/239 MVA (Limited by terminal equipment at Rocky Mount) Approximately \$0.1 Million Project Type : FAC Cost : \$100,000 Time Estimate : 18 Months	

ID	Idx	Facility	Upgrade Description	Cost
97804604,97804603	14	AD2-051 TAP 230.0 kV - 6EARLEYS 230.0 kV Ckt 1	<u>DVP</u> dom-236 (1358) : Rebuild 1.2 miles of 230 kV line 2012 from AD2-051 Tap to Earleys with 2-636 ACSR. Project Type : FAC Cost : \$1,800,000 Time Estimate : 30-36 Months	\$1,800,000
97804420	4	6HARROWG 230.0 kV - 6TYLER1 230.0 kV Ckt 1	<u>DVP</u> dom-036 (1125) : Rebuild 4.5 miles of 230 kV Line 2003 from Harrowgate to Tyler with 2-636 ACSR. Project Type : FAC Cost : \$11,250,000 Time Estimate : 30-36 Months	\$11,250,000
96976517	9	6EVERETS 230.0 kV - 6GREENVILE T 230.0 kV Ckt 1	<u>CPL</u> NonPJMArea (944) : The external (i.e. Non-PJM) Transmission Owner, CPL, will not evaluate this violation until the impact study phase. <u>DVP</u> dom-173 (1247) : Rebuild 20.32 miles of 230 kV Line 218 from Everetts to Greenville with 2-636 ACSR Project Type : FAC Cost : \$30,480,000 Time Estimate : 30-36 Months	\$30,480,000
			TOTAL COST	\$723,166,000

11.6 Flow Gate Details - Primary POI

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

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97459093	313844	3HATHAWAY	DVP	314554	3BTLEBRO	DVP	1	DVP_P7-1: LN 2058-2181	tower	301.0	122.93	129.6	DC	20.05

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315131	1EDGECEMA (Deactivation : 22/04/2019)	15.5075	50/50	15.5075
315132	1EDGECEMB (Deactivation : 22/04/2019)	15.5075	50/50	15.5075
315136	1ROSEMG1	1.4855	50/50	1.4855
315137	1ROSEMS1	0.9212	50/50	0.9212
315138	1ROSEMG2	0.6962	50/50	0.6962
315601	1CONETOE2SOL	1.6496	50/50	1.6496
917512	Z2-088 E OP1	4.0985	50/50	4.0985
918532	AA1-067 E	0.2783	Adder	0.33
922922	AB1-081 C OP	32.2196	50/50	32.2196
922923	AB1-081 E OP	13.8084	50/50	13.8084
923262	AB1-132 C OP (Suspended)	6.4581	Adder	7.6
923263	AB1-132 E OP (Suspended)	2.7678	Adder	3.26
924151	AB2-059 C OP	6.5501	50/50	6.5501
924152	AB2-059 E OP	19.5619	50/50	19.5619
925591	AC1-034 C	24.5962	50/50	24.5962
925592	AC1-034 E	18.5550	50/50	18.5550
926071	AC1-086 C	9.5104	Adder	11.19
926072	AC1-086 E	4.3285	Adder	5.09
926211	AC1-099 C	-1.4621	Adder	-1.72
927021	AC1-189 C	7.4141	50/50	7.4141
927022	AC1-189 E	3.6931	50/50	3.6931
934331	AD1-057 C O1	11.7322	50/50	11.7322
934332	AD1-057 E O1	6.2585	50/50	6.2585
940571	AE2-044 C	16.1098	50/50	16.1098
940572	AE2-044 E	6.9042	50/50	6.9042
944141	AF1-082	10.3563	50/50	10.3563
957861	AF2-080 C	6.7337	50/50	6.7337
957862	AF2-080 E	2.9851	50/50	2.9851
959231	AF2-214 C	34.8087	50/50	34.8087
959232	AF2-214 E	52.1842	50/50	52.1842
960122	AF2-303 E O1	20.0527	50/50	20.0527
960331	AF2-324 C O1	13.0477	50/50	13.0477
960332	AF2-324 E O1	7.0051	50/50	7.0051
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	3.8947	50/50	3.8947
NEWTON	NEWTON	0.5426	Confirmed LTF	0.5426
FARMERCITY	FARMERCITY	0.0310	Confirmed LTF	0.0310

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
G-007A	G-007A	0.3476	Confirmed LTF	0.3476
VFT	VFT	0.9223	Confirmed LTF	0.9223
CALDERWOOD	CALDERWOOD	0.4289	Confirmed LTF	0.4289
PRAIRIE	PRAIRIE	1.4620	Confirmed LTF	1.4620
CHEOAH	CHEOAH	0.4399	Confirmed LTF	0.4399
EDWARDS	EDWARDS	0.1638	Confirmed LTF	0.1638
TILTON	TILTON	0.2898	Confirmed LTF	0.2898
GIBSON	GIBSON	0.2621	Confirmed LTF	0.2621
BLUEG	BLUEG	0.8107	Confirmed LTF	0.8107
TRIMBLE	TRIMBLE	0.2571	Confirmed LTF	0.2571
CATAWBA	CATAWBA	0.4630	Confirmed LTF	0.4630

11.6.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
95879007	242631	05EDAN 1	AEP	242620	05DANVL 2	AEP	1	AEP_P4_#11112_05J.FER R 765_A1	breaker	402.0	115.02	115.63	DC	5.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
244012	05PINNACLE	-1.8090	Adder	-2.13
315131	1EDGECEMA (Deactivation : 22/04/2019)	3.5545	Adder	4.18
315132	1EDGECEMB (Deactivation : 22/04/2019)	3.5545	Adder	4.18
917332	Z2-043 E	0.3416	Adder	0.4
917342	Z2-044 E	0.2131	Adder	0.25
917512	Z2-088 E OP1	1.3831	Adder	1.63
918492	AA1-063AE OP	1.1318	Adder	1.33
918532	AA1-067 E	0.2426	Adder	0.29
919692	AA2-053 E OP	1.0995	Adder	1.29
919702	AA2-057 E OP	1.2081	Adder	1.42
920592	AA2-165 E	0.1660	Adder	0.2
920672	AA2-174 E OP	0.1271	Adder	0.15
922922	AB1-081 C OP	3.4267	Adder	4.03
922923	AB1-081 E OP	1.4686	Adder	1.73
923262	AB1-132 C OP (Suspended)	4.0634	Adder	4.78
923263	AB1-132 E OP (Suspended)	1.7414	Adder	2.05
923572	AB1-173 C OP	0.6354	Adder	0.75
923573	AB1-173 E OP	0.2965	Adder	0.35
923582	AB1-173AC OP	0.6354	Adder	0.75
923583	AB1-173AE OP	0.2965	Adder	0.35
923911	AB2-031 C O1	0.6307	Adder	0.74
923912	AB2-031 E O1	0.3106	Adder	0.37
923991	AB2-040 C O1	2.0708	Adder	2.44
923992	AB2-040 E O1	1.6943	Adder	1.99
924022	AB2-043 E O1	0.8878	Adder	1.04
924152	AB2-059 E OP	2.0805	Adder	2.45
924162	AB2-060 E OP	1.3365	Adder	1.57
924301	AB2-077 C O1 (Suspended)	0.6357	Adder	0.75
924302	AB2-077 E O1 (Suspended)	0.4238	Adder	0.5
924311	AB2-078 C O1 (Suspended)	0.6357	Adder	0.75
924312	AB2-078 E O1 (Suspended)	0.4238	Adder	0.5
924321	AB2-079 C O1 (Suspended)	0.6357	Adder	0.75
924322	AB2-079 E O1 (Suspended)	0.4238	Adder	0.5

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924501	AB2-099 C (Suspended)	0.1611	Adder	0.19
924502	AB2-099 E (Suspended)	0.0690	Adder	0.08
925122	AB2-169 E	1.6847	Adder	1.98
925172	AB2-174 E O1	1.7694	Adder	2.08
925591	AC1-034 C	2.6159	Adder	3.08
925592	AC1-034 E	1.9734	Adder	2.32
925611	AC1-036 C	0.2686	Adder	0.32
925612	AC1-036 E	0.4382	Adder	0.52
925781	AC1-054 C O1	2.4980	Adder	2.94
925782	AC1-054 E O1	1.1507	Adder	1.35
926051	AC1-083 C O1	3.9626	50/50	3.9626
926052	AC1-083 E O1	6.4654	50/50	6.4654
926071	AC1-086 C	5.9838	Adder	7.04
926072	AC1-086 E	2.7234	Adder	3.2
926201	AC1-098 C	1.9882	Adder	2.34
926202	AC1-098 E	1.1845	Adder	1.39
926211	AC1-099 C	0.6663	Adder	0.78
926212	AC1-099 E	0.3913	Adder	0.46
926271	AC1-105 C O1 (Suspended)	1.9582	Adder	2.3
926272	AC1-105 E O1 (Suspended)	0.9748	Adder	1.15
927021	AC1-189 C	3.0130	Adder	3.54
927022	AC1-189 E	1.5009	Adder	1.77
927141	AC1-208 C	2.9907	Adder	3.52
927142	AC1-208 E	1.3280	Adder	1.56
927251	AC1-221 C	1.5648	50/50	1.5648
927252	AC1-221 E	1.5648	50/50	1.5648
927261	AC1-222 C	1.2518	Adder	1.47
927262	AC1-222 E	1.1917	Adder	1.4
932631	AC2-084 C	2.8343	Adder	3.33
932632	AC2-084 E	1.3960	Adder	1.64
932761	AC2-100 C	3.6012	50/50	3.6012
932762	AC2-100 E	1.7578	50/50	1.7578
933941	AD1-017 C	0.7925	50/50	0.7925
933942	AD1-017 E	1.2931	50/50	1.2931
934311	AD1-055 C	0.8691	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
934331	AD1-057 C O1	3.4134	Adder	4.02
934332	AD1-057 E O1	1.8209	Adder	2.14
934341	AD1-058 C	3.9228	50/50	3.9228
934342	AD1-058 E	0.9968	50/50	0.9968
934611	AD1-087 C O1	2.7885	Adder	3.28
934612	AD1-087 E O1	1.3105	Adder	1.54
934991	AD1-131 C	1.2862	50/50	1.2862
934992	AD1-131 E	0.8574	50/50	0.8574
935171	AD1-152 C O1	2.7711	Adder	3.26
935172	AD1-152 E O1	1.8474	Adder	2.17
936161	AD2-022 C O1	10.5804	50/50	10.5804
936162	AD2-022 E O1	6.3482	50/50	6.3482
936171	AD2-023 C O1	6.1719	50/50	6.1719
936172	AD2-023 E O1	3.3505	50/50	3.3505
936261	AD2-033 C	3.7513	Adder	4.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936262	AD2-033 E	2.5008	Adder	2.94
936361	AD2-046 C O1	3.1497	Adder	3.71
936362	AD2-046 E O1	1.4484	Adder	1.7
936481	AD2-063 C O1	4.5403	Adder	5.34
936482	AD2-063 E O1	3.0016	Adder	3.53
937481	AD2-202 C O1	0.7390	Adder	0.87
937482	AD2-202 E O1	0.4157	Adder	0.49
939181	AE1-148 C O1	3.0900	Adder	3.64
939182	AE1-148 E O1	2.0600	Adder	2.42
939441	AE1-176	-0.1149	Adder	-0.14
940081	AE1-250 C	14.0508	50/50	14.0508
940082	AE1-250 E	9.3672	50/50	9.3672
940241	AE2-006	0.1366	Adder	0.16
940571	AE2-044 C	1.7134	Adder	2.02
940572	AE2-044 E	0.7343	Adder	0.86
940661	AE2-053 O1	1.1444	Adder	1.35
941541	AE2-151 C	0.3022	Adder	0.36
941542	AE2-151 E	0.1627	Adder	0.19
942451	AE2-258	0.7407	Adder	0.87
943171	AE2-346 C	0.3866	Adder	0.45
943172	AE2-346 E	0.1657	Adder	0.19
943901	AF1-058 C	0.7057	Adder	0.83
943902	AF1-058 E	0.4705	Adder	0.55
943911	AF1-059	4.9266	Adder	5.8
944141	AF1-082	1.1014	Adder	1.3
945811	AF1-246 C O1	1.9428	Adder	2.29
945812	AF1-246 E O1	2.6829	Adder	3.16
957481	AF2-042 C O1	7.3954	Adder	16.42
957482	AF2-042 E O1	4.9303	Adder	10.94
957861	AF2-080 C	1.4504	Adder	3.22
957862	AF2-080 E	0.6429	Adder	1.43
959231	AF2-214 C	1.9621	Adder	4.36
959232	AF2-214 E	2.9415	Adder	6.53
959311	AF2-222 C	2.4620	Adder	5.47
959312	AF2-222 E	1.6495	Adder	3.66
959511	AF2-242	1.2786	Adder	2.84
959751	AF2-266 O1	1.3105	Adder	2.91
960061	AF2-297 C O1	1.4962	Adder	3.32
960062	AF2-297 E O1	0.9974	Adder	2.21
960122	AF2-303 E O1	2.4361	Adder	5.41
960331	AF2-324 C O1	1.5851	Adder	3.52
960332	AF2-324 E O1	0.8510	Adder	1.89
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.5185	Adder	1.15
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1296	Adder	0.29
960811	AF2-372 C	0.2128	Adder	0.47
960812	AF2-372 E	0.3473	Adder	0.77
960821	AF2-373 C	0.1698	Adder	0.38
960822	AF2-373 E	0.2547	Adder	0.57
960831	AF2-374 C	0.1904	Adder	0.42
960832	AF2-374 E	0.3107	Adder	0.69
NEWTON	NEWTON	0.3567	Confirmed LTF	0.3567

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CPLE	CPLE	5.5176	Confirmed LTF	5.5176
G-007A	G-007A	0.6186	Confirmed LTF	0.6186
VFT	VFT	1.6254	Confirmed LTF	1.6254
CBM-W2	CBM-W2	5.2744	Confirmed LTF	5.2744
TVA	TVA	1.9418	Confirmed LTF	1.9418
EDWARDS	EDWARDS	0.1740	Confirmed LTF	0.1740
CBM-S2	CBM-S2	37.0845	Confirmed LTF	37.0845
CBM-S1	CBM-S1	8.5967	Confirmed LTF	8.5967
TILTON	TILTON	0.3856	Confirmed LTF	0.3856
MADISON	MADISON	1.8829	Confirmed LTF	1.8829
GIBSON	GIBSON	0.2905	Confirmed LTF	0.2905
BLUEG	BLUEG	1.2187	Confirmed LTF	1.2187
TRIMBLE	TRIMBLE	0.4096	Confirmed LTF	0.4096
AA2-074	AA2-074	3.7471	LTF	3.7471

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
97804550	314282	6CARSON	DVP	314331	6POE	DVP	1	DVP_P4-2: 24972-4	breaker	830.0	101.89	102.39	DC	9.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	1.3380	50/50	1.3380
314541	3WATKINS	0.2615	Adder	0.31
314572	3EMPORIA	0.1299	50/50	0.1299
314704	3LAWRENC	0.4831	50/50	0.4831
315126	1ROARAP2	1.6618	50/50	1.6618
315131	1EDGECEMA (Deactivation : 22/04/2019)	6.0166	Adder	7.08
315132	1EDGECEMB (Deactivation : 22/04/2019)	6.0166	Adder	7.08
315136	1ROSEMG1	3.0292	50/50	3.0292
315137	1ROSEMS1	1.8784	50/50	1.8784
315138	1ROSEMG2	1.4197	50/50	1.4197
315139	1GASTONA	4.6322	50/50	4.6322
315141	1GASTONB	4.6322	50/50	4.6322
315294	1DOMTR10	4.3387	Adder	5.1
900672	V4-068 E	0.1746	Adder	0.21
917332	Z2-043 E	0.7492	Adder	0.88
917342	Z2-044 E	0.3893	Adder	0.46
917512	Z2-088 E OP1	2.2289	Adder	2.62
918492	AA1-063AE OP	3.2907	Adder	3.87
918512	AA1-065 E OP	2.1663	Adder	2.55
918532	AA1-067 E	0.3683	Adder	0.43
919692	AA2-053 E OP	3.4129	Adder	4.02
919702	AA2-057 E OP	2.4101	Adder	2.84
920042	AA2-088 E OP	5.7854	Adder	6.81
920592	AA2-165 E	0.3312	Adder	0.39
920672	AA2-174 E OP	0.3944	Adder	0.46
922922	AB1-081 C OP	5.7339	Adder	6.75
922923	AB1-081 E OP	2.4574	Adder	2.89
923262	AB1-132 C OP (Suspended)	20.5069	50/50	20.5069
923263	AB1-132 E OP (Suspended)	8.7887	50/50	8.7887
923572	AB1-173 C OP	3.5355	50/50	3.5355
923573	AB1-173 E OP	1.6499	50/50	1.6499
923582	AB1-173AC OP	3.5355	50/50	3.5355
923583	AB1-173AE OP	1.6499	50/50	1.6499
923852	AB2-025 E	3.4850	50/50	3.4850
923911	AB2-031 C O1	3.5093	50/50	3.5093
923912	AB2-031 E O1	1.7285	50/50	1.7285
923991	AB2-040 C O1	11.5232	50/50	11.5232
923992	AB2-040 E O1	9.4280	50/50	9.4280

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924022	AB2-043 E O1	1.5006	Adder	1.77
924152	AB2-059 E OP	3.4813	Adder	4.1
924162	AB2-060 E OP	2.2426	Adder	2.64
924301	AB2-077 C O1 (Suspended)	1.0528	Adder	1.24
924302	AB2-077 E O1 (Suspended)	0.7019	Adder	0.83
924311	AB2-078 C O1 (Suspended)	1.0528	Adder	1.24
924312	AB2-078 E O1 (Suspended)	0.7019	Adder	0.83
924321	AB2-079 C O1 (Suspended)	1.0528	Adder	1.24
924322	AB2-079 E O1 (Suspended)	0.7019	Adder	0.83
924501	AB2-099 C (Suspended)	0.3506	Adder	0.41
924502	AB2-099 E (Suspended)	0.1502	Adder	0.18
924511	AB2-100 C	4.5471	50/50	4.5471
924512	AB2-100 E	12.9838	50/50	12.9838
925122	AB2-169 E	2.5097	Adder	2.95
925171	AB2-174 C O1	2.0072	50/50	2.0072
925172	AB2-174 E O1	10.5283	50/50	10.5283
925591	AC1-034 C	4.3772	Adder	5.15
925592	AC1-034 E	3.3021	Adder	3.88
925611	AC1-036 C	0.3977	Adder	0.47
925612	AC1-036 E	0.6488	Adder	0.76
925781	AC1-054 C O1	4.9910	Adder	5.87
925782	AC1-054 E O1	2.2992	Adder	2.7
926071	AC1-086 C	30.1989	50/50	30.1989
926072	AC1-086 E	13.7445	50/50	13.7445
926201	AC1-098 C	4.4440	Adder	5.23
926202	AC1-098 E	2.6475	Adder	3.11
926211	AC1-099 C	1.4892	Adder	1.75
926212	AC1-099 E	0.8746	Adder	1.03
927021	AC1-189 C	4.7673	Adder	5.61
927022	AC1-189 E	2.3747	Adder	2.79
927141	AC1-208 C	7.0404	Adder	8.28
927142	AC1-208 E	3.1263	Adder	3.68
932631	AC2-084 C	6.3351	Adder	7.45
932632	AC2-084 E	3.1203	Adder	3.67
933991	AD1-023 C	5.4269	Adder	6.38
933992	AD1-023 E	2.9544	Adder	3.48
934331	AD1-057 C O1	9.1627	Adder	10.78
934332	AD1-057 E O1	4.8878	Adder	5.75
936261	AD2-033 C	5.7071	Adder	6.71
936262	AD2-033 E	3.8047	Adder	4.48
936361	AD2-046 C O1	5.1615	Adder	6.07
936362	AD2-046 E O1	2.3736	Adder	2.79
936401	AD2-051 C O1	4.8954	Adder	5.76
936402	AD2-051 E O1	2.1020	Adder	2.47
936481	AD2-063 C O1	7.3318	Adder	8.63
936482	AD2-063 E O1	4.8471	Adder	5.7
938171	AE1-026 C O1	14.0528	Adder	16.53

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938172	AE1-026 E O1	3.7074	Adder	4.36
938221	AE1-035 C	1.2095	Adder	1.42
938222	AE1-035 E	0.5957	Adder	0.7
939181	AE1-148 C O1	5.0706	Adder	5.97
939182	AE1-148 E O1	3.3804	Adder	3.98
940241	AE2-006	0.2023	Adder	0.24
940481	AE2-033 C	48.0573	50/50	48.0573
940482	AE2-033 E	32.3982	50/50	32.3982
940542	AE2-040 BAT	1.3350	Merchant Transmission	1.3350
940571	AE2-044 C	2.8669	Adder	3.37
940572	AE2-044 E	1.2287	Adder	1.45
940652	AE2-052 BAT	2.6462	Merchant Transmission	2.6462
940661	AE2-053 O1	1.8780	Adder	2.21
941533	AE2-150 BAT	4.5004	Merchant Transmission	4.5004
941541	AE2-151 C	0.6543	Adder	0.77
941542	AE2-151 E	0.3523	Adder	0.41
942451	AE2-258	1.2520	Adder	1.47
942471	AE2-260 C O1	34.0823	50/50	34.0823
942472	AE2-260 E O1	48.3417	50/50	48.3417
943171	AE2-346 C	0.8414	Adder	0.99
943172	AE2-346 E	0.3606	Adder	0.42
943911	AF1-059	19.9610	50/50	19.9610
944141	AF1-082	1.8430	Adder	2.17
946011	AF1-266	40.2278	50/50	40.2278
946281	AF1-292 C	2.8219	50/50	2.8219
946282	AF1-292 E	1.9024	50/50	1.9024
957521	AF2-046 C	5.2333	Adder	11.62
957522	AF2-046 E	2.6324	Adder	5.84
957861	AF2-080 C	2.2948	Adder	5.09
957862	AF2-080 E	1.0173	Adder	2.26
958142	AF2-108 BAT	0.3246	Merchant Transmission	0.3246
959231	AF2-214 C	3.2832	Adder	7.29
959232	AF2-214 E	4.9220	Adder	10.93
959311	AF2-222 C	3.5747	Adder	7.93
959312	AF2-222 E	2.3951	Adder	5.32
959511	AF2-242	1.9189	Adder	4.26
959731	AF2-264 C	0.7073	Adder	1.57
959732	AF2-264 E	0.3484	Adder	0.77
960081	AF2-299 C	4.7561	50/50	4.7561
960082	AF2-299 E	3.1707	50/50	3.1707
960122	AF2-303 E O1	4.1234	Adder	9.15
960331	AF2-324 C O1	2.6830	Adder	5.96
960332	AF2-324 E O1	1.4405	Adder	3.2
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.8650	Adder	1.92
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.2162	Adder	0.48
960363	AF2-327 BAT (Withdrawn : 07/22/2020)	0.4077	Merchant Transmission	0.4077
960811	AF2-372 C	0.3525	Adder	0.78
960812	AF2-372 E	0.5752	Adder	1.28
960831	AF2-374 C	0.4739	Adder	1.05
960832	AF2-374 E	0.7732	Adder	1.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
WEC	WEC	0.2476	Confirmed LTF	0.2476
LGEE	LGEE	0.4655	Confirmed LTF	0.4655
CPL	CPL	2.7499	Confirmed LTF	2.7499
CBM-W2	CBM-W2	9.7871	Confirmed LTF	9.7871
NY	NY	0.3008	Confirmed LTF	0.3008
CBM-W1	CBM-W1	9.2699	Confirmed LTF	9.2699
TVA	TVA	2.0454	Confirmed LTF	2.0454
O-066	O-066	4.3142	Confirmed LTF	4.3142
CBM-S2	CBM-S2	17.5307	Confirmed LTF	17.5307
CBM-S1	CBM-S1	11.4253	Confirmed LTF	11.4253
G-007	G-007	0.6739	Confirmed LTF	0.6739
MADISON	MADISON	0.5604	Confirmed LTF	0.5604
MEC	MEC	1.4873	Confirmed LTF	1.4873
AA2-074	AA2-074	1.8738	LTF	1.8738

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
97804420	314299	6HARROWG	DVP	314263	6TYLER1	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	138.14	138.76	DC	7.42

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.9991	50/50	0.9991
314539	3UNCAMP	1.0317	Adder	1.21
314541	3WATKINS	0.3195	Adder	0.38
314572	3EMPORIA	0.0998	50/50	0.0998
314704	3LAWRENC	0.3711	50/50	0.3711
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.8777	Adder	5.74
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.8777	Adder	5.74
315136	1ROSEMG1	2.3684	50/50	2.3684
315137	1ROSEMS1	1.4687	50/50	1.4687
315138	1ROSEMG2	1.1100	50/50	1.1100
315139	1GASTONA	3.6125	50/50	3.6125
315141	1GASTONB	3.6125	50/50	3.6125
315294	1DOMTR10	4.0021	Adder	4.71
900672	V4-068 E	0.1643	Adder	0.19
907092	X1-038 E	2.5793	Adder	3.03
917332	Z2-043 E	0.6384	Adder	0.75
917342	Z2-044 E	0.3171	Adder	0.37
917512	Z2-088 E OP1	1.8525	Adder	2.18
918492	AA1-063AE OP	2.8026	Adder	3.3
918512	AA1-065 E OP	1.9029	Adder	2.24
918532	AA1-067 E	0.3158	Adder	0.37
919692	AA2-053 E OP	2.7695	Adder	3.26
919702	AA2-057 E OP	1.9657	Adder	2.31
920042	AA2-088 E OP	5.7728	Adder	6.79
920592	AA2-165 E	0.2702	Adder	0.32
920672	AA2-174 E OP	0.3200	Adder	0.38
922922	AB1-081 C OP	4.6600	Adder	5.48
922923	AB1-081 E OP	1.9972	Adder	2.35
923262	AB1-132 C OP (Suspended)	15.9928	50/50	15.9928
923263	AB1-132 E OP (Suspended)	6.8540	50/50	6.8540
923572	AB1-173 C OP	2.7475	50/50	2.7475
923573	AB1-173 E OP	1.2822	50/50	1.2822
923582	AB1-173AC OP	2.7475	50/50	2.7475
923583	AB1-173AE OP	1.2822	50/50	1.2822
923801	AB2-015 C OP	3.8649	Adder	4.55
923802	AB2-015 E OP	3.1693	Adder	3.73
923852	AB2-025 E	2.6023	50/50	2.6023
923911	AB2-031 C O1	2.7272	50/50	2.7272

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923912	AB2-031 E O1	1.3432	50/50	1.3432
923991	AB2-040 C O1	8.9549	50/50	8.9549
923992	AB2-040 E O1	7.3267	50/50	7.3267
924022	AB2-043 E O1	1.1913	Adder	1.4
924152	AB2-059 E OP	2.8293	Adder	3.33
924162	AB2-060 E OP	1.7804	Adder	2.09
924301	AB2-077 C O1 (Suspended)	0.8369	Adder	0.98
924302	AB2-077 E O1 (Suspended)	0.5579	Adder	0.66
924311	AB2-078 C O1 (Suspended)	0.8369	Adder	0.98
924312	AB2-078 E O1 (Suspended)	0.5579	Adder	0.66
924321	AB2-079 C O1 (Suspended)	0.8369	Adder	0.98
924322	AB2-079 E O1 (Suspended)	0.5579	Adder	0.66
924501	AB2-099 C (Suspended)	0.3109	Adder	0.37
924502	AB2-099 E (Suspended)	0.1332	Adder	0.16
924511	AB2-100 C	3.4439	50/50	3.4439
924512	AB2-100 E	9.8337	50/50	9.8337
925061	AB2-161 C O1 (Suspended)	3.3322	50/50	3.3322
925062	AB2-161 E O1 (Suspended)	5.4368	50/50	5.4368
925122	AB2-169 E	2.2556	Adder	2.65
925171	AB2-174 C O1	1.5519	50/50	1.5519
925172	AB2-174 E O1	8.1400	50/50	8.1400
925591	AC1-034 C	3.5574	Adder	4.19
925592	AC1-034 E	2.6837	Adder	3.16
925781	AC1-054 C O1	4.0091	Adder	4.72
925782	AC1-054 E O1	1.8469	Adder	2.17
926071	AC1-086 C	23.5512	50/50	23.5512
926072	AC1-086 E	10.7190	50/50	10.7190
926201	AC1-098 C	3.6712	Adder	4.32
926202	AC1-098 E	2.1871	Adder	2.57
926211	AC1-099 C	1.2303	Adder	1.45
926212	AC1-099 E	0.7225	Adder	0.85
927021	AC1-189 C	4.0002	Adder	4.71
927022	AC1-189 E	1.9926	Adder	2.34
927141	AC1-208 C	5.7384	Adder	6.75
927142	AC1-208 E	2.5481	Adder	3.0
932581	AC2-078 C O1	6.5573	50/50	6.5573
932582	AC2-078 E O1	10.6987	50/50	10.6987
932591	AC2-079 C O1	3.4283	Adder	4.03
932592	AC2-079 E O1	5.5936	Adder	6.58
932631	AC2-084 C	5.2335	Adder	6.16
932632	AC2-084 E	2.5777	Adder	3.03
933991	AD1-023 C	5.0135	Adder	5.9
933992	AD1-023 E	2.7293	Adder	3.21
934331	AD1-057 C O1	7.2541	Adder	8.53
934332	AD1-057 E O1	3.8696	Adder	4.55

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	19.0190	Adder	22.38
934522	AD1-076 E	9.6844	Adder	11.39
934571	AD1-082 C	7.5940	50/50	7.5940
934572	AD1-082 E	4.3319	50/50	4.3319
936261	AD2-033 C	4.5356	Adder	5.34
936262	AD2-033 E	3.0237	Adder	3.56
936361	AD2-046 C O1	4.1377	Adder	4.87
936362	AD2-046 E O1	1.9027	Adder	2.24
936401	AD2-051 C O1	4.2709	Adder	5.02
936402	AD2-051 E O1	1.8339	Adder	2.16
936481	AD2-063 C O1	5.8224	Adder	6.85
936482	AD2-063 E O1	3.8493	Adder	4.53
936661	AD2-085 C	2.0955	Adder	2.47
936662	AD2-085 E	3.4190	Adder	4.02
938171	AE1-026 C O1	12.8244	Adder	15.09
938172	AE1-026 E O1	3.3834	Adder	3.98
938221	AE1-035 C	1.0625	Adder	1.25
938222	AE1-035 E	0.5233	Adder	0.62
938631	AE1-085 C O1	13.5690	50/50	13.5690
938632	AE1-085 E O1	6.7845	50/50	6.7845
938771	AE1-103 C O1	1.5476	Adder	1.82
938772	AE1-103 E O1	2.1372	Adder	2.51
939181	AE1-148 C O1	4.0631	Adder	4.78
939182	AE1-148 E O1	2.7087	Adder	3.19
939191	AE1-149 C O1	18.4740	50/50	18.4740
939192	AE1-149 E O1	12.3160	50/50	12.3160
940061	AE2-000BC O1	15.7842	50/50	15.7842
940062	AE2-000BE O1	10.5228	50/50	10.5228
940481	AE2-033 C	35.9338	50/50	35.9338
940482	AE2-033 E	24.2250	50/50	24.2250
940571	AE2-044 C	2.3300	Adder	2.74
940572	AE2-044 E	0.9986	Adder	1.17
940651	AE2-052	6.1580	50/50	6.1580
940661	AE2-053 O1	1.5048	Adder	1.77
941541	AE2-151 C	0.5688	Adder	0.67
941542	AE2-151 E	0.3063	Adder	0.36
942341	AE2-247 C	0.9153	Adder	1.08
942342	AE2-247 E	1.2640	Adder	1.49
942451	AE2-258	0.9939	Adder	1.17
942471	AE2-260 C O1	25.7561	50/50	25.7561
942472	AE2-260 E O1	36.5319	50/50	36.5319
943171	AE2-346 C	0.7461	Adder	0.88
943172	AE2-346 E	0.3198	Adder	0.38
943461	AF1-017 C	0.8281	Adder	0.97
943462	AF1-017 E	1.3511	Adder	1.59
943911	AF1-059	15.4300	50/50	15.4300
944141	AF1-082	1.4979	Adder	1.76
946011	AF1-266	30.0794	50/50	30.0794
946281	AF1-292 C	2.1575	50/50	2.1575
946282	AF1-292 E	1.4545	50/50	1.4545
957521	AF2-046 C	4.8701	Adder	10.81
957522	AF2-046 E	2.4497	Adder	5.44

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957861	AF2-080 C	1.9256	Adder	4.27
957862	AF2-080 E	0.8536	Adder	1.89
958142	AF2-108 BAT	0.3276	Merchant Transmission	0.3276
959231	AF2-214 C	2.6683	Adder	5.92
959232	AF2-214 E	4.0002	Adder	8.88
959511	AF2-242	1.6932	Adder	3.76
959731	AF2-264 C	0.6416	Adder	1.42
959732	AF2-264 E	0.3160	Adder	0.7
960081	AF2-299 C	3.6363	50/50	3.6363
960082	AF2-299 E	2.4242	50/50	2.4242
960122	AF2-303 E O1	3.3429	Adder	7.42
960331	AF2-324 C O1	2.1751	Adder	4.83
960332	AF2-324 E O1	1.1678	Adder	2.59
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.7035	Adder	1.56
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1759	Adder	0.39
960361	AF2-327 C (Withdrawn : 07/22/2020)	3.2912	50/50	3.2912
960362	AF2-327 E (Withdrawn : 07/22/2020)	0.8228	50/50	0.8228
960811	AF2-372 C	0.2802	Adder	0.62
960812	AF2-372 E	0.4572	Adder	1.01
960831	AF2-374 C	0.4002	Adder	0.89
960832	AF2-374 E	0.6530	Adder	1.45
961091	AF2-400 C	0.1106	Adder	0.25
961092	AF2-400 E	0.1815	Adder	0.4
961111	AF2-402 C O1	1.0328	50/50	1.0328
961112	AF2-402 E O1	1.6885	50/50	1.6885
WEC	WEC	0.2063	Confirmed LTF	0.2063
LGEE	LGEE	0.3879	Confirmed LTF	0.3879
CPL	CPL	2.3563	Confirmed LTF	2.3563
CBM-W2	CBM-W2	8.2801	Confirmed LTF	8.2801
NY	NY	0.2732	Confirmed LTF	0.2732
CBM-W1	CBM-W1	7.7062	Confirmed LTF	7.7062
TVA	TVA	1.7374	Confirmed LTF	1.7374
O-066	O-066	3.8909	Confirmed LTF	3.8909
CBM-S2	CBM-S2	15.0511	Confirmed LTF	15.0511
CBM-S1	CBM-S1	9.6872	Confirmed LTF	9.6872
G-007	G-007	0.6074	Confirmed LTF	0.6074
MADISON	MADISON	0.4879	Confirmed LTF	0.4879
MEC	MEC	1.2490	Confirmed LTF	1.2490
AA2-074	AA2-074	1.6056	LTF	1.6056

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
97804415	314331	6POE	DVP	314299	6HARROWG	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	138.16	138.78	DC	7.42

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.9991	50/50	0.9991
314539	3UNCAMP	1.0317	Adder	1.21
314541	3WATKINS	0.3195	Adder	0.38
314572	3EMPORIA	0.0998	50/50	0.0998
314704	3LAWRENC	0.3711	50/50	0.3711
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.8777	Adder	5.74
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.8777	Adder	5.74
315136	1ROSEMG1	2.3684	50/50	2.3684
315137	1ROSEMS1	1.4687	50/50	1.4687
315138	1ROSEMG2	1.1100	50/50	1.1100
315139	1GASTONA	3.6125	50/50	3.6125
315141	1GASTONB	3.6125	50/50	3.6125
315294	1DOMTR10	4.0021	Adder	4.71
900672	V4-068 E	0.1643	Adder	0.19
907092	X1-038 E	2.5793	Adder	3.03
917332	Z2-043 E	0.6384	Adder	0.75
917342	Z2-044 E	0.3171	Adder	0.37
917512	Z2-088 E OP1	1.8525	Adder	2.18
918492	AA1-063AE OP	2.8026	Adder	3.3
918512	AA1-065 E OP	1.9029	Adder	2.24
918532	AA1-067 E	0.3158	Adder	0.37
919692	AA2-053 E OP	2.7695	Adder	3.26
919702	AA2-057 E OP	1.9657	Adder	2.31
920042	AA2-088 E OP	5.7728	Adder	6.79
920592	AA2-165 E	0.2702	Adder	0.32
920672	AA2-174 E OP	0.3200	Adder	0.38
922922	AB1-081 C OP	4.6600	Adder	5.48
922923	AB1-081 E OP	1.9972	Adder	2.35
923262	AB1-132 C OP (Suspended)	15.9928	50/50	15.9928
923263	AB1-132 E OP (Suspended)	6.8540	50/50	6.8540
923572	AB1-173 C OP	2.7475	50/50	2.7475
923573	AB1-173 E OP	1.2822	50/50	1.2822
923582	AB1-173AC OP	2.7475	50/50	2.7475
923583	AB1-173AE OP	1.2822	50/50	1.2822
923801	AB2-015 C OP	3.8649	Adder	4.55
923802	AB2-015 E OP	3.1693	Adder	3.73
923852	AB2-025 E	2.6023	50/50	2.6023
923911	AB2-031 C O1	2.7272	50/50	2.7272

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923912	AB2-031 E O1	1.3432	50/50	1.3432
923991	AB2-040 C O1	8.9549	50/50	8.9549
923992	AB2-040 E O1	7.3267	50/50	7.3267
924022	AB2-043 E O1	1.1913	Adder	1.4
924152	AB2-059 E OP	2.8293	Adder	3.33
924162	AB2-060 E OP	1.7804	Adder	2.09
924301	AB2-077 C O1 (Suspended)	0.8369	Adder	0.98
924302	AB2-077 E O1 (Suspended)	0.5579	Adder	0.66
924311	AB2-078 C O1 (Suspended)	0.8369	Adder	0.98
924312	AB2-078 E O1 (Suspended)	0.5579	Adder	0.66
924321	AB2-079 C O1 (Suspended)	0.8369	Adder	0.98
924322	AB2-079 E O1 (Suspended)	0.5579	Adder	0.66
924501	AB2-099 C (Suspended)	0.3109	Adder	0.37
924502	AB2-099 E (Suspended)	0.1332	Adder	0.16
924511	AB2-100 C	3.4439	50/50	3.4439
924512	AB2-100 E	9.8337	50/50	9.8337
925061	AB2-161 C O1 (Suspended)	3.3322	50/50	3.3322
925062	AB2-161 E O1 (Suspended)	5.4368	50/50	5.4368
925122	AB2-169 E	2.2556	Adder	2.65
925171	AB2-174 C O1	1.5519	50/50	1.5519
925172	AB2-174 E O1	8.1400	50/50	8.1400
925591	AC1-034 C	3.5574	Adder	4.19
925592	AC1-034 E	2.6837	Adder	3.16
925781	AC1-054 C O1	4.0091	Adder	4.72
925782	AC1-054 E O1	1.8469	Adder	2.17
926071	AC1-086 C	23.5512	50/50	23.5512
926072	AC1-086 E	10.7190	50/50	10.7190
926201	AC1-098 C	3.6712	Adder	4.32
926202	AC1-098 E	2.1871	Adder	2.57
926211	AC1-099 C	1.2303	Adder	1.45
926212	AC1-099 E	0.7225	Adder	0.85
927021	AC1-189 C	4.0002	Adder	4.71
927022	AC1-189 E	1.9926	Adder	2.34
927141	AC1-208 C	5.7384	Adder	6.75
927142	AC1-208 E	2.5481	Adder	3.0
932581	AC2-078 C O1	6.5573	50/50	6.5573
932582	AC2-078 E O1	10.6987	50/50	10.6987
932591	AC2-079 C O1	3.4283	Adder	4.03
932592	AC2-079 E O1	5.5936	Adder	6.58
932631	AC2-084 C	5.2335	Adder	6.16
932632	AC2-084 E	2.5777	Adder	3.03
933991	AD1-023 C	5.0135	Adder	5.9
933992	AD1-023 E	2.7293	Adder	3.21
934331	AD1-057 C O1	7.2541	Adder	8.53
934332	AD1-057 E O1	3.8696	Adder	4.55

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	19.0190	Adder	22.38
934522	AD1-076 E	9.6844	Adder	11.39
934571	AD1-082 C	7.5940	50/50	7.5940
934572	AD1-082 E	4.3319	50/50	4.3319
936261	AD2-033 C	4.5356	Adder	5.34
936262	AD2-033 E	3.0237	Adder	3.56
936361	AD2-046 C O1	4.1377	Adder	4.87
936362	AD2-046 E O1	1.9027	Adder	2.24
936401	AD2-051 C O1	4.2709	Adder	5.02
936402	AD2-051 E O1	1.8339	Adder	2.16
936481	AD2-063 C O1	5.8224	Adder	6.85
936482	AD2-063 E O1	3.8493	Adder	4.53
936661	AD2-085 C	2.0955	Adder	2.47
936662	AD2-085 E	3.4190	Adder	4.02
938171	AE1-026 C O1	12.8244	Adder	15.09
938172	AE1-026 E O1	3.3834	Adder	3.98
938221	AE1-035 C	1.0625	Adder	1.25
938222	AE1-035 E	0.5233	Adder	0.62
938631	AE1-085 C O1	13.5690	50/50	13.5690
938632	AE1-085 E O1	6.7845	50/50	6.7845
938771	AE1-103 C O1	1.5476	Adder	1.82
938772	AE1-103 E O1	2.1372	Adder	2.51
939181	AE1-148 C O1	4.0631	Adder	4.78
939182	AE1-148 E O1	2.7087	Adder	3.19
939191	AE1-149 C O1	18.4740	50/50	18.4740
939192	AE1-149 E O1	12.3160	50/50	12.3160
940061	AE2-000BC O1	15.7842	50/50	15.7842
940062	AE2-000BE O1	10.5228	50/50	10.5228
940481	AE2-033 C	35.9338	50/50	35.9338
940482	AE2-033 E	24.2250	50/50	24.2250
940571	AE2-044 C	2.3300	Adder	2.74
940572	AE2-044 E	0.9986	Adder	1.17
940651	AE2-052	6.1580	50/50	6.1580
940661	AE2-053 O1	1.5048	Adder	1.77
941541	AE2-151 C	0.5688	Adder	0.67
941542	AE2-151 E	0.3063	Adder	0.36
942341	AE2-247 C	0.9153	Adder	1.08
942342	AE2-247 E	1.2640	Adder	1.49
942451	AE2-258	0.9939	Adder	1.17
942471	AE2-260 C O1	25.7561	50/50	25.7561
942472	AE2-260 E O1	36.5319	50/50	36.5319
943171	AE2-346 C	0.7461	Adder	0.88
943172	AE2-346 E	0.3198	Adder	0.38
943461	AF1-017 C	0.8281	Adder	0.97
943462	AF1-017 E	1.3511	Adder	1.59
943911	AF1-059	15.4300	50/50	15.4300
944141	AF1-082	1.4979	Adder	1.76
946011	AF1-266	30.0794	50/50	30.0794
946281	AF1-292 C	2.1575	50/50	2.1575
946282	AF1-292 E	1.4545	50/50	1.4545
957521	AF2-046 C	4.8701	Adder	10.81
957522	AF2-046 E	2.4497	Adder	5.44

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957861	AF2-080 C	1.9256	Adder	4.27
957862	AF2-080 E	0.8536	Adder	1.89
958142	AF2-108 BAT	0.3276	Merchant Transmission	0.3276
959231	AF2-214 C	2.6683	Adder	5.92
959232	AF2-214 E	4.0002	Adder	8.88
959511	AF2-242	1.6932	Adder	3.76
959731	AF2-264 C	0.6416	Adder	1.42
959732	AF2-264 E	0.3160	Adder	0.7
960081	AF2-299 C	3.6363	50/50	3.6363
960082	AF2-299 E	2.4242	50/50	2.4242
960122	AF2-303 E O1	3.3429	Adder	7.42
960331	AF2-324 C O1	2.1751	Adder	4.83
960332	AF2-324 E O1	1.1678	Adder	2.59
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.7035	Adder	1.56
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1759	Adder	0.39
960361	AF2-327 C (Withdrawn : 07/22/2020)	3.2912	50/50	3.2912
960362	AF2-327 E (Withdrawn : 07/22/2020)	0.8228	50/50	0.8228
960811	AF2-372 C	0.2802	Adder	0.62
960812	AF2-372 E	0.4572	Adder	1.01
960831	AF2-374 C	0.4002	Adder	0.89
960832	AF2-374 E	0.6530	Adder	1.45
961091	AF2-400 C	0.1106	Adder	0.25
961092	AF2-400 E	0.1815	Adder	0.4
961111	AF2-402 C O1	1.0328	50/50	1.0328
961112	AF2-402 E O1	1.6885	50/50	1.6885
WEC	WEC	0.2063	Confirmed LTF	0.2063
LGEE	LGEE	0.3879	Confirmed LTF	0.3879
CPL	CPL	2.3563	Confirmed LTF	2.3563
CBM-W2	CBM-W2	8.2801	Confirmed LTF	8.2801
NY	NY	0.2732	Confirmed LTF	0.2732
CBM-W1	CBM-W1	7.7062	Confirmed LTF	7.7062
TVA	TVA	1.7374	Confirmed LTF	1.7374
O-066	O-066	3.8909	Confirmed LTF	3.8909
CBM-S2	CBM-S2	15.0511	Confirmed LTF	15.0511
CBM-S1	CBM-S1	9.6872	Confirmed LTF	9.6872
G-007	G-007	0.6074	Confirmed LTF	0.6074
MADISON	MADISON	0.4879	Confirmed LTF	0.4879
MEC	MEC	1.2490	Confirmed LTF	1.2490
AA2-074	AA2-074	1.6056	LTF	1.6056

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
96976512	314554	3BTLEBRO	DVP	304223	3ROCKYMT115T	CPL	1	DVP_P7-1: LN 2058-2181	tower	93.0	522.61	539.51	DC	15.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314541	3WATKINS	0.2106	Adder	0.25
314582	3KELFORD	0.3883	50/50	0.3883
314623	3WITAKRS	0.5537	50/50	0.5537
315131	1EDGECEMA (Deactivation : 22/04/2019)	12.1487	50/50	12.1487
315132	1EDGECEMB (Deactivation : 22/04/2019)	12.1487	50/50	12.1487
315136	1ROSEMG1	1.5941	50/50	1.5941
315137	1ROSEMS1	0.9885	50/50	0.9885
315138	1ROSEMG2	0.7471	50/50	0.7471
315139	1GASTONA	2.0488	50/50	2.0488
315141	1GASTONB	2.0488	50/50	2.0488
315601	1CONETOE2SOL	1.3283	50/50	1.3283
315612	3AA2-057SOLA	2.5571	50/50	2.5571
900672	V4-068 E	0.1239	Adder	0.15
917332	Z2-043 E	0.9788	50/50	0.9788
917342	Z2-044 E	1.3758	50/50	1.3758
917512	Z2-088 E OP1	3.3002	50/50	3.3002
918492	AA1-063AE OP	1.9451	Adder	2.29
918512	AA1-065 E OP	1.4319	Adder	1.68
918532	AA1-067 E	0.2468	Adder	0.29
919692	AA2-053 E OP	1.9800	Adder	2.33
919702	AA2-057 E OP	6.9976	50/50	6.9976
920042	AA2-088 E OP	4.0200	Adder	4.73
920591	AA2-165 C	0.3032	50/50	0.3032
920592	AA2-165 E	0.9618	50/50	0.9618
920672	AA2-174 E OP	0.2288	Adder	0.27
922922	AB1-081 C OP	22.9723	50/50	22.9723
922923	AB1-081 E OP	9.8453	50/50	9.8453
923262	AB1-132 C OP (Suspended)	9.0703	50/50	9.0703
923263	AB1-132 E OP (Suspended)	3.8873	50/50	3.8873
923572	AB1-173 C OP	1.0085	Adder	1.19
923573	AB1-173 E OP	0.4707	Adder	0.55
923582	AB1-173AC OP	1.0085	Adder	1.19
923583	AB1-173AE OP	0.4707	Adder	0.55
923911	AB2-031 C O1	1.0011	Adder	1.18
923912	AB2-031 E O1	0.4931	Adder	0.58
923991	AB2-040 C O1	3.2871	Adder	3.87
923992	AB2-040 E O1	2.6894	Adder	3.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924151	AB2-059 C OP	4.6702	50/50	4.6702
924152	AB2-059 E OP	13.9475	50/50	13.9475
924501	AB2-099 C (Suspended)	0.2638	Adder	0.31
924502	AB2-099 E (Suspended)	0.1131	Adder	0.13
924512	AB2-100 E	2.0948	Adder	2.46
925172	AB2-174 E O1	2.7106	Adder	3.19
925591	AC1-034 C	17.5369	50/50	17.5369
925592	AC1-034 E	13.2296	50/50	13.2296
926071	AC1-086 C	13.3571	50/50	13.3571
926072	AC1-086 E	6.0793	50/50	6.0793
926201	AC1-098 C	8.4859	50/50	8.4859
926202	AC1-098 E	5.0555	50/50	5.0555
926211	AC1-099 C	2.8437	50/50	2.8437
926212	AC1-099 E	1.6701	50/50	1.6701
927021	AC1-189 C	6.0732	50/50	6.0732
927022	AC1-189 E	3.0252	50/50	3.0252
927141	AC1-208 C	13.5254	50/50	13.5254
927142	AC1-208 E	6.0058	50/50	6.0058
932631	AC2-084 C	12.0970	50/50	12.0970
932632	AC2-084 E	5.9582	50/50	5.9582
934331	AD1-057 C O1	10.1862	50/50	10.1862
934332	AD1-057 E O1	5.4338	50/50	5.4338
936401	AD2-051 C O1	3.1726	Adder	3.73
936402	AD2-051 E O1	1.3623	Adder	1.6
938171	AE1-026 C O1	9.9093	Adder	11.66
938172	AE1-026 E O1	2.6143	Adder	3.08
938221	AE1-035 C	0.7995	Adder	0.94
938222	AE1-035 E	0.3938	Adder	0.46
940571	AE2-044 C	11.4862	50/50	11.4862
940572	AE2-044 E	4.9226	50/50	4.9226
941541	AE2-151 C	0.5014	Adder	0.59
941542	AE2-151 E	0.2700	Adder	0.32
942471	AE2-260 C O1	4.9565	Adder	5.83
942472	AE2-260 E O1	7.0302	Adder	8.27
943171	AE2-346 C	0.6332	Adder	0.74
943172	AE2-346 E	0.2714	Adder	0.32
944141	AF1-082	7.3840	50/50	7.3840
946281	AF1-292 C	0.5556	Adder	0.65
946282	AF1-292 E	0.3746	Adder	0.44
957521	AF2-046 C	3.7559	Adder	8.34
957522	AF2-046 E	1.8893	Adder	4.19
957861	AF2-080 C	5.5159	50/50	5.5159
957862	AF2-080 E	2.4452	50/50	2.4452
959231	AF2-214 C	24.8183	50/50	24.8183
959232	AF2-214 E	37.2070	50/50	37.2070
959511	AF2-242	1.3281	Adder	2.95
959731	AF2-264 C	0.5208	Adder	1.16
959732	AF2-264 E	0.2565	Adder	0.57
960081	AF2-299 C	0.4963	Adder	1.1
960082	AF2-299 E	0.3309	Adder	0.73
960122	AF2-303 E O1	15.7095	50/50	15.7095
960331	AF2-324 C O1	10.2216	50/50	10.2216

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960332	AF2-324 E O1	5.4879	50/50	5.4879
960351	AF2-326 C (Withdrawn : 07/22/2020)	6.9299	50/50	6.9299
960352	AF2-326 E (Withdrawn : 07/22/2020)	1.7325	50/50	1.7325
960831	AF2-374 C	0.3253	Adder	0.72
960832	AF2-374 E	0.5307	Adder	1.18
NEWTON	NEWTON	0.8596	Confirmed LTF	0.8596
FARMERCITY	FARMERCITY	0.0493	Confirmed LTF	0.0493
G-007A	G-007A	0.5131	Confirmed LTF	0.5131
VFT	VFT	1.3610	Confirmed LTF	1.3610
CALDERWOOD	CALDERWOOD	0.6834	Confirmed LTF	0.6834
PRAIRIE	PRAIRIE	2.3221	Confirmed LTF	2.3221
CHEOAH	CHEOAH	0.7007	Confirmed LTF	0.7007
EDWARDS	EDWARDS	0.2597	Confirmed LTF	0.2597
TILTON	TILTON	0.4593	Confirmed LTF	0.4593
GIBSON	GIBSON	0.4155	Confirmed LTF	0.4155
BLUEG	BLUEG	1.2812	Confirmed LTF	1.2812
TRIMBLE	TRIMBLE	0.4068	Confirmed LTF	0.4068
CATAWBA	CATAWBA	0.7382	Confirmed LTF	0.7382

11.6.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97804452	314561	6CAROLNA	DVP	314583	6LAKEVEW	DVP	1	DVP_P4-2: 218T2160	breaker	459.0	131.6	132.87	DC	11.0

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	1.6526	Adder	1.94
314541	3WATKINS	0.6292	50/50	0.6292
314574	6EVERETS	0.4446	50/50	0.4446
314582	3KELFORD	0.5554	50/50	0.5554
314589	3MURPHYS	0.1199	50/50	0.1199
315115	1S HAMPT1	1.4656	50/50	1.4656
315126	1ROARAP2	2.4015	50/50	2.4015
315128	1ROARAP4	2.2917	50/50	2.2917
315292	1DOMTR78	1.7816	50/50	1.7816
315294	1DOMTR10	13.3857	50/50	13.3857
315602	1HOLLOMANSOL	2.3992	50/50	2.3992
315606	3AA2-053SOLA	2.4453	50/50	2.4453
315607	3AA1-063SOLA	2.1746	50/50	2.1746
315608	3AA2-088SOLA	1.2899	50/50	1.2899
315611	6Z1-036WIND	3.8974	Adder	4.59
315614	AA2-178 C	1.6067	50/50	1.6067
900672	V4-068 E	0.3808	50/50	0.3808
901082	W1-029 E	13.9650	Adder	16.43
907092	X1-038 E	4.1314	Adder	4.86
913392	Y1-086 E	0.7902	Adder	0.93
916042	Z1-036 E (Suspended)	26.1129	Adder	30.72
917122	Z2-027 E	0.4178	Adder	0.49
917332	Z2-043 E	1.3999	50/50	1.3999
918492	AA1-063AE OP	5.9443	50/50	5.9443
918512	AA1-065 E OP	6.2280	50/50	6.2280
918532	AA1-067 E	1.1047	50/50	1.1047
919692	AA2-053 E OP	6.0871	50/50	6.0871
920042	AA2-088 E OP	12.2010	50/50	12.2010
920671	AA2-174 C OP	0.1120	50/50	0.1120
920672	AA2-174 E OP	0.7034	50/50	0.7034
920692	AA2-178 E	3.9919	50/50	3.9919
922922	AB1-081 C OP	-4.5063	Adder	-5.3
923572	AB1-173 C OP	1.1431	Adder	1.34
923573	AB1-173 E OP	0.5335	Adder	0.63
923582	AB1-173AC OP	1.1431	Adder	1.34
923583	AB1-173AE OP	0.5335	Adder	0.63
923801	AB2-015 C OP	7.4805	50/50	7.4805
923802	AB2-015 E OP	6.1340	50/50	6.1340
923831	AB2-022 C	0.8284	Adder	0.97
923832	AB2-022 E	0.4461	Adder	0.52
923911	AB2-031 C O1	1.1347	Adder	1.33

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923912	AB2-031 E O1	0.5589	Adder	0.66
923991	AB2-040 C O1	3.7258	Adder	4.38
923992	AB2-040 E O1	3.0484	Adder	3.59
924501	AB2-099 C (Suspended)	0.8232	50/50	0.8232
924502	AB2-099 E (Suspended)	0.3528	50/50	0.3528
925121	AB2-169 C	1.4733	50/50	1.4733
925122	AB2-169 E	7.6650	50/50	7.6650
925781	AC1-054 C O1	5.0508	Adder	5.94
925782	AC1-054 E O1	2.3268	Adder	2.74
926201	AC1-098 C	4.0516	Adder	4.77
926202	AC1-098 E	2.4137	Adder	2.84
926211	AC1-099 C	1.3577	Adder	1.6
926212	AC1-099 E	0.7974	Adder	0.94
927141	AC1-208 C	5.4747	Adder	6.44
927142	AC1-208 E	2.4310	Adder	2.86
932631	AC2-084 C	5.7756	Adder	6.79
932632	AC2-084 E	2.8447	Adder	3.35
933991	AD1-023 C	16.4747	50/50	16.4747
933992	AD1-023 E	8.9689	50/50	8.9689
934521	AD1-076 C	62.6103	50/50	62.6103
934522	AD1-076 E	31.8811	50/50	31.8811
936361	AD2-046 C O1	3.6575	Adder	4.3
936362	AD2-046 E O1	1.6819	Adder	1.98
936401	AD2-051 C O1	14.0736	50/50	14.0736
936402	AD2-051 E O1	6.0430	50/50	6.0430
938171	AE1-026 C O1	42.1008	50/50	42.1008
938172	AE1-026 E O1	11.1072	50/50	11.1072
938221	AE1-035 C	3.4773	50/50	3.4773
938222	AE1-035 E	1.7127	50/50	1.7127
938771	AE1-103 C O1	2.4788	Adder	2.92
938772	AE1-103 E O1	3.4231	Adder	4.03
939181	AE1-148 C O1	3.5159	Adder	4.14
939182	AE1-148 E O1	2.3440	Adder	2.76
940491	AE2-034 C	6.9859	50/50	6.9859
940492	AE2-034 E	2.9939	50/50	2.9939
940661	AE2-053 O1	1.3022	Adder	1.53
941501	AE2-147 C	6.9439	Adder	8.17
941502	AE2-147 E	4.6293	Adder	5.45
941541	AE2-151 C	1.5718	50/50	1.5718
941542	AE2-151 E	0.8464	50/50	0.8464
942851	AE2-304 C	0.3189	Adder	0.38
942852	AE2-304 E	0.1240	Adder	0.15
943171	AE2-346 C	1.9758	50/50	1.9758
943172	AE2-346 E	0.8468	50/50	0.8468
944142	AF1-082 BAT	1.7041	Merchant Transmission	1.7041
944871	AF1-152 C	2.3146	Adder	2.72
944872	AF1-152 E	1.5431	Adder	1.82
945711	AF1-236 C O1	76.4785	50/50	76.4785
945712	AF1-236 E O1	124.7808	50/50	124.7808
946012	AF1-266 BAT	8.0020	Merchant Transmission	8.0020
957521	AF2-046 C	21.8452	50/50	21.8452
957522	AF2-046 E	10.9883	50/50	10.9883

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957531	AF2-047 C	16.5997	50/50	16.5997
957532	AF2-047 E	8.3498	50/50	8.3498
957791	AF2-073 C (Withdrawn : 07/02/2020)	2.9263	Adder	6.5
957792	AF2-073 E (Withdrawn : 07/02/2020)	1.8709	Adder	4.15
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.3006	Adder	2.89
957802	AF2-074 E (Withdrawn : 07/02/2020)	0.8315	Adder	1.85
957821	AF2-076 C O1	1.0123	Adder	2.25
957822	AF2-076 E O1	0.6748	Adder	1.5
959233	AF2-214 BAT	7.5865	Merchant Transmission	7.5865
959511	AF2-242	10.9790	50/50	10.9790
959731	AF2-264 C	3.0494	50/50	3.0494
959732	AF2-264 E	1.5020	50/50	1.5020
960123	AF2-303 BAT	5.8275	Merchant Transmission	5.8275
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	0.4490	Merchant Transmission	0.4490
960831	AF2-374 C	1.9105	50/50	1.9105
960832	AF2-374 E	3.1171	50/50	3.1171
961091	AF2-400 C	0.4039	50/50	0.4039
961092	AF2-400 E	0.6628	50/50	0.6628
NEWTON	NEWTON	0.5931	Confirmed LTF	0.5931
FARMERCITY	FARMERCITY	0.0346	Confirmed LTF	0.0346
G-007A	G-007A	0.4915	Confirmed LTF	0.4915
VFT	VFT	1.3094	Confirmed LTF	1.3094
CALDERWOOD	CALDERWOOD	0.4980	Confirmed LTF	0.4980
PRAIRIE	PRAIRIE	1.6273	Confirmed LTF	1.6273
CHEOAH	CHEOAH	0.5115	Confirmed LTF	0.5115
EDWARDS	EDWARDS	0.1771	Confirmed LTF	0.1771
TILTON	TILTON	0.3118	Confirmed LTF	0.3118
GIBSON	GIBSON	0.2839	Confirmed LTF	0.2839
BLUEG	BLUEG	0.8697	Confirmed LTF	0.8697
TRIMBLE	TRIMBLE	0.2755	Confirmed LTF	0.2755
CATAWBA	CATAWBA	0.5495	Confirmed LTF	0.5495

11.6.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97804612	314561	6CAROLNA	DVP	314599	6ROA VAL	DVP	1	DVP_P4-2: 238T2002	breaker	671.0	103.2	103.7	DC	7.48

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1077	50/50	0.1077
314704	3LAWRENC	0.3940	50/50	0.3940
315126	1ROARAP2	1.7251	50/50	1.7251
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315136	1ROSEMG1	4.2161	50/50	4.2161
315137	1ROSEMS1	2.6144	50/50	2.6144
315138	1ROSEMG2	1.9760	50/50	1.9760
315139	1GASTONA	6.6275	50/50	6.6275
315141	1GASTONB	6.6275	50/50	6.6275
315294	1DOMTR10	-5.1296	Adder	-6.03
315611	6Z1-036WIND	-2.2091	Adder	-2.6
917342	Z2-044 E	0.2911	Adder	0.34
918492	AA1-063AE OP	2.9372	Adder	3.46
919692	AA2-053 E OP	2.8284	Adder	3.33
919702	AA2-057 E OP	1.7334	Adder	2.04
920592	AA2-165 E	0.2382	Adder	0.28
920672	AA2-174 E OP	0.3268	Adder	0.38
922922	AB1-081 C OP	4.5320	Adder	5.33
922923	AB1-081 E OP	1.9423	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3404	50/50	29.3404
923263	AB1-132 E OP (Suspended)	12.5744	50/50	12.5744
923572	AB1-173 C OP	3.1248	50/50	3.1248
923573	AB1-173 E OP	1.4583	50/50	1.4583
923582	AB1-173AC OP	3.1248	50/50	3.1248
923583	AB1-173AE OP	1.4583	50/50	1.4583
923911	AB2-031 C O1	3.1017	50/50	3.1017
923912	AB2-031 E O1	1.5277	50/50	1.5277
923991	AB2-040 C O1	10.1847	50/50	10.1847
923992	AB2-040 E O1	8.3329	50/50	8.3329
924022	AB2-043 E O1	1.2769	Adder	1.5
924152	AB2-059 E OP	2.7516	Adder	3.24
924162	AB2-060 E OP	1.9081	Adder	2.24
924301	AB2-077 C O1 (Suspended)	0.8971	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5981	Adder	0.7

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	0.8971	Adder	1.06
924312	AB2-078 E O1 (Suspended)	0.5981	Adder	0.7
924321	AB2-079 C O1 (Suspended)	0.8971	Adder	1.06
924322	AB2-079 E O1 (Suspended)	0.5981	Adder	0.7
924511	AB2-100 C	3.6931	50/50	3.6931
924512	AB2-100 E	10.5452	50/50	10.5452
925171	AB2-174 C O1	1.7279	50/50	1.7279
925172	AB2-174 E O1	9.0630	50/50	9.0630
925591	AC1-034 C	3.4597	Adder	4.07
925592	AC1-034 E	2.6099	Adder	3.07
925611	AC1-036 C	0.3376	Adder	0.4
925612	AC1-036 E	0.5508	Adder	0.65
925781	AC1-054 C O1	4.7648	Adder	5.61
925782	AC1-054 E O1	2.1950	Adder	2.58
926071	AC1-086 C	43.2072	50/50	43.2072
926072	AC1-086 E	19.6650	50/50	19.6650
926201	AC1-098 C	1.9358	Adder	2.28
926202	AC1-098 E	1.1533	Adder	1.36
926211	AC1-099 C	0.6487	Adder	0.76
926212	AC1-099 E	0.3810	Adder	0.45
927141	AC1-208 C	5.1597	Adder	6.07
927142	AC1-208 E	2.2911	Adder	2.7
932631	AC2-084 C	2.7596	Adder	3.25
932632	AC2-084 E	1.3592	Adder	1.6
934331	AD1-057 C O1	12.9067	50/50	12.9067
934332	AD1-057 E O1	6.8850	50/50	6.8850
936261	AD2-033 C	4.8479	Adder	5.7
936262	AD2-033 E	3.2319	Adder	3.8
936361	AD2-046 C O1	4.6384	Adder	5.46
936362	AD2-046 E O1	2.1330	Adder	2.51
936481	AD2-063 C O1	6.2340	Adder	7.33
936482	AD2-063 E O1	4.1214	Adder	4.85
938173	AE1-026 BAT	15.6372	Merchant Transmission	15.6372
939181	AE1-148 C O1	4.5450	Adder	5.35
939182	AE1-148 E O1	3.0300	Adder	3.56
940241	AE2-006	0.1718	Adder	0.2
940481	AE2-033 C	28.1080	50/50	28.1080
940482	AE2-033 E	18.9492	50/50	18.9492
940571	AE2-044 C	2.2660	Adder	2.67
940572	AE2-044 E	0.9711	Adder	1.14
940661	AE2-053 O1	1.6833	Adder	1.98
942451	AE2-258	1.0653	Adder	1.25
942471	AE2-260 C O1	26.1191	50/50	26.1191
942472	AE2-260 E O1	37.0469	50/50	37.0469
943911	AF1-059	13.9527	Adder	16.41
944141	AF1-082	1.4567	Adder	1.71
946011	AF1-266	23.5286	50/50	23.5286
946281	AF1-292 C	2.2878	50/50	2.2878
946282	AF1-292 E	1.5424	50/50	1.5424

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959231	AF2-214 C	2.5950	Adder	5.76
959232	AF2-214 E	3.8903	Adder	8.64
959311	AF2-222 C	3.0332	Adder	6.73
959312	AF2-222 E	2.0323	Adder	4.51
960081	AF2-299 C	3.8559	50/50	3.8559
960082	AF2-299 E	2.5706	50/50	2.5706
960122	AF2-303 E O1	3.3703	Adder	7.48
960331	AF2-324 C O1	2.1929	Adder	4.87
960332	AF2-324 E O1	1.1774	Adder	2.61
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6749	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1687	Adder	0.37
960811	AF2-372 C	0.3003	Adder	0.67
960812	AF2-372 E	0.4901	Adder	1.09
WEC	WEC	0.1188	Confirmed LTF	0.1188
LGEE	LGEE	0.2248	Confirmed LTF	0.2248
CPL	CPL	1.1808	Confirmed LTF	1.1808
CBM-W2	CBM-W2	4.6355	Confirmed LTF	4.6355
NY	NY	0.1615	Confirmed LTF	0.1615
CBM-W1	CBM-W1	4.4411	Confirmed LTF	4.4411
TVA	TVA	0.9674	Confirmed LTF	0.9674
O-066	O-066	2.3117	Confirmed LTF	2.3117
CBM-S2	CBM-S2	7.9880	Confirmed LTF	7.9880
CBM-S1	CBM-S1	5.4102	Confirmed LTF	5.4102
G-007	G-007	0.3609	Confirmed LTF	0.3609
MADISON	MADISON	0.2540	Confirmed LTF	0.2540
MEC	MEC	0.7103	Confirmed LTF	0.7103

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
96976517	314574	6EVERETS	DVP	304451	6GREENVILE T	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	187.94	190.58	DC	12.63

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	0.9820	Adder	1.16
314541	3WATKINS	0.2993	Adder	0.35
314574	6EVERETS	0.6442	50/50	0.6442
314582	3KELFORD	0.3890	50/50	0.3890
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.7655	50/50	9.7655
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.7655	50/50	9.7655
315136	1ROSEMG1	1.7016	50/50	1.7016
315137	1ROSEMS1	1.0552	50/50	1.0552
315138	1ROSEMG2	0.7975	50/50	0.7975
315141	1GASTONB	2.3466	50/50	2.3466
315292	1DOMTR78	1.8394	50/50	1.8394
315294	1DOMTR10	13.8199	50/50	13.8199
315601	1CONETOESOL	2.5245	50/50	2.5245
315602	1HOLLOMANSOL	1.6852	50/50	1.6852
315611	6Z1-036WIND	3.5636	Adder	4.19
315614	AA2-178 C	1.4283	50/50	1.4283
900672	V4-068 E	0.1798	Adder	0.21
901082	W1-029 E	13.0911	Adder	15.4
907092	X1-038 E	2.4550	Adder	2.89
913392	Y1-086 E	0.7706	Adder	0.91
916042	Z1-036 E (Suspended)	23.8763	Adder	28.09
917122	Z2-027 E	0.4007	Adder	0.47
917332	Z2-043 E	0.9806	50/50	0.9806
917342	Z2-044 E	0.2246	Adder	0.26
917512	Z2-088 E OP1	6.2724	50/50	6.2724
918492	AA1-063AE OP	2.0465	Adder	2.41
918512	AA1-065 E OP	4.3745	50/50	4.3745
918532	AA1-067 E	1.6006	50/50	1.6006
919152	AA1-139 E	1.8100	Adder	2.13
919692	AA2-053 E OP	2.1059	Adder	2.48
919702	AA2-057 E OP	1.4646	Adder	1.72
920042	AA2-088 E OP	5.2584	Adder	6.19
920592	AA2-165 E	0.2013	Adder	0.24
920672	AA2-174 E OP	0.2433	Adder	0.29
920692	AA2-178 E	3.5486	50/50	3.5486
922922	AB1-081 C OP	3.5909	Adder	4.22
922923	AB1-081 E OP	1.5390	Adder	1.81
923262	AB1-132 C OP (Suspended)	8.8300	Adder	10.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923263	AB1-132 E OP (Suspended)	3.7843	Adder	4.45
923572	AB1-173 C OP	1.0108	Adder	1.19
923573	AB1-173 E OP	0.4717	Adder	0.55
923582	AB1-173AC OP	1.0108	Adder	1.19
923583	AB1-173AE OP	0.4717	Adder	0.55
923801	AB2-015 C OP	3.6431	Adder	4.29
923802	AB2-015 E OP	2.9873	Adder	3.51
923831	AB2-022 C	0.8079	Adder	0.95
923832	AB2-022 E	0.4350	Adder	0.51
923852	AB2-025 E	0.2989	Adder	0.35
923911	AB2-031 C O1	1.0033	Adder	1.18
923912	AB2-031 E O1	0.4942	Adder	0.58
923991	AB2-040 C O1	3.2946	Adder	3.88
923992	AB2-040 E O1	2.6956	Adder	3.17
924152	AB2-059 E OP	2.1802	Adder	2.56
924501	AB2-099 C (Suspended)	0.5225	50/50	0.5225
924502	AB2-099 E (Suspended)	0.2239	50/50	0.2239
924512	AB2-100 E	2.4516	Adder	2.88
925121	AB2-169 C	1.7406	50/50	1.7406
925122	AB2-169 E	9.0559	50/50	9.0559
925172	AB2-174 E O1	2.7662	Adder	3.25
925591	AC1-034 C	2.7413	Adder	3.23
925592	AC1-034 E	2.0680	Adder	2.43
926071	AC1-086 C	13.0033	Adder	15.3
926072	AC1-086 E	5.9182	Adder	6.96
926201	AC1-098 C	3.4152	Adder	4.02
926202	AC1-098 E	2.0346	Adder	2.39
926211	AC1-099 C	1.1445	Adder	1.35
926212	AC1-099 E	0.6721	Adder	0.79
927021	AC1-189 C	15.5976	50/50	15.5976
927022	AC1-189 E	7.7696	50/50	7.7696
927141	AC1-208 C	4.4227	Adder	5.2
927142	AC1-208 E	1.9639	Adder	2.31
932631	AC2-084 C	4.8685	Adder	5.73
932632	AC2-084 E	2.3979	Adder	2.82
933991	AD1-023 C	13.5602	50/50	13.5602
933992	AD1-023 E	7.3822	50/50	7.3822
934331	AD1-057 C O1	9.0197	50/50	9.0197
934332	AD1-057 E O1	4.8115	50/50	4.8115
934521	AD1-076 C	55.0866	50/50	55.0866
934522	AD1-076 E	28.0500	50/50	28.0500
936401	AD2-051 C O1	9.4655	50/50	9.4655
936402	AD2-051 E O1	4.0644	50/50	4.0644
938171	AE1-026 C O1	33.4414	50/50	33.4414
938172	AE1-026 E O1	8.8226	50/50	8.8226
938221	AE1-035 C	2.4424	50/50	2.4424
938222	AE1-035 E	1.2030	50/50	1.2030
938531	AE1-072 C O1	5.1803	Adder	6.09
938532	AE1-072 E O1	2.7005	Adder	3.18
938771	AE1-103 C O1	1.4730	Adder	1.73
938772	AE1-103 E O1	2.0341	Adder	2.39
940481	AE2-033 C	4.5821	Adder	5.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940482	AE2-033 E	3.0891	Adder	3.63
940491	AE2-034 C	6.2101	50/50	6.2101
940492	AE2-034 E	2.6615	50/50	2.6615
940571	AE2-044 C	1.7955	Adder	2.11
940572	AE2-044 E	0.7695	Adder	0.91
941101	AE2-104 C O1	0.9879	Adder	1.16
941102	AE2-104 E O1	1.5706	Adder	1.85
941501	AE2-147 C	6.5094	Adder	7.66
941502	AE2-147 E	4.3396	Adder	5.11
941541	AE2-151 C	1.0340	50/50	1.0340
941542	AE2-151 E	0.5567	50/50	0.5567
942131	AE2-225 C	0.6120	Adder	0.72
942132	AE2-225 E	0.4080	Adder	0.48
942171	AE2-229 C	0.6120	Adder	0.72
942172	AE2-229 E	0.4080	Adder	0.48
942471	AE2-260 C O1	5.8246	Adder	6.85
942472	AE2-260 E O1	8.2616	Adder	9.72
942851	AE2-304 C	0.2951	Adder	0.35
942852	AE2-304 E	0.1148	Adder	0.14
943171	AE2-346 C	1.2540	50/50	1.2540
943172	AE2-346 E	0.5374	50/50	0.5374
943611	AF1-032 C	0.4998	Adder	0.59
943612	AF1-032 E	0.2652	Adder	0.31
944141	AF1-082	1.1542	Adder	1.36
944871	AF1-152 C	2.1698	Adder	2.55
944872	AF1-152 E	1.4465	Adder	1.7
945711	AF1-236 C O1	67.9860	50/50	67.9860
945712	AF1-236 E O1	110.9246	50/50	110.9246
946011	AF1-266	3.8356	Adder	4.51
946281	AF1-292 C	0.5991	Adder	0.7
946282	AF1-292 E	0.4039	Adder	0.48
957491	AF2-043 C	0.3244	Adder	0.72
957492	AF2-043 E	0.2162	Adder	0.48
957521	AF2-046 C	12.4840	50/50	12.4840
957522	AF2-046 E	6.2795	50/50	6.2795
957531	AF2-047 C	14.7564	50/50	14.7564
957532	AF2-047 E	7.4226	50/50	7.4226
957791	AF2-073 C (Withdrawn : 07/02/2020)	2.3407	Adder	5.2
957792	AF2-073 E (Withdrawn : 07/02/2020)	1.4965	Adder	3.32
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.0403	Adder	2.31
957802	AF2-074 E (Withdrawn : 07/02/2020)	0.6651	Adder	1.48
957821	AF2-076 C O1	0.9148	Adder	2.03
957822	AF2-076 E O1	0.6099	Adder	1.35
957861	AF2-080 C	14.1664	50/50	14.1664
957862	AF2-080 E	6.2799	50/50	6.2799
957871	AF2-081 C O1	1.4922	Adder	3.31
957872	AF2-081 E O1	0.6395	Adder	1.42
958161	AF2-110 C	0.2159	Adder	0.48
958162	AF2-110 E	0.3376	Adder	0.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959231	AF2-214 C	2.0561	Adder	4.56
959232	AF2-214 E	3.0825	Adder	6.84
959511	AF2-242	14.1288	50/50	14.1288
959731	AF2-264 C	1.8484	50/50	1.8484
959732	AF2-264 E	0.9104	50/50	0.9104
960081	AF2-299 C	0.5351	Adder	1.19
960082	AF2-299 E	0.3568	Adder	0.79
960122	AF2-303 E O1	12.6277	50/50	12.6277
960331	AF2-324 C O1	8.2165	50/50	8.2165
960332	AF2-324 E O1	4.4113	50/50	4.4113
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4689	Adder	1.04
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1172	Adder	0.26
960831	AF2-374 C	1.0851	50/50	1.0851
960832	AF2-374 E	1.7703	50/50	1.7703
961091	AF2-400 C	0.1043	Adder	0.23
961092	AF2-400 E	0.1711	Adder	0.38
NEWTON	NEWTON	1.6397	Confirmed LTF	1.6397
FARMERCITY	FARMERCITY	0.0953	Confirmed LTF	0.0953
G-007A	G-007A	1.1724	Confirmed LTF	1.1724
VFT	VFT	3.1218	Confirmed LTF	3.1218
CALDERWOOD	CALDERWOOD	1.3494	Confirmed LTF	1.3494
PRAIRIE	PRAIRIE	4.4867	Confirmed LTF	4.4867
AC1-131	AC1-131	5.7225	LTF	5.7225
CHEOAH	CHEOAH	1.3844	Confirmed LTF	1.3844
EDWARDS	EDWARDS	0.4918	Confirmed LTF	0.4918
TILTON	TILTON	0.8662	Confirmed LTF	0.8662
GIBSON	GIBSON	0.7862	Confirmed LTF	0.7862
BLUEG	BLUEG	2.4113	Confirmed LTF	2.4113
TRIMBLE	TRIMBLE	0.7646	Confirmed LTF	0.7646
CATAWBA	CATAWBA	1.4574	Confirmed LTF	1.4574

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
97804375	314583	6LAKEVEW	DVP	314561	6CAROLNA	DVP	1	DVP_P4-2: 23872	breaker	459.0	161.77	164.23	DC	11.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	-0.9070	Adder	-1.07
314541	3WATKINS	-0.2911	Adder	-0.34
314572	3EMPORIA	0.0797	50/50	0.0797
314704	3LAWRENC	0.3224	50/50	0.3224
315131	1EDGE CMA (Deactivation : 22/04/2019)	8.8241	50/50	8.8241
315132	1EDGE CMB (Deactivation : 22/04/2019)	8.8241	50/50	8.8241
315136	1ROSEMG1	6.5873	50/50	6.5873
315137	1ROSEMS1	4.0848	50/50	4.0848
315138	1ROSEMG2	3.0873	50/50	3.0873
315139	1GASTONA	10.3679	50/50	10.3679
315141	1GASTONB	10.3679	50/50	10.3679
907092	X1-038 E	-2.2675	Adder	-2.67
917342	Z2-044 E	0.2211	Adder	0.26
917512	Z2-088 E OP1	1.4488	Adder	1.7
922922	AB1-081 C OP	6.6724	50/50	6.6724
922923	AB1-081 E OP	2.8596	50/50	2.8596
923262	AB1-132 C OP (Suspended)	45.8993	50/50	45.8993
923263	AB1-132 E OP (Suspended)	19.6711	50/50	19.6711
923801	AB2-015 C OP	-3.4718	Adder	-4.08
924151	AB2-059 C OP	1.3565	50/50	1.3565
924152	AB2-059 E OP	4.0511	50/50	4.0511
924511	AB2-100 C	5.1474	50/50	5.1474
924512	AB2-100 E	14.6979	50/50	14.6979
925172	AB2-174 E O1	3.5575	Adder	4.19
925591	AC1-034 C	5.0937	50/50	5.0937
925592	AC1-034 E	3.8426	50/50	3.8426
926071	AC1-086 C	67.5921	50/50	67.5921
926072	AC1-086 E	30.7634	50/50	30.7634
934331	AD1-057 C O1	20.0206	50/50	20.0206
934332	AD1-057 E O1	10.6798	50/50	10.6798
938173	AE1-026 BAT	11.6712	Merchant Transmission	11.6712
940481	AE2-033 C	38.5147	50/50	38.5147
940482	AE2-033 E	25.9650	50/50	25.9650
940571	AE2-044 C	3.3362	50/50	3.3362
940572	AE2-044 E	1.2153	Adder	1.43
942471	AE2-260 C O1	35.7893	50/50	35.7893
942472	AE2-260 E O1	50.7627	50/50	50.7627
943911	AF1-059	9.7112	Adder	11.42

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944141	AF1-082	1.8230	Adder	2.14
946011	AF1-266	32.2399	50/50	32.2399
946281	AF1-292 C	2.0749	50/50	2.0749
946282	AF1-292 E	1.3988	50/50	1.3988
959231	AF2-214 C	7.2086	50/50	7.2086
959232	AF2-214 E	10.8069	50/50	10.8069
960081	AF2-299 C	3.4970	50/50	3.4970
960082	AF2-299 E	2.3313	50/50	2.3313
960122	AF2-303 E O1	11.4105	50/50	11.4105
960331	AF2-324 C O1	7.4244	50/50	7.4244
960332	AF2-324 E O1	3.9861	50/50	3.9861
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.7992	Adder	1.77
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1998	Adder	0.44
WEC	WEC	0.1468	Confirmed LTF	0.1468
LGEE	LGEE	0.2750	Confirmed LTF	0.2750
CPL	CPL	1.6299	Confirmed LTF	1.6299
CBM-W2	CBM-W2	5.7985	Confirmed LTF	5.7985
NY	NY	0.1631	Confirmed LTF	0.1631
CBM-W1	CBM-W1	5.5044	Confirmed LTF	5.5044
TVA	TVA	1.2096	Confirmed LTF	1.2096
O-066	O-066	2.3587	Confirmed LTF	2.3587
CBM-S2	CBM-S2	10.4156	Confirmed LTF	10.4156
CBM-S1	CBM-S1	6.7564	Confirmed LTF	6.7564
G-007	G-007	0.3682	Confirmed LTF	0.3682
MADISON	MADISON	0.3306	Confirmed LTF	0.3306
MEC	MEC	0.8819	Confirmed LTF	0.8819

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
97457931	314596	3POPLR C	DVP	314573	3EVERETS	DVP	1	DVP_P4-2: 246T2034	breaker	349.0	160.59	161.28	DC	4.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	3.1666	50/50	3.1666
315294	1DOMTR10	23.7920	50/50	23.7920
315611	6Z1-036WIND	5.3348	50/50	5.3348
315614	AA2-178 C	2.1112	50/50	2.1112
901082	W1-029 E	13.8573	Adder	16.3
913392	Y1-086 E	0.7575	Adder	0.89
916042	Z1-036 E (Suspended)	35.7432	50/50	35.7432
917122	Z2-027 E	0.4142	Adder	0.49
920692	AA2-178 E	5.2454	50/50	5.2454
922922	AB1-081 C OP	-2.5214	Adder	-2.97
923831	AB2-022 C	0.7942	Adder	0.93
923832	AB2-022 E	0.4276	Adder	0.5
925121	AB2-169 C	0.8315	50/50	0.8315
925122	AB2-169 E	4.3260	50/50	4.3260
926211	AC1-099 C	-0.5791	Adder	-0.68
933991	AD1-023 C	20.7475	50/50	20.7475
933992	AD1-023 E	11.2949	50/50	11.2949
934521	AD1-076 C	85.6365	50/50	85.6365
934522	AD1-076 E	43.6060	50/50	43.6060
938531	AE1-072 C O1	4.3958	Adder	5.17
938532	AE1-072 E O1	2.2915	Adder	2.7
940491	AE2-034 C	9.1795	50/50	9.1795
940492	AE2-034 E	3.9341	50/50	3.9341
941501	AE2-147 C	6.8904	Adder	8.11
941502	AE2-147 E	4.5936	Adder	5.4
942851	AE2-304 C	0.4118	50/50	0.4118
942852	AE2-304 E	0.1602	50/50	0.1602
944142	AF1-082 BAT	0.9535	Merchant Transmission	0.9535
944871	AF1-152 C	2.2968	Adder	2.7
944872	AF1-152 E	1.5312	Adder	1.8
945711	AF1-236 C O1	100.4939	50/50	100.4939
945712	AF1-236 E O1	163.9637	50/50	163.9637
957531	AF2-047 C	21.8123	50/50	21.8123
957532	AF2-047 E	10.9717	50/50	10.9717
959233	AF2-214 BAT	4.2448	Merchant Transmission	4.2448
960123	AF2-303 BAT	2.3884	Merchant Transmission	2.3884
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	0.2778	Merchant Transmission	0.2778
NEWTON	NEWTON	0.5287	Confirmed LTF	0.5287
FARMERCITY	FARMERCITY	0.0307	Confirmed LTF	0.0307
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.3094	Confirmed LTF	1.3094

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CALDERWOOD	CALDERWOOD	0.4389	Confirmed LTF	0.4389
PRAIRIE	PRAIRIE	1.4491	Confirmed LTF	1.4491
CHEOAH	CHEOAH	0.4499	Confirmed LTF	0.4499
EDWARDS	EDWARDS	0.1582	Confirmed LTF	0.1582
TILTON	TILTON	0.2791	Confirmed LTF	0.2791
GIBSON	GIBSON	0.2539	Confirmed LTF	0.2539
BLUEG	BLUEG	0.7795	Confirmed LTF	0.7795
TRIMBLE	TRIMBLE	0.2471	Confirmed LTF	0.2471
CATAWBA	CATAWBA	0.4770	Confirmed LTF	0.4770

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
97804614	314599	6ROA VAL	DVP	314266	6NORTHAMPTON	DVP	1	DVP_P4-2: 238T2002	breaker	671.0	103.15	103.66	DC	7.48

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1077	50/50	0.1077
314704	3LAWRENC	0.3940	50/50	0.3940
315126	1ROARAP2	1.7251	50/50	1.7251
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315136	1ROSEMG1	4.2161	50/50	4.2161
315137	1ROSEMS1	2.6144	50/50	2.6144
315138	1ROSEMG2	1.9760	50/50	1.9760
315139	1GASTONA	6.6275	50/50	6.6275
315141	1GASTONB	6.6275	50/50	6.6275
315294	1DOMTR10	-5.1296	Adder	-6.03
315611	6Z1-036WIND	-2.2091	Adder	-2.6
917342	Z2-044 E	0.2911	Adder	0.34
918492	AA1-063AE OP	2.9372	Adder	3.46
919692	AA2-053 E OP	2.8284	Adder	3.33
919702	AA2-057 E OP	1.7334	Adder	2.04
920592	AA2-165 E	0.2382	Adder	0.28
920672	AA2-174 E OP	0.3268	Adder	0.38
922922	AB1-081 C OP	4.5320	Adder	5.33
922923	AB1-081 E OP	1.9423	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3404	50/50	29.3404
923263	AB1-132 E OP (Suspended)	12.5744	50/50	12.5744
923572	AB1-173 C OP	3.1248	50/50	3.1248
923573	AB1-173 E OP	1.4583	50/50	1.4583
923582	AB1-173AC OP	3.1248	50/50	3.1248
923583	AB1-173AE OP	1.4583	50/50	1.4583
923911	AB2-031 C O1	3.1017	50/50	3.1017
923912	AB2-031 E O1	1.5277	50/50	1.5277
923991	AB2-040 C O1	10.1847	50/50	10.1847
923992	AB2-040 E O1	8.3329	50/50	8.3329
924022	AB2-043 E O1	1.2769	Adder	1.5
924152	AB2-059 E OP	2.7516	Adder	3.24
924162	AB2-060 E OP	1.9081	Adder	2.24
924301	AB2-077 C O1 (Suspended)	0.8971	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5981	Adder	0.7

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	0.8971	Adder	1.06
924312	AB2-078 E O1 (Suspended)	0.5981	Adder	0.7
924321	AB2-079 C O1 (Suspended)	0.8971	Adder	1.06
924322	AB2-079 E O1 (Suspended)	0.5981	Adder	0.7
924511	AB2-100 C	3.6931	50/50	3.6931
924512	AB2-100 E	10.5452	50/50	10.5452
925171	AB2-174 C O1	1.7279	50/50	1.7279
925172	AB2-174 E O1	9.0630	50/50	9.0630
925591	AC1-034 C	3.4597	Adder	4.07
925592	AC1-034 E	2.6099	Adder	3.07
925611	AC1-036 C	0.3376	Adder	0.4
925612	AC1-036 E	0.5508	Adder	0.65
925781	AC1-054 C O1	4.7648	Adder	5.61
925782	AC1-054 E O1	2.1950	Adder	2.58
926071	AC1-086 C	43.2072	50/50	43.2072
926072	AC1-086 E	19.6650	50/50	19.6650
926201	AC1-098 C	1.9358	Adder	2.28
926202	AC1-098 E	1.1533	Adder	1.36
926211	AC1-099 C	0.6487	Adder	0.76
926212	AC1-099 E	0.3810	Adder	0.45
927141	AC1-208 C	5.1597	Adder	6.07
927142	AC1-208 E	2.2911	Adder	2.7
932631	AC2-084 C	2.7596	Adder	3.25
932632	AC2-084 E	1.3592	Adder	1.6
934331	AD1-057 C O1	12.9067	50/50	12.9067
934332	AD1-057 E O1	6.8850	50/50	6.8850
936261	AD2-033 C	4.8479	Adder	5.7
936262	AD2-033 E	3.2319	Adder	3.8
936361	AD2-046 C O1	4.6384	Adder	5.46
936362	AD2-046 E O1	2.1330	Adder	2.51
936481	AD2-063 C O1	6.2340	Adder	7.33
936482	AD2-063 E O1	4.1214	Adder	4.85
938173	AE1-026 BAT	15.6372	Merchant Transmission	15.6372
939181	AE1-148 C O1	4.5450	Adder	5.35
939182	AE1-148 E O1	3.0300	Adder	3.56
940241	AE2-006	0.1718	Adder	0.2
940481	AE2-033 C	28.1080	50/50	28.1080
940482	AE2-033 E	18.9492	50/50	18.9492
940571	AE2-044 C	2.2660	Adder	2.67
940572	AE2-044 E	0.9711	Adder	1.14
940661	AE2-053 O1	1.6833	Adder	1.98
942451	AE2-258	1.0653	Adder	1.25
942471	AE2-260 C O1	26.1191	50/50	26.1191
942472	AE2-260 E O1	37.0469	50/50	37.0469
943911	AF1-059	13.9527	Adder	16.41
944141	AF1-082	1.4567	Adder	1.71
946011	AF1-266	23.5286	50/50	23.5286
946281	AF1-292 C	2.2878	50/50	2.2878
946282	AF1-292 E	1.5424	50/50	1.5424

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959231	AF2-214 C	2.5950	Adder	5.76
959232	AF2-214 E	3.8903	Adder	8.64
959311	AF2-222 C	3.0332	Adder	6.73
959312	AF2-222 E	2.0323	Adder	4.51
960081	AF2-299 C	3.8559	50/50	3.8559
960082	AF2-299 E	2.5706	50/50	2.5706
960122	AF2-303 E O1	3.3703	Adder	7.48
960331	AF2-324 C O1	2.1929	Adder	4.87
960332	AF2-324 E O1	1.1774	Adder	2.61
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6749	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1687	Adder	0.37
960811	AF2-372 C	0.3003	Adder	0.67
960812	AF2-372 E	0.4901	Adder	1.09
WEC	WEC	0.1188	Confirmed LTF	0.1188
LGEE	LGEE	0.2248	Confirmed LTF	0.2248
CPL	CPL	1.1808	Confirmed LTF	1.1808
CBM-W2	CBM-W2	4.6355	Confirmed LTF	4.6355
NY	NY	0.1615	Confirmed LTF	0.1615
CBM-W1	CBM-W1	4.4411	Confirmed LTF	4.4411
TVA	TVA	0.9674	Confirmed LTF	0.9674
O-066	O-066	2.3117	Confirmed LTF	2.3117
CBM-S2	CBM-S2	7.9880	Confirmed LTF	7.9880
CBM-S1	CBM-S1	5.4102	Confirmed LTF	5.4102
G-007	G-007	0.3609	Confirmed LTF	0.3609
MADISON	MADISON	0.2540	Confirmed LTF	0.2540
MEC	MEC	0.7103	Confirmed LTF	0.7103

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
97457926	314614	3TRWBRDG2	DVP	314596	3POPLR C	DVP	1	DVP_P4-2: 246T2034	breaker	350.0	161.76	162.45	DC	4.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	3.1666	50/50	3.1666
315294	1DOMTR10	23.7920	50/50	23.7920
315611	6Z1-036WIND	5.3348	50/50	5.3348
315614	AA2-178 C	2.1112	50/50	2.1112
901082	W1-029 E	13.8573	Adder	16.3
913392	Y1-086 E	0.7575	Adder	0.89
916042	Z1-036 E (Suspended)	35.7432	50/50	35.7432
917122	Z2-027 E	0.4142	Adder	0.49
920692	AA2-178 E	5.2454	50/50	5.2454
922922	AB1-081 C OP	-2.5214	Adder	-2.97
923831	AB2-022 C	0.7942	Adder	0.93
923832	AB2-022 E	0.4276	Adder	0.5
925121	AB2-169 C	0.8315	50/50	0.8315
925122	AB2-169 E	4.3260	50/50	4.3260
926211	AC1-099 C	-0.5791	Adder	-0.68
933991	AD1-023 C	20.7475	50/50	20.7475
933992	AD1-023 E	11.2949	50/50	11.2949
934521	AD1-076 C	85.6365	50/50	85.6365
934522	AD1-076 E	43.6060	50/50	43.6060
938531	AE1-072 C O1	4.3958	Adder	5.17
938532	AE1-072 E O1	2.2915	Adder	2.7
940491	AE2-034 C	9.1795	50/50	9.1795
940492	AE2-034 E	3.9341	50/50	3.9341
941501	AE2-147 C	6.8904	Adder	8.11
941502	AE2-147 E	4.5936	Adder	5.4
942851	AE2-304 C	0.4118	50/50	0.4118
942852	AE2-304 E	0.1602	50/50	0.1602
944142	AF1-082 BAT	0.9535	Merchant Transmission	0.9535
944871	AF1-152 C	2.2968	Adder	2.7
944872	AF1-152 E	1.5312	Adder	1.8
945711	AF1-236 C O1	100.4939	50/50	100.4939
945712	AF1-236 E O1	163.9637	50/50	163.9637
957531	AF2-047 C	21.8123	50/50	21.8123
957532	AF2-047 E	10.9717	50/50	10.9717
959233	AF2-214 BAT	4.2448	Merchant Transmission	4.2448
960123	AF2-303 BAT	2.3884	Merchant Transmission	2.3884
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	0.2778	Merchant Transmission	0.2778
NEWTON	NEWTON	0.5287	Confirmed LTF	0.5287
FARMERCITY	FARMERCITY	0.0307	Confirmed LTF	0.0307
G-007A	G-007A	0.4891	Confirmed LTF	0.4891
VFT	VFT	1.3094	Confirmed LTF	1.3094

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CALDERWOOD	CALDERWOOD	0.4389	Confirmed LTF	0.4389
PRAIRIE	PRAIRIE	1.4491	Confirmed LTF	1.4491
CHEOAH	CHEOAH	0.4499	Confirmed LTF	0.4499
EDWARDS	EDWARDS	0.1582	Confirmed LTF	0.1582
TILTON	TILTON	0.2791	Confirmed LTF	0.2791
GIBSON	GIBSON	0.2539	Confirmed LTF	0.2539
BLUEG	BLUEG	0.7795	Confirmed LTF	0.7795
TRIMBLE	TRIMBLE	0.2471	Confirmed LTF	0.2471
CATAWBA	CATAWBA	0.4770	Confirmed LTF	0.4770

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
97804604	936400	AD2-051 TAP	DVP	314569	6EARLEYS	DVP	1	DVP_P4-2: 238T2002	breaker	699.0	106.66	107.14	DC	7.48

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1077	50/50	0.1077
314704	3LAWRENC	0.3940	50/50	0.3940
315126	1ROARAP2	1.7251	50/50	1.7251
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.9177	Adder	5.79
315136	1ROSEMG1	4.2161	50/50	4.2161
315137	1ROSEMS1	2.6144	50/50	2.6144
315138	1ROSEMG2	1.9760	50/50	1.9760
315139	1GASTONA	6.6275	50/50	6.6275
315141	1GASTONB	6.6275	50/50	6.6275
315294	1DOMTR10	-5.1296	Adder	-6.03
917342	Z2-044 E	0.2911	Adder	0.34
918492	AA1-063AE OP	2.9372	Adder	3.46
919692	AA2-053 E OP	2.8284	Adder	3.33
919702	AA2-057 E OP	1.7334	Adder	2.04
920592	AA2-165 E	0.2382	Adder	0.28
920672	AA2-174 E OP	0.3268	Adder	0.38
922922	AB1-081 C OP	4.5320	Adder	5.33
922923	AB1-081 E OP	1.9423	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3404	50/50	29.3404
923263	AB1-132 E OP (Suspended)	12.5744	50/50	12.5744
923572	AB1-173 C OP	3.1248	50/50	3.1248
923573	AB1-173 E OP	1.4583	50/50	1.4583
923582	AB1-173AC OP	3.1248	50/50	3.1248
923583	AB1-173AE OP	1.4583	50/50	1.4583
923911	AB2-031 C O1	3.1017	50/50	3.1017
923912	AB2-031 E O1	1.5277	50/50	1.5277
923991	AB2-040 C O1	10.1847	50/50	10.1847
923992	AB2-040 E O1	8.3329	50/50	8.3329
924022	AB2-043 E O1	1.2769	Adder	1.5
924152	AB2-059 E OP	2.7516	Adder	3.24
924162	AB2-060 E OP	1.9081	Adder	2.24
924301	AB2-077 C O1 (Suspended)	0.8971	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5981	Adder	0.7
924311	AB2-078 C O1 (Suspended)	0.8971	Adder	1.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924312	AB2-078 E O1 (Suspended)	0.5981	Adder	0.7
924321	AB2-079 C O1 (Suspended)	0.8971	Adder	1.06
924322	AB2-079 E O1 (Suspended)	0.5981	Adder	0.7
924511	AB2-100 C	3.6931	50/50	3.6931
924512	AB2-100 E	10.5452	50/50	10.5452
925171	AB2-174 C O1	1.7279	50/50	1.7279
925172	AB2-174 E O1	9.0630	50/50	9.0630
925591	AC1-034 C	3.4597	Adder	4.07
925592	AC1-034 E	2.6099	Adder	3.07
925611	AC1-036 C	0.3376	Adder	0.4
925612	AC1-036 E	0.5508	Adder	0.65
925781	AC1-054 C O1	4.7648	Adder	5.61
925782	AC1-054 E O1	2.1950	Adder	2.58
926071	AC1-086 C	43.2072	50/50	43.2072
926072	AC1-086 E	19.6650	50/50	19.6650
927141	AC1-208 C	5.1597	Adder	6.07
927142	AC1-208 E	2.2911	Adder	2.7
934331	AD1-057 C O1	12.9067	50/50	12.9067
934332	AD1-057 E O1	6.8850	50/50	6.8850
936261	AD2-033 C	4.8479	Adder	5.7
936262	AD2-033 E	3.2319	Adder	3.8
936361	AD2-046 C O1	4.6384	Adder	5.46
936362	AD2-046 E O1	2.1330	Adder	2.51
936401	AD2-051 C O1	43.0702	50/50	43.0702
936402	AD2-051 E O1	18.4939	50/50	18.4939
936481	AD2-063 C O1	6.2340	Adder	7.33
936482	AD2-063 E O1	4.1214	Adder	4.85
938173	AE1-026 BAT	15.6372	Merchant Transmission	15.6372
939181	AE1-148 C O1	4.5450	Adder	5.35
939182	AE1-148 E O1	3.0300	Adder	3.56
940241	AE2-006	0.1718	Adder	0.2
940481	AE2-033 C	28.1080	50/50	28.1080
940482	AE2-033 E	18.9492	50/50	18.9492
940571	AE2-044 C	2.2660	Adder	2.67
940572	AE2-044 E	0.9711	Adder	1.14
940661	AE2-053 O1	1.6833	Adder	1.98
942451	AE2-258	1.0653	Adder	1.25
942471	AE2-260 C O1	26.1191	50/50	26.1191
942472	AE2-260 E O1	37.0469	50/50	37.0469
943911	AF1-059	13.9527	Adder	16.41
944141	AF1-082	1.4567	Adder	1.71
946011	AF1-266	23.5286	50/50	23.5286
946281	AF1-292 C	2.2878	50/50	2.2878
946282	AF1-292 E	1.5424	50/50	1.5424
959231	AF2-214 C	2.5950	Adder	5.76
959232	AF2-214 E	3.8903	Adder	8.64
959311	AF2-222 C	3.0332	Adder	6.73
959312	AF2-222 E	2.0323	Adder	4.51
960081	AF2-299 C	3.8559	50/50	3.8559
960082	AF2-299 E	2.5706	50/50	2.5706

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960122	AF2-303 E O1	3.3703	Adder	7.48
960331	AF2-324 C O1	2.1929	Adder	4.87
960332	AF2-324 E O1	1.1774	Adder	2.61
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6749	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1687	Adder	0.37
960811	AF2-372 C	0.3003	Adder	0.67
960812	AF2-372 E	0.4901	Adder	1.09
WEC	WEC	0.1188	Confirmed LTF	0.1188
LGEE	LGEE	0.2248	Confirmed LTF	0.2248
CPL	CPL	1.1808	Confirmed LTF	1.1808
CBM-W2	CBM-W2	4.6355	Confirmed LTF	4.6355
NY	NY	0.1615	Confirmed LTF	0.1615
CBM-W1	CBM-W1	4.4411	Confirmed LTF	4.4411
TVA	TVA	0.9674	Confirmed LTF	0.9674
O-066	O-066	2.3117	Confirmed LTF	2.3117
CBM-S2	CBM-S2	7.9880	Confirmed LTF	7.9880
CBM-S1	CBM-S1	5.4102	Confirmed LTF	5.4102
G-007	G-007	0.3609	Confirmed LTF	0.3609
MADISON	MADISON	0.2540	Confirmed LTF	0.2540
MEC	MEC	0.7103	Confirmed LTF	0.7103

11.6.15 Index 15

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98578871	940480	AE2-033 TAP	DVP	314435	6SAPONY	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	133.15	134.09	DC	17.39

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	1.1800	Adder	1.39
314541	3WATKINS	0.4059	Adder	0.48
314572	3EMPORIA	0.1781	50/50	0.1781
314704	3LAWRENC	0.6562	50/50	0.6562
315126	1ROARAP2	2.3517	50/50	2.3517
315131	1EDGECEMA (Deactivation : 22/04/2019)	11.4287	Adder	13.45
315132	1EDGECEMB (Deactivation : 22/04/2019)	11.4287	Adder	13.45
315136	1ROSEMG1	4.4470	50/50	4.4470
315137	1ROSEMS1	2.7576	50/50	2.7576
315138	1ROSEMG2	2.0842	50/50	2.0842
315139	1GASTONA	6.6590	50/50	6.6590
315141	1GASTONB	6.6590	50/50	6.6590
315294	1DOMTR10	6.4730	Adder	7.62
900672	V4-068 E	0.2567	Adder	0.3
907092	X1-038 E	2.9500	Adder	3.47
917332	Z2-043 E	1.0904	Adder	1.28
917342	Z2-044 E	0.5705	Adder	0.67
917512	Z2-088 E OP1	3.8340	Adder	4.51
918492	AA1-063AE OP	4.7118	Adder	5.54
918512	AA1-065 E OP	3.1865	Adder	3.75
918532	AA1-067 E	0.5486	Adder	0.65
919692	AA2-053 E OP	4.8480	Adder	5.7
919702	AA2-057 E OP	3.5108	Adder	4.13
920042	AA2-088 E OP	8.5732	Adder	10.09
920592	AA2-165 E	0.4825	Adder	0.57
920672	AA2-174 E OP	0.5602	Adder	0.66
922922	AB1-081 C OP	8.7046	Adder	10.24
922923	AB1-081 E OP	3.7305	Adder	4.39
923262	AB1-132 C OP (Suspended)	29.4798	50/50	29.4798
923263	AB1-132 E OP (Suspended)	12.6342	50/50	12.6342
923572	AB1-173 C OP	4.8865	50/50	4.8865
923573	AB1-173 E OP	2.2803	50/50	2.2803
923582	AB1-173AC OP	4.8865	50/50	4.8865
923583	AB1-173AE OP	2.2803	50/50	2.2803
923801	AB2-015 C OP	4.7154	Adder	5.55
923802	AB2-015 E OP	3.8666	Adder	4.55
923911	AB2-031 C O1	4.8503	50/50	4.8503

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923912	AB2-031 E O1	2.3889	50/50	2.3889
923991	AB2-040 C O1	15.9262	50/50	15.9262
923992	AB2-040 E O1	13.0306	50/50	13.0306
924022	AB2-043 E O1	1.9475	Adder	2.29
924152	AB2-059 E OP	5.2849	Adder	6.22
924162	AB2-060 E OP	2.9089	Adder	3.42
924301	AB2-077 C O1 (Suspended)	1.3639	Adder	1.6
924302	AB2-077 E O1 (Suspended)	0.9093	Adder	1.07
924311	AB2-078 C O1 (Suspended)	1.3639	Adder	1.6
924312	AB2-078 E O1 (Suspended)	0.9093	Adder	1.07
924321	AB2-079 C O1 (Suspended)	1.3639	Adder	1.6
924322	AB2-079 E O1 (Suspended)	0.9093	Adder	1.07
924501	AB2-099 C (Suspended)	0.5127	Adder	0.6
924502	AB2-099 E (Suspended)	0.2197	Adder	0.26
924511	AB2-100 C	6.2132	50/50	6.2132
924512	AB2-100 E	17.7411	50/50	17.7411
925122	AB2-169 E	3.7423	Adder	4.4
925171	AB2-174 C O1	2.7644	50/50	2.7644
925172	AB2-174 E O1	14.4997	50/50	14.4997
925591	AC1-034 C	6.6450	Adder	7.82
925592	AC1-034 E	5.0129	Adder	5.9
925611	AC1-036 C	0.5114	Adder	0.6
925612	AC1-036 E	0.8344	Adder	0.98
925781	AC1-054 C O1	6.7381	Adder	7.93
925782	AC1-054 E O1	3.1041	Adder	3.65
926071	AC1-086 C	43.4125	50/50	43.4125
926072	AC1-086 E	19.7585	50/50	19.7585
926201	AC1-098 C	6.4358	Adder	7.57
926202	AC1-098 E	3.8341	Adder	4.51
926211	AC1-099 C	2.1567	Adder	2.54
926212	AC1-099 E	1.2666	Adder	1.49
927021	AC1-189 C	7.8724	Adder	9.26
927022	AC1-189 E	3.9215	Adder	4.61
927141	AC1-208 C	10.1488	Adder	11.94
927142	AC1-208 E	4.5065	Adder	5.3
932631	AC2-084 C	9.1744	Adder	10.79
932632	AC2-084 E	4.5187	Adder	5.32
933991	AD1-023 C	8.0608	Adder	9.48
933992	AD1-023 E	4.3883	Adder	5.16
934331	AD1-057 C O1	17.4625	50/50	17.4625
934332	AD1-057 E O1	9.3152	50/50	9.3152
934521	AD1-076 C	29.9773	Adder	35.27
934522	AD1-076 E	15.2644	Adder	17.96
936261	AD2-033 C	7.3540	Adder	8.65
936262	AD2-033 E	4.9027	Adder	5.77
936361	AD2-046 C O1	6.7643	Adder	7.96
936362	AD2-046 E O1	3.1106	Adder	3.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936401	AD2-051 C O1	7.1905	Adder	8.46
936402	AD2-051 E O1	3.0875	Adder	3.63
936481	AD2-063 C O1	9.4860	Adder	11.16
936482	AD2-063 E O1	6.2713	Adder	7.38
938171	AE1-026 C O1	20.8241	Adder	24.5
938172	AE1-026 E O1	5.4939	Adder	6.46
938221	AE1-035 C	1.7791	Adder	2.09
938222	AE1-035 E	0.8763	Adder	1.03
938771	AE1-103 C O1	1.7700	Adder	2.08
938772	AE1-103 E O1	2.4443	Adder	2.88
939181	AE1-148 C O1	6.6422	Adder	7.81
939182	AE1-148 E O1	4.4281	Adder	5.21
940241	AE2-006	0.2602	Adder	0.31
940481	AE2-033 C	64.4066	50/50	64.4066
940482	AE2-033 E	43.4202	50/50	43.4202
940571	AE2-044 C	4.3523	Adder	5.12
940572	AE2-044 E	1.8653	Adder	2.19
940661	AE2-053 O1	2.4601	Adder	2.89
941541	AE2-151 C	0.9553	Adder	1.12
941542	AE2-151 E	0.5144	Adder	0.61
942451	AE2-258	1.6248	Adder	1.91
942471	AE2-260 C O1	46.3897	50/50	46.3897
942472	AE2-260 E O1	65.7983	50/50	65.7983
943171	AE2-346 C	1.2305	Adder	1.45
943172	AE2-346 E	0.5274	Adder	0.62
943911	AF1-059	22.8480	Adder	26.88
944141	AF1-082	2.7979	Adder	3.29
946011	AF1-266	53.9134	50/50	53.9134
946281	AF1-292 C	3.8562	50/50	3.8562
946282	AF1-292 E	2.5997	50/50	2.5997
957521	AF2-046 C	7.6850	Adder	17.06
957522	AF2-046 E	3.8656	Adder	8.58
957861	AF2-080 C	3.7895	Adder	8.41
957862	AF2-080 E	1.6799	Adder	3.73
959231	AF2-214 C	4.9842	Adder	11.06
959232	AF2-214 E	7.4721	Adder	16.59
959311	AF2-222 C	4.5897	Adder	10.19
959312	AF2-222 E	3.0751	Adder	6.83
959511	AF2-242	2.8602	Adder	6.35
959731	AF2-264 C	1.0364	Adder	2.3
959732	AF2-264 E	0.5105	Adder	1.13
960081	AF2-299 C	6.4992	50/50	6.4992
960082	AF2-299 E	4.3328	50/50	4.3328
960122	AF2-303 E O1	7.8326	Adder	17.39
960331	AF2-324 C O1	5.0964	Adder	11.31
960332	AF2-324 E O1	2.7362	Adder	6.07
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.2763	Adder	2.83
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.3191	Adder	0.71
960811	AF2-372 C	0.4566	Adder	1.01
960812	AF2-372 E	0.7452	Adder	1.65
960831	AF2-374 C	0.6838	Adder	1.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960832	AF2-374 E	1.1157	Adder	2.48
961091	AF2-400 C	0.1350	Adder	0.3
961092	AF2-400 E	0.2214	Adder	0.49
WEC	WEC	0.2000	Confirmed LTF	0.2000
LGEE	LGEE	0.3782	Confirmed LTF	0.3782
CPL	CPL	2.4542	Confirmed LTF	2.4542
CBM-W2	CBM-W2	8.0999	Confirmed LTF	8.0999
NY	NY	0.2992	Confirmed LTF	0.2992
CBM-W1	CBM-W1	7.4560	Confirmed LTF	7.4560
TVA	TVA	1.7052	Confirmed LTF	1.7052
O-066	O-066	4.2202	Confirmed LTF	4.2202
CBM-S2	CBM-S2	15.0916	Confirmed LTF	15.0916
CBM-S1	CBM-S1	9.4998	Confirmed LTF	9.4998
G-007	G-007	0.6594	Confirmed LTF	0.6594
MADISON	MADISON	0.4818	Confirmed LTF	0.4818
MEC	MEC	1.2156	Confirmed LTF	1.2156
AA2-074	AA2-074	1.6722	LTF	1.6722

11.7 Queue Dependencies

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

Queue Number	Project Name	Status
AA1-063	Huntsville (Cabin Creek) 69kV	Withdrawn
AA1-063A	Carolina–Seaboard 115kV	In Service
AA1-065	Earleys 230kV	In Service
AA1-067	Everetts 34.5kV	In Service
AA1-139	Hickory-Shawboro 230kV	In Service
AA2-053	Carolina-Jackson 115kV	In Service
AA2-057	Hornertown-Whitakers 115kV	In Service
AA2-074	CPL- PJM	Confirmed
AA2-088	Boykins-Handsome 115kV	In Service
AA2-165	Hornertown-Whitakers 115kV	In Service
AA2-174	Carolina-Jackson 115kV	In Service
AA2-178	Mackeys 230kV	Under Construction
AB1-081	Anaconda-Mayo Dunbar 115kV	Under Construction
AB1-132	Thelma 230kV	Suspended
AB1-173	Brink-Trego 115kV	Engineering and Procurement
AB1-173A	Brink-Trego 115kV	Engineering and Procurement
AB2-015	Franklin 115kV	Engineering and Procurement
AB2-022	Elizabeth City 34.5kV	Engineering and Procurement
AB2-025	Sapony 34.5kV	In Service
AB2-031	Brink-Trego 115kV	Engineering and Procurement
AB2-040	Brink 115kV	Engineering and Procurement
AB2-043	Chase City 115kV	Under Construction
AB2-059	Benson-Dunbar 115kV	Under Construction
AB2-060	Chase City-Lunenburg 115kV	Under Construction
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
AB2-161	Waverly #2 DP 115kV	Suspended
AB2-169	Pantago-Five Points 115kV	Partially in Service - Under Construction
AB2-174	Emporia-Trego 115kV	Under Construction
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Active
AC1-036	Twittys Creek 34.5kV	Engineering and Procurement
AC1-054	Kerr Dam–Eatons Ferry 115 kV	Engineering and Procurement
AC1-083	Smith Mountain-Bearskin 138kV	Active
AC1-086	Thelma 230kV	Active
AC1-098	Dawson-South Justice 115kV	Engineering and Procurement
AC1-099	Dawson-South Justice 115kV	Engineering and Procurement

Queue Number	Project Name	Status
AC1-105	Halifax-Mt. Laurel 115kV	Suspended
AC1-131	PJM-CPLE	Confirmed
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-208	Cox-Whitakers 115kV	Engineering and Procurement
AC1-221	Halifax-Person 230kV	Engineering and Procurement
AC1-222	Crystal Hill-Halifax 115kV	Engineering and Procurement
AC2-078	Disputanta-Waverly 115kV	Active
AC2-079	Ivor-Oakridge 115kV	Active
AC2-084	Dawson-South Justice 115kV	Active
AC2-100	Halifax-Person 230kV	Active
AD1-017	Smith Mountain-Bearskin 138 kV	Active
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-055	Crystal Hill-Halifax 115 kV	Engineering and Procurement
AD1-057	Hornertown-Hathaway 230 kV	Active
AD1-058	Halifax-Person 230 kV	Engineering and Procurement
AD1-076	Trowbridge 230 kV	Active
AD1-082	Bakers Pond-Ivor 115kV	Active
AD1-087	Clover-Sedge Hill 230 kV	Active
AD1-131	Sedge Hill-Person 230 kV	Active
AD1-152	Clover-Sedge Hill 230 kV	Active
AD2-022	East Danville-Roxborough 230 kV	Active
AD2-023	E. Danville-Roxborough 230 kV	Active
AD2-033	Chase City-Lunenburg 115 kV	Active
AD2-046	Boydton DP-Kerr Dam 115 kV	Active
AD2-051	Earleys – Northampton 230kV	Active
AD2-063	Central-Chase City 115kV	Active
AD2-085	Myrtle-Windsor DP 115kV	Active
AD2-202	Clover-Sedge Hill 230kV	Active
AE1-026	Cashie 230 kV	Active
AE1-035	Earleys 230 kV	Engineering and Procurement
AE1-072	Shawboro-Sligo 230 kV	Active
AE1-085	Bakers Pond-Bell Ave 115 kV	Active
AE1-103	Holland-Union Camp 115 kV	Active
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE1-149	Disputanta-Poe 115 kV	Active
AE1-176	Roanoke-Vinton 12 kV (Niagara Hydro)	In Service
AE1-250	Smith Mountain-E. Danville 138 kV	Active
AE2-000B	N/A	N/A
AE2-006	Twittys Creek 34.5 kV	Engineering and Procurement
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-034	Mackeys 230 kV	Active
AE2-040	Sapony 34.5 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-052	Disputanta-Poe 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-104	Suffolk 115 kV	Active
AE2-147	Swamp 230 kV	Active
AE2-150	Bakers Pond-Bell Ave 115 kV	Active
AE2-151	Earleys 34.5kV	Engineering and Procurement
AE2-225	Suffolk 34 kV	Engineering and Procurement
AE2-229	Suffolk 34 kV	Engineering and Procurement
AE2-247	Myrtle-Windsor 115 kV	Active

Queue Number	Project Name	Status
AE2-258	Chase City 115 kV	Active
AE2-260	Clubhouse 230 kV	Active
AE2-304	South Hertford 34 kV	Engineering and Procurement
AE2-346	Ahoskie 34.5 kV	Active
AF1-017	Myrtle-Windsor 115 kV	Active
AF1-032	Suffolk 34.5 kV	Engineering and Procurement
AF1-058	Welco 34.5 kV	Engineering and Procurement
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-152	Swamp 230 kV	Active
AF1-236	Mackeys 230 kV	Active
AF1-246	Clover-Rawlings 500 kV	Active
AF1-266	Clubhouse-Sapony 230 kV	Active
AF1-292	Fields Crossroads 34.5 kV	Active
AF2-042	Clover 500 kV	Active
AF2-043	Suffolk 34.5 kV	Active
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-047	Creswell-Riders Creek 115 kV	Active
AF2-073	Nucor Steel-Suffolk 230 kV	Withdrawn
AF2-074	Nucor Steel-Suffolk 230 kV	Withdrawn
AF2-076	Suffolk-Nucor Steel 230 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-081	Moyock 230 kV	Active
AF2-108	Locks 34.5 kV	Active
AF2-110	Suffolk 115 kV	Active
AF2-214	Heartsease DP-Anaconda 115 kV	Active
AF2-222	Madisonville DP-Twitty's Creek 115 kV	Active
AF2-242	Wharton 115 kV	Active
AF2-264	Tunis 34.5 kV	Active
AF2-266	Clover 230 kV	Active
AF2-297	Sedge Hill 115 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-303	Edgecombe 230 kV	Active
AF2-324	Edgecombe 230 kV	Active
AF2-326	Battleboro 34.5kV	Withdrawn
AF2-327	Wakefield 13 kV	Withdrawn
AF2-372	Black Branch 34.5 kV	Active
AF2-373	Mount Laurel 115 kV	Active
AF2-374	Woodland 34.5 kV	Active
AF2-400	Franklin 13.2 kV	Active
AF2-402	Ivor-Oak Ridge 115 kV	Active
V4-068	Murphy's 34.5kV	In Service
W1-029	Winfall 230kV	In Service
X1-038	Union Camp 115kV	In Service
Y1-086	Morgans Corner	In Service
Z1-036	WinFall-Chowan 230kV	Suspended
Z2-027	Pasquotank 34.5kV	In Service
Z2-043	Kelford 34.5kV	In Service
Z2-044	Whitakers 34.5kV	In Service
Z2-088	Tarboro-Everetts 230kV	In Service

11.8 Contingency Descriptions - Primary POI

Contingency Name	Contingency Definition
DVP_P4-2: 2012T2014	CONTINGENCY 'DVP_P4-2: 2012T2014' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 313857 TO BUS 314569 CKT 1 /* 6WINDSORDP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 313857 TO BUS 314574 CKT 1 /* 6WINDSORDP 230.00 - 6EVERETS 230.00 OPEN BUS 313857 /* ISLAND: 6WINDSORDP 230.00 OPEN BUS 314552 /* ISLAND: 3WINDSORDP 115.00 END
DVP_P4-2: 218T2160	CONTINGENCY 'DVP_P4-2: 218T2160' /* EVERETTS 230 KV OPEN BRANCH FROM BUS 304451 TO BUS 314574 CKT 1 /* 6GREENVILE T230.00 - 6EVERETS 230.00 OPEN BRANCH FROM BUS 927020 TO BUS 314574 CKT 1 /* AC1-189 TAP 230.00 - 6EVERETS 230.00 END
DVP_P1-2: LN 246	CONTINGENCY 'DVP_P1-2: LN 246' OPEN BRANCH FROM BUS 957790 TO BUS 314575 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 END
DVP_P7-1: LN 56-2012-B	CONTINGENCY 'DVP_P7-1: LN 56-2012-B' /* . OPEN BRANCH FROM BUS 313723 TO BUS 314604 CKT 1 /* 3PECAN 115.00 - 3SEABORD 115.00 OPEN BRANCH FROM BUS 314558 TO BUS 314587 CKT 1 /* 3BOYKINS 115.00 - 3MARGTSV 115.00 OPEN BRANCH FROM BUS 314587 TO BUS 314604 CKT 1 /* 3MARGTSV 115.00 - 3SEABORD 115.00 OPEN BUS 314587 /* ISLAND: 3MARGTSV 115.00 OPEN BUS 314604 /* ISLAND: 3SEABORD 115.00 OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP - 6EARLEYS 230.00 END

Contingency Name	Contingency Definition
DVP_P7-1: LN 2058-2181	CONTINGENCY 'DVP_P7-1: LN 2058-2181' /* . OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END
DVP_P4-2: 246T2034	CONTINGENCY 'DVP_P4-2: 246T2034' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314620 CKT 1 /* 6EARLEYS 230.00 - 6CASHIE 230.00 OPEN BRANCH FROM BUS 933990 TO BUS 314620 CKT 1 /* AD1-023 TAP 230.00 - 6CASHIE 230.00 OPEN BUS 314620 /* ISLAND: 6CASHIE 230.00 END
DVP_P4-2: 201262	CONTINGENCY 'DVP_P4-2: 201262' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END
DVP_P1-2: LN 2181	CONTINGENCY 'DVP_P1-2: LN 2181' OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END
DVP_P1-2: LN 238-B	CONTINGENCY 'DVP_P1-2: LN 238-B' OPEN BRANCH FROM BUS 940480 TO BUS 314563 CKT 1 /* AE2-033 TAP 230.00 - 6CLUBHSE 230.00 OPEN BRANCH FROM BUS 314562 TO BUS 314563 CKT 1 /* 3CLUBHSE 115.00 - 6CLUBHSE 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 238-A	CONTINGENCY 'DVP_P1-2: LN 238-A' OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2-033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 END
DVP_P1-2: LN 2056-A	CONTINGENCY 'DVP_P1-2: LN 2056-A' OPEN BRANCH FROM BUS 313845 TO BUS 934330 CKT 1 /* 6HATHAWAY 230.00 - AD1-057 TAP 230.00 END
AEP_P4_#11111_05J.FERR 765_B1	CONTINGENCY 'AEP_P4_#11111_05J.FERR 765_B1' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242514 TO BUS 242684 CKT 2 / 242514 05J.FERR 765 242684 05J.FERR 138 2 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
DVP_P1-2: LN 218	CONTINGENCY 'DVP_P1-2: LN 218' OPEN BRANCH FROM BUS 304451 TO BUS 314574 CKT 1 /* 6GREENVILE T230.00 - 6EVERETS 230.00 END
DVP_P4-2: 23872	CONTINGENCY 'DVP_P4-2: 23872' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2-033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314902 CKT 1 /* 6CARSON 230.00 - 8CARSON 500.00 OPEN BUS 314455 /* 6CARSO_1 230.00 KV END

Contingency Name	Contingency Definition
DVP_P4-2: 2020T2144	CONTINGENCY 'DVP_P4-2: 2020T2144' /* WINFALL 230 KV OPEN BRANCH FROM BUS 313851 TO BUS 314638 CKT 1 /* 6ECITYDP2 230.00 - 6ELIZ CT 230.00 OPEN BRANCH FROM BUS 313851 TO BUS 314639 CKT 1 /* 6ECITYDP2 230.00 - 6TANGLEW 230.00 OPEN BRANCH FROM BUS 314639 TO BUS 314651 CKT 1 /* 6TANGLEW 230.00 - 6WINFALL 230.00 OPEN BUS 313851 /* ISLAND: 6ECITYDP2 230.00 OPEN BUS 314639 /* ISLAND: 6TANGLEW 230.00 OPEN BUS 917122 /* ISLAND: Z2-027 E 230.00 OPEN BRANCH FROM BUS 313713 TO BUS 314651 CKT 1 /* 6SWAMP 230.00 - 6WINFALL 230.00 END
AEP_P1-2_#1377	CONTINGENCY 'AEP_P1-2_#1377' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
Base Case	
DVP_P4-2: 254T2141	CONTINGENCY 'DVP_P4-2: 254T2141' /* LAKEVIEW 230 KV OPEN BRANCH FROM BUS 314583 TO BUS 924510 CKT 1 /* 6LAKEVEW 230.00 - AB2- 100 TAP 230.00 OPEN BRANCH FROM BUS 314561 TO BUS 314583 CKT 1 /* 6CAROLNA 230.00 - 6LAKEVEW 230.00 END
314435 6SAPONY 230 940480 AE2-033 TAP 230 1	CONTINGENCY '314435 6SAPONY 230 940480 AE2-033 TAP 230 1' OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 END
DVP_P1-2: LN 2058	CONTINGENCY 'DVP_P1-2: LN 2058' OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 END
DVP_P1-2: LN 2092	CONTINGENCY 'DVP_P1-2: LN 2092' OPEN BRANCH FROM BUS 313714 TO BUS 314662 CKT 1 /* 6PERQUIMANS 230.00 - 6S HERTFORD 230.00 OPEN BRANCH FROM BUS 314651 TO BUS 314662 CKT 1 /* 6WINFALL 230.00 - 6S HERTFORD 230.00 OPEN BUS 314662 /* ISLAND: 6S HERTFORD 230.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2012-B	CONTINGENCY 'DVP_P1-2: LN 2012-B' OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP230.00 - 6EARLEYS 230.00 END
DVP_P4-2: 24972-4	CONTINGENCY 'DVP_P4-2: 24972-4' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314285 CKT 1 /* 6CARSON 230.00 - 6CHRL249 230.00 OPEN BRANCH FROM BUS 314285 TO BUS 314316 CKT 1 /* 6CHRL249 230.00 - 6LOCKS 230.00 OPEN BRANCH FROM BUS 314314 TO BUS 314316 CKT 2 /* 3LOCKS 115.00 - 6LOCKS 230.00 OPEN BUS 314285 /* ISLAND: 6CHRL249 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314902 CKT 1 /* 6CARSON 230.00 - 8CARSON 500.00 OPEN BUS 314455 /* 6CARSO_1 230.00 KV END
DVP_P4-2: 238T2002	CONTINGENCY 'DVP_P4-2: 238T2002' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2-033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314331 CKT 1 /* 6CARSON 230.00 - 6POE 230.00 OPEN BRANCH FROM BUS 314329 TO BUS 314331 CKT 1 /* 3POE 115.00 - 6POE 230.00 END
AEP_P4_#11112_05J.FERR 765_A1	CONTINGENCY 'AEP_P4_#11112_05J.FERR 765_A1' OPEN BRANCH FROM BUS 242511 TO BUS 242514 CKT 1 / 242511 05BROADF 765 242514 05J.FERR 765 1 OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 OPEN BRANCH FROM BUS 242566 TO BUS 242567 CKT ZB / 242566 05BROADX 138 242567 05BROADX 138 ZB END

12 Short Circuit Analysis - Primary POI

The following Breakers are overdutied

Bus Number	Bus Name	BREAKER	Type	Capacity (Amps)	Duty Percentage Post Queue	Duty Percentage Pre Queue

12.1 System Reinforcements - Short Circuit

13 Summer Peak - Load Flow Analysis - Secondary POI

The Queue Project AF2-303 was evaluated as a 190.0 MW (Capacity 115.0 MW) injection at the Hathaway 230 kV substation in the Dominion area. For the secondary POI, AF2-303 is modeled at a different bus from the existing Edgcombe NUG units; therefore, the Edgcombe NUG units were removed from the model and the full AF2-303 project (i.e. 190 MW Energy and 115 MW Capacity) was modeled at the secondary POI. Project AF2-303 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF2-303 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

13.1 Generation Deliverability

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
96976145	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT30T	230.0	CPL E	1	DVP_P 1-2: LN 2181	single	478.0	98.65	109.16	DC	50.24
98090375	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P 1-2: LN 68	single	678.679992676	97.52	100.24	DC	18.44
98090131	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	Base Case	single	571.520019531	98.78	101.22	DC	14.17
96976152	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P 1-2: LN 2058	single	478.0	96.29	107.28	DC	52.52

13.2 Multiple Facility Contingency

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
97458052	313844	3HATHAWAY	115.0	DVP	314554	3BTLEBR O	115.0	DVP	1	DVP_P4-2: 254T2141	breaker	301.0	92.48	102.01	DC	28.69

13.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
95879007	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P4_#11112_0 5J.FERR 765_A1	breaker	402.0	113.29	114.83	DC	13.72
95879009	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P4_#11111_0 5J.FERR 765_B1	breaker	402.0	107.71	109.28	DC	14.06
98090138	313714	6PERQUIMANS	230.0	DVP	314662	65 HERTFORD	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012207	135.31	136.91	DC	12.32

ID	FROM BUS#	FROM BUS	KV	FROM BUS AREA	TO BUS#	TO BUS	KV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
98090142	313714	6PERQUIMANS	230.0	DVP	314662	6SHERTFORD	230.0	DVP	1	DVP_P1-2: LN 218	single	733.200012207	115.14	116.31	DC	8.58
98090143	313714	6PERQUIMANS	230.0	DVP	314662	6SHERTFORD	230.0	DVP	1	Base Case	single	733.200012207	109.15	110.25	DC	8.07
97459093	313844	3HATHAWAY	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	301.0	112.63	129.69	DC	51.37
98090334	313845	6HATHAWAY	230.0	DVP	314591	6NASH	230.0	DVP	1	DVP_P1-2: LN 2058	single	449.320007324	108.09	119.78	DC	52.52
97804399	313851	6ECITYDP2	230.0	DVP	314638	6ELIZ CT	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	146.43	147.07	DC	17.31
148844321	313851	6ECITYDP2	230.0	DVP	314638	6ELIZ CT	230.0	DVP	1	DVP_P4-2: 24642	breaker	1204.0	146.5	147.15	DC	17.34
148844322	313851	6ECITYDP2	230.0	DVP	314638	6ELIZ CT	230.0	DVP	1	DVP_P4-2: 24662	breaker	1204.0	146.51	147.16	DC	17.34
98090225	313885	6WALBMR L	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012207	130.23	131.83	DC	12.32
98090228	313885	6WALBMR L	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	DVP_P1-2: LN 218	single	733.200012207	110.05	111.22	DC	8.58
98090230	313885	6WALBMR L	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	Base Case	single	733.200012207	104.07	105.17	DC	8.07
98090199	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	DVP_P1-2: LN 246	single	731.320007324	134.38	135.98	DC	12.32
98090202	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	DVP_P1-2: LN 218	single	731.320007324	114.14	115.32	DC	8.58
98090204	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	Base Case	single	731.320007324	108.16	109.26	DC	8.07
97804360	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	172.71	173.73	DC	15.26
97804549	314282	6CARSON	230.0	DVP	314331	6POE	230.0	DVP	1	DVP_P4-2: 562T563	breaker	830.0	115.91	116.62	DC	12.98
97804550	314282	6CARSON	230.0	DVP	314331	6POE	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	830.0	100.43	101.7	DC	23.26
98090359	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P1-2: LN 563	single	559.299987793	144.6	146.03	DC	8.41
98090361	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P1-2: LN 2002	single	559.299987793	132.12	133.5	DC	8.59
98090733	314282	6CARSON	230.0	DVP	314331	6POE	230.0	DVP	1	DVP_P1-2: LN 249	single	678.679992676	101.37	102.41	DC	7.98
97804370	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P4-2: 562T563	breaker	684.0	169.63	170.64	DC	15.26
98090381	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P1-2: LN 563	single	559.299987793	140.83	142.26	DC	8.41
98090383	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P1-2: LN 2002	single	559.299987793	128.35	129.73	DC	8.59
97804409	314287	6CHESTFB	230.0	DVP	314276	6BASIN	230.0	DVP	1	DVP_P4-2: 562T563	breaker	812.0	145.64	146.28	DC	11.47
97804419	314299	6HARROWG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.42	144.38	DC	11.59
97804420	314299	6HARROWG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	136.33	137.91	DC	18.85
98090574	314299	6HARROWG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	119.28	120.74	DC	6.46
97804474	314301	6HARR205	230.0	DVP	314346	6TYLER	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	128.45	129.46	DC	12.07
98090811	314301	6HARR205	230.0	DVP	314346	6TYLER	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	104.85	106.34	DC	6.68
97804429	314316	6LOCKS	230.0	DVP	314301	6HARR205	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.64	144.65	DC	12.07
98090593	314316	6LOCKS	230.0	DVP	314301	6HARR205	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	118.24	119.75	DC	6.68
97804414	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.43	144.4	DC	11.59
97804415	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P4-2: 24972-4	breaker	541.0	136.35	137.93	DC	18.85
98090569	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	119.3	120.76	DC	6.46

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
980903 23	3144 35	6SAPONY	230 .0	DVP	3142 82	6CARSON	230 .0	DV P	1	DVP_P1-2: LN 246	singl e	678.67999 2676	128.3	131.33	DC	20.81
980903 25	3144 35	6SAPONY	230 .0	DVP	3142 82	6CARSON	230 .0	DV P	1	DVP_P1-2: LN 2012-B	singl e	678.67999 2676	111.87	114.76	DC	19.64
980903 28	3144 35	6SAPONY	230 .0	DVP	3142 82	6CARSON	230 .0	DV P	1	Base Case	singl e	678.67999 2676	104.81	107.43	DC	17.74
969759 75	3145 54	3BTLEBRO	115 .0	DVP	3042 23	3ROCKYMT1 15T	115 .0	CPL E	1	DVP_P4-2: 2058T2167	break er	93.0	284.53	290.1	DC	11.51
969760 82	3145 54	3BTLEBRO	115 .0	DVP	3042 23	3ROCKYMT1 15T	115 .0	CPL E	1	DVP_P1-2: LN 2058	singl e	93.0	176.42	182.75	DC	5.88
969765 12	3145 54	3BTLEBRO	115 .0	DVP	3042 23	3ROCKYMT1 15T	115 .0	CPL E	1	DVP_P7-1: LN 2058-2181	towe r	93.0	497.49	540.76	DC	40.22
145505 354	3145 54	3BTLEBRO	115 .0	DVP	3042 23	3ROCKYMT1 15T	115 .0	CPL E	1	DVP_P1-2: LN 218	singl e	93.0	141.53	147.95	DC	5.97
978044 52	3145 61	6CAROLNA	230 .0	DVP	3145 83	6LAKEVEW	230 .0	DV P	1	DVP_P4-2: 218T2160	break er	459.0	131.23	132.5	DC	11.0
978044 53	3145 61	6CAROLNA	230 .0	DVP	3145 83	6LAKEVEW	230 .0	DV P	1	DVP_P4-2: 2020T2144	break er	459.0	123.34	124.03	DC	5.99
978046 11	3145 61	6CAROLNA	230 .0	DVP	3145 99	6ROA VAL	230 .0	DV P	1	DVP_P4-2: 23872	break er	671.0	102.0	103.32	DC	19.41
978046 12	3145 61	6CAROLNA	230 .0	DVP	3145 99	6ROA VAL	230 .0	DV P	1	DVP_P4-2: 238T2002	break er	671.0	101.72	103.03	DC	19.38
980903 73	3145 63	6CLUBHSE	230 .0	DVP	9404 80	AE2-033 TAP	230 .0	DV P	1	DVP_P1-2: LN 246	singl e	678.67999 2676	113.38	116.46	DC	20.82
980901 13	3145 69	6EARLEYS	230 .0	DVP	3145 75	6NUCO TP	230 .0	DV P	1	DVP_P1-2: LN 2092	singl e	571.52001 9531	167.42	170.3	DC	17.75
980901 14	3145 69	6EARLEYS	230 .0	DVP	3145 75	6NUCO TP	230 .0	DV P	1	DVP_P1-2: LN 2131	singl e	571.52001 9531	166.93	169.91	DC	17.75
980901 19	3145 69	6EARLEYS	230 .0	DVP	3145 75	6NUCO TP	230 .0	DV P	1	Base Case	singl e	571.52001 9531	105.18	107.63	DC	14.17
969760 97	3145 74	6EVERETS	230 .0	DVP	3044 51	6GREENVILE T	230 .0	CPL E	1	DVP_P1-2: LN 246	singl e	478.0	102.33	103.61	DC	6.11
969765 17	3145 74	6EVERETS	230 .0	DVP	3044 51	6GREENVILE T	230 .0	CPL E	1	DVP_P7-1: LN 2058-2181	towe r	478.0	188.61	195.2	DC	31.44
980901 25	3145 75	6NUCO TP	230 .0	DVP	9577 90	AF2-073 TAP	230 .0	DV P	1	DVP_P1-2: LN 2092	singl e	571.52001 9531	161.01	163.9	DC	17.75
980901 26	3145 75	6NUCO TP	230 .0	DVP	9577 90	AF2-073 TAP	230 .0	DV P	1	DVP_P1-2: LN 2131	singl e	571.52001 9531	160.54	163.52	DC	17.75
978043 75	3145 83	6LAKEVEW	230 .0	DVP	3145 61	6CAROLNA	230 .0	DV P	1	DVP_P4-2: 23872	break er	459.0	158.65	165.05	DC	29.38
978043 76	3145 83	6LAKEVEW	230 .0	DVP	3145 61	6CAROLNA	230 .0	DV P	1	DVP_P4-2: 238T2002	break er	459.0	158.18	164.57	DC	29.35
980902 85	3145 83	6LAKEVEW	230 .0	DVP	9245 10	AB2-100 TAP	230 .0	DV P	1	DVP_P1-2: LN 246	singl e	375.05999 7559	141.22	146.46	DC	20.18
980902 86	3145 83	6LAKEVEW	230 .0	DVP	9245 10	AB2-100 TAP	230 .0	DV P	1	314572 3EMPORIA 115 925170 AB2-174 TAP 115 1	singl e	375.05999 7559	131.49	136.25	DC	18.36
980902 90	3145 83	6LAKEVEW	230 .0	DVP	9245 10	AB2-100 TAP	230 .0	DV P	1	Base Case	singl e	375.05999 7559	109.64	114.25	DC	17.31
980902 96	3145 83	6LAKEVEW	230 .0	DVP	3145 61	6CAROLNA	230 .0	DV P	1	314435 6SAPONY 230 940480 AE2-033 TAP 230 1	singl e	375.05999 7559	143.07	147.81	DC	17.76
980902 97	3145 83	6LAKEVEW	230 .0	DVP	3145 61	6CAROLNA	230 .0	DV P	1	DVP_P1-2: LN 238-A	singl e	375.05999 7559	143.02	147.76	DC	17.76
974579 31	3145 96	3POPLR C	115 .0	DVP	3145 73	3EVERETS	115 .0	DV P	1	DVP_P4-2: 246T2034	break er	349.0	211.08	211.69	DC	4.04
978046 13	3145 99	6ROA VAL	230 .0	DVP	3142 66	6NORTHAM PTON	230 .0	DV P	1	DVP_P4-2: 23872	break er	671.0	101.97	103.29	DC	19.41
978046 14	3145 99	6ROA VAL	230 .0	DVP	3142 66	6NORTHAM PTON	230 .0	DV P	1	DVP_P4-2: 238T2002	break er	671.0	101.67	102.99	DC	19.38
974579 26	3146 14	3TRWBRD G2	115 .0	DVP	3145 96	3POPLR C	115 .0	DV P	1	DVP_P4-2: 246T2034	break er	350.0	212.1	212.71	DC	4.04
980902 37	3146 37	6EDENTO N	230 .0	DVP	3138 85	6WALBMRL	230 .0	DV P	1	DVP_P1-2: LN 246	singl e	733.20001 2207	130.24	131.84	DC	12.32
980902 40	3146 37	6EDENTO N	230 .0	DVP	3138 85	6WALBMRL	230 .0	DV P	1	DVP_P1-2: LN 218	singl e	733.20001 2207	110.05	111.22	DC	8.58

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
98090242	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	Base Case	single	733.200012207	104.07	105.17	DC	8.07
149216333	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P1-2: LN 247-B	single	571.520019531	125.4	126.61	DC	6.9
149216334	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P1-2: LN 247-A	single	571.520019531	123.54	124.75	DC	6.9
97804394	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	148.4	149.05	DC	17.31
148844306	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P4-2: 24642	breaker	1204.0	148.47	149.12	DC	17.34
148844307	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P4-2: 24662	breaker	1204.0	148.49	149.14	DC	17.34
97804389	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1163.0	158.15	158.82	DC	17.32
148844286	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P4-2: 24642	breaker	1163.0	158.23	158.9	DC	17.35
148844287	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P4-2: 24662	breaker	1163.0	158.22	158.89	DC	17.35
98090150	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012207	133.51	135.11	DC	12.32
98090153	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P1-2: LN 218	single	733.200012207	113.33	114.5	DC	8.58
98090155	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	Base Case	single	733.200012207	107.35	108.45	DC	8.07
98090179	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 246	single	375.059997559	157.59	162.81	DC	20.14
98090180	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	314572 3EMPORIA 115 925170 AB2-174 TAP 115 1	single	375.059997559	147.5	152.37	DC	18.32
98090184	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	375.059997559	125.94	130.55	DC	17.27
97804603	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 23872	breaker	699.0	105.53	106.79	DC	19.41
97804604	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P4-2: 238T2002	breaker	699.0	105.24	106.5	DC	19.38
97677989	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P2-2: BREMO B1	bus	830.0	124.91	126.54	DC	29.75
97804469	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P4-2: 201262	breaker	830.0	126.88	128.66	DC	32.63
97804470	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P4-2: 2012T2014	breaker	830.0	125.54	127.38	DC	33.71
98090447	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P1-2: LN 2012-B	single	678.679992676	114.14	117.03	DC	19.65
98090450	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P1-2: LN 2060	single	678.679992676	111.22	114.11	DC	19.65
98090451	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	single	678.679992676	107.09	109.71	DC	17.75
98578871	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	130.38	132.8	DC	44.3
98578872	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	DVP_P7-1: LN 56-2012-B	tower	830.0	128.64	130.48	DC	33.68
149216272	957790	AF2-073 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	171.44	174.39	DC	17.75
149216273	957790	AF2-073 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	170.45	173.41	DC	17.75
149216278	957790	AF2-073 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	single	571.520019531	107.95	110.3	DC	14.17

13.4 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed

with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
95879205	242620	05DANVL2	138.0	AEP	242631	05EDAN 1	138.0	AEP	1	Base Case	operati on	275.0	123.33	124.23	DC	4.72
95879279	242631	05EDAN 1	138.0	AEP	242620	05DANVL2	138.0	AEP	1	AEP_P 1-2: LN 2056-A	operati on	402.0	107.68	109.26	DC	14.06
98090692	313701	6CHINQUAPI N	230.0	DVP	314609	6TARBORO	230.0	DVP	1	DVP_P 1-2: LN 218	operati on	441.799987793	124.74	127.41	DC	11.79
98090137	313714	6PERQUIMAN S	230.0	DVP	314662	6S HERTFORD	230.0	DVP	1	Base Case	operati on	733.200012207	208.66	209.48	DC	13.33
97458307	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	148.49	150.95	DC	7.69
97458312	313719	3CHESTNUT	115.0	DVP	314623	3WITAKRS	115.0	DVP	1	Base Case	operati on	165.440002441	112.44	113.95	DC	4.74
96976141	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT23 OT	230.0	CPL E	1	DVP_P 1-2: LN 2181	operati on	478.0	139.64	157.02	DC	83.0
98090329	313845	6HATHAWAY	230.0	DVP	314591	6NASH	230.0	DVP	1	DVP_P 1-2: LN 2058	operati on	449.320007324	152.06	171.39	DC	86.77
97458265	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	154.0	156.47	DC	7.69
97458270	313854	3CONSLDL	115.0	DVP	314554	3BTLEBRO	115.0	DVP	1	Base Case	operati on	165.440002441	122.6	124.12	DC	4.74
97458414	313858	3SO JUSTICE	115.0	DVP	314577	3COX DP	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	118.36	120.82	DC	7.67
98090221	313885	6WALBMRL	230.0	DVP	313714	6PERQUIMAN S	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	733.200012207	218.61	221.33	DC	20.36
98090224	313885	6WALBMRL	230.0	DVP	313714	6PERQUIMAN S	230.0	DVP	1	Base Case	operati on	733.200012207	178.53	179.35	DC	13.33
98090195	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	731.320007324	222.99	225.72	DC	20.36
98090198	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	Base Case	operati on	731.320007324	182.81	183.63	DC	13.33
98090737	314266	6NORTHAMP TON	230.0	DVP	936400	AD2-051 TAP	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	571.520019531	118.93	120.47	DC	19.38
98090357	314282	6CARSON	230.0	DVP	314285	6CHRL249	230.0	DVP	1	DVP_P 1-2: LN 563	operati on	559.299987793	167.73	168.86	DC	13.9
98090730	314282	6CARSON	230.0	DVP	314331	6POE	230.0	DVP	1	DVP_P 1-2: LN 249	operati on	678.679992676	119.86	120.73	DC	13.18

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADING %	POST PROJE CT LOADING %	AC/DC	MW IMPACT
98090379	314285	6CHRL249	230.0	DVP	314316	6LOCKS	230.0	DVP	1	DVP_P 1-2: LN 563	operation	559.299987793	163.96	165.08	DC	13.9
98090572	314299	6HARROWG	230.0	DVP	314263	6TYLER1	230.0	DVP	1	DVP_P 1-2: LN 563	operation	441.799987793	144.19	145.28	DC	10.68
98090592	314316	6LOCKS	230.0	DVP	314301	6HARR205	230.0	DVP	1	DVP_P 1-2: LN 563	operation	441.799987793	138.92	140.05	DC	11.04
98090567	314331	6POE	230.0	DVP	314299	6HARROWG	230.0	DVP	1	DVP_P 1-2: LN 563	operation	441.799987793	144.22	145.3	DC	10.68
98090317	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P 1-2: LN 246	operation	678.679992676	182.65	184.94	DC	34.39
98090322	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	Base Case	operation	678.679992676	144.53	146.49	DC	29.31
96976077	314554	3BTLEBRO	115.0	DVP	304223	3ROCKYMT115T	115.0	CPL E	1	DVP_P 1-2: LN 2058	operation	93.0	272.83	277.54	DC	9.72
98090475	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P 1-2: LN 2092	operation	375.059997559	150.58	151.42	DC	6.0
98090695	314561	6CAROLNA	230.0	DVP	314599	6ROA VAL	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	548.020019531	124.43	126.04	DC	19.38
98090367	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P 1-2: LN 246	operation	678.679992676	163.64	165.94	DC	34.4
98090372	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	Base Case	operation	678.679992676	127.08	129.04	DC	29.32
98090434	314564	6EDGECOM	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P 1-2: LN 218	operation	441.799987793	113.01	115.68	DC	11.79
98090108	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P 1-2: LN 2092	operation	571.520019531	277.0	279.31	DC	29.33
98090115	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	operation	571.520019531	147.72	149.57	DC	23.42
98090120	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	DVP_P 1-2: LN 2092	operation	571.520019531	270.59	272.91	DC	29.33
98090127	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	Base Case	operation	571.520019531	141.31	143.16	DC	23.42
97458445	314577	3COX DP	115.0	DVP	313719	3CHESTNUT	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operation	165.440002441	111.59	114.05	DC	7.67
98090599	314579	6HORNRTN	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	DVP_P 1-2: LN 238-A	operation	441.799987793	138.39	140.21	DC	15.22
98090280	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	DVP_P 1-2: LN 246	operation	375.059997559	197.18	206.08	DC	33.34
98090284	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	Base Case	operation	375.059997559	154.29	161.93	DC	28.59
98090292	314583	6LAKEVEW	230.0	DVP	314561	6CAROLNA	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operation	375.059997559	193.37	201.2	DC	29.35

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADI NG %	POST PROJE CT LOADI NG %	AC DC	MW IMPA CT
98090301	314583	6LAKEVEW	230.0	DVP	314561	6CAROLNA	230.0	DVP	1	Base Case	operati on	375.059997559	103.44	105.42	DC	16.27
98090713	314583	6LAKEVEW	230.0	DVP	314579	6HORNRTN	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	441.799987793	119.52	122.95	DC	15.15
96976147	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P 1-2: LN 2058	operati on	478.0	137.62	155.79	DC	86.77
98090830	314594	6PLYMOTH	230.0	DVP	314203	6MACKEYS	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	789.599975586	102.13	104.63	DC	20.41
98090701	314599	6ROA VAL	230.0	DVP	314266	6NORTHAMP TON	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	548.020019531	124.4	126.0	DC	19.38
98090766	314609	6TARBORO	230.0	DVP	314610	6TOTDP4	230.0	DVP	1	DVP_P 1-2: LN 218	operati on	441.799987793	114.94	117.61	DC	11.79
149217057	314610	6TOTDP4	230.0	DVP	960330	AF2-324 TAP	230.0	DVP	1	DVP_P 1-2: LN 218	operati on	441.799987793	113.42	116.09	DC	11.79
98090825	314616	6TRWBRDG	230.0	DVP	314594	6PLYMOTH	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	789.599975586	104.42	106.92	DC	20.41
97458256	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	DVP_P 1-2: LN 2056-A	operati on	165.440002441	154.06	156.53	DC	7.69
97458261	314623	3WITAKRS	115.0	DVP	313854	3CONSLDL	115.0	DVP	1	Base Case	operati on	165.440002441	122.6	124.12	DC	4.74
98090233	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	733.200012207	218.62	221.35	DC	20.36
98090236	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	Base Case	operati on	733.200012207	178.53	179.35	DC	13.33
98090149	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	Base Case	operati on	733.200012207	204.38	205.2	DC	13.33
98090174	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P 1-2: LN 246	operati on	375.059997559	219.2	228.1	DC	33.27
98090178	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operati on	375.059997559	174.82	182.44	DC	28.53
98090795	927020	AC1-189 TAP	230.0	DVP	313701	6CHINQUAPI N	230.0	DVP	1	DVP_P 1-2: LN 218	operati on	441.799987793	109.97	112.63	DC	11.77
98090483	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P 1-2: LN 238-A	operati on	441.799987793	149.77	151.59	DC	15.22
98090492	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	Base Case	operati on	441.799987793	95.9	100.22	DC	19.05
98090667	936400	AD2-051 TAP	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	314435 6SAPO NY 230 940480 AE2-033 TAP 230 1	operati on	571.520019531	128.6	130.14	DC	19.38
98090445	940480	AE2-033 TAP	230.0	DVP	314435	6SAPONY	230.0	DVP	1	Base Case	operati on	678.679992676	146.13	148.08	DC	29.32
149216267	957790	AF2-073 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P 1-2: LN 2092	operati on	571.520019531	286.54	288.85	DC	29.33
149216274	957790	AF2-073 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	operati on	571.520019531	155.3	157.15	DC	23.42

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
149216927	960330	AF2-324 TAP	230.0	DVP	314564	6EDGECOM	230.0	DVP	1	DVP_P1-2: LN 218	operation	441.799987793	113.01	115.68	DC	11.79

13.5 Flow Gate Details - Secondary POI

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

13.5.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
96976145	313845	6HATHAWAY	DVP	304222	6ROCKYMT230T	CPL	1	DVP_P1-2: LN 2181	single	478.0	98.65	109.16	DC	50.24

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.1766	80/20	0.1766
314572	3EMPORIA	0.0497	80/20	0.0497
314574	6EVERETS	0.2240	80/20	0.2240
314582	3KELFORD	0.3819	80/20	0.3819
314589	3MURPHYS	0.0609	80/20	0.0609
314623	3WITAKRS	0.3141	80/20	0.3141
314704	3LAWRENC	0.1694	80/20	0.1694
315115	1S HAMPT1	0.7849	80/20	0.7849
315126	1ROARAP2	1.1859	80/20	1.1859
315128	1ROARAP4	1.1317	80/20	1.1317
315136	1ROSEMG1	2.9028	80/20	2.9028
315137	1ROSEMS1	1.8000	80/20	1.8000
315138	1ROSEMG2	1.3604	80/20	1.3604
315139	1GASTONA	3.5951	80/20	3.5951
315141	1GASTONB	3.5951	80/20	3.5951
315292	1DOMTR78	0.8569	80/20	0.8569
315294	1DOMTR10	6.4385	80/20	6.4385
315601	1CONETOE2SOL	2.6952	80/20	2.6952
315602	1HOLLOMANSOL	1.0473	80/20	1.0473
315605	6W1-029WIND	0.2433	80/20	0.2433
315606	3AA2-053SOLA	1.2090	80/20	1.2090
315607	3AA1-063SOLA	1.0879	80/20	1.0879
315608	3AA2-088SOLA	0.6661	80/20	0.6661
315611	6Z1-036WIND	2.4371	80/20	2.4371
315612	3AA2-057SOLA	1.5529	80/20	1.5529
315614	AA2-178 C	0.7843	80/20	0.7843
920591	AA2-165 C	0.1841	80/20	0.1841
920671	AA2-174 C OP	0.0554	80/20	0.0554
922922	AB1-081 C OP	15.1732	80/20	15.1732
923262	AB1-132 C OP (Suspended)	15.9155	80/20	15.9155
923572	AB1-173 C OP	1.6606	80/20	1.6606
923582	AB1-173AC OP	1.6606	80/20	1.6606
923801	AB2-015 C OP	4.0595	80/20	4.0595
923911	AB2-031 C O1	1.6483	80/20	1.6483
923991	AB2-040 C O1	5.4124	80/20	5.4124
924151	AB2-059 C OP	3.0847	80/20	3.0847
924501	AB2-099 C (Suspended)	0.4117	80/20	0.4117
924511	AB2-100 C	1.4667	80/20	1.4667
925121	AB2-169 C	0.7206	80/20	0.7206
925171	AB2-174 C O1	0.8699	80/20	0.8699
925591	AC1-034 C	11.5831	80/20	11.5831

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925781	AC1-054 C O1	2.9325	80/20	2.9325
926071	AC1-086 C	23.4374	80/20	23.4374
926201	AC1-098 C	6.2999	80/20	6.2999
926211	AC1-099 C	2.1111	80/20	2.1111
927021	AC1-189 C	12.1966	80/20	12.1966
927141	AC1-208 C	9.7050	80/20	9.7050
932631	AC2-084 C	8.9807	80/20	8.9807
933991	AD1-023 C	7.5960	80/20	7.5960
934331	AD1-057 C O1	20.1230	80/20	20.1230
934521	AD1-076 C	29.5910	80/20	29.5910
936401	AD2-051 C O1	6.0417	80/20	6.0417
938171	AE1-026 C O1	19.1647	80/20	19.1647
938221	AE1-035 C	1.5178	80/20	1.5178
938771	AE1-103 C O1	1.6073	80/20	1.6073
940481	AE2-033 C	7.1912	80/20	7.1912
940491	AE2-034 C	3.4100	80/20	3.4100
940571	AE2-044 C	7.5866	80/20	7.5866
941501	AE2-147 C	4.7016	80/20	4.7016
941541	AE2-151 C	0.7823	80/20	0.7823
942471	AE2-260 C O1	9.8487	80/20	9.8487
942851	AE2-304 C	0.2065	80/20	0.2065
943171	AE2-346 C	0.9880	80/20	0.9880
943911	AF1-059	6.8970	80/20	6.8970
944141	AF1-082	4.8771	80/20	4.8771
944871	AF1-152 C	1.5672	80/20	1.5672
945711	AF1-236 C O1	37.3312	80/20	37.3312
946011	AF1-266	6.0196	80/20	6.0196
946281	AF1-292 C	0.9994	80/20	0.9994
957521	AF2-046 C	11.0658	80/20	11.0658
957531	AF2-047 C	8.1028	80/20	8.1028
957791	AF2-073 C (Withdrawn : 07/02/2020)	3.3956	80/20	3.3956
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.5091	80/20	1.5091
957861	AF2-080 C	11.0774	80/20	11.0774
959231	AF2-214 C	16.3925	80/20	16.3925
959511	AF2-242	5.4341	80/20	5.4341
959731	AF2-264 C	1.5338	80/20	1.5338
960081	AF2-299 C	1.6844	80/20	1.6844
960121	AF2-303 C O2	50.2389	80/20	50.2389
960331	AF2-324 C O2	20.7698	80/20	20.7698
960351	AF2-326 C (Withdrawn : 07/22/2020)	3.7166	80/20	3.7166
960831	AF2-374 C	0.9486	80/20	0.9486
961091	AF2-400 C	0.2192	80/20	0.2192
NEWTON	NEWTON	1.3496	Confirmed LTF	1.3496
FARMERCITY	FARMERCITY	0.0774	Confirmed LTF	0.0774
G-007A	G-007A	0.8871	Confirmed LTF	0.8871
VFT	VFT	2.3607	Confirmed LTF	2.3607
CALDERWOOD	CALDERWOOD	1.0725	Confirmed LTF	1.0725
PRAIRIE	PRAIRIE	3.6420	Confirmed LTF	3.6420
CHEOAH	CHEOAH	1.1001	Confirmed LTF	1.1001
EDWARDS	EDWARDS	0.4070	Confirmed LTF	0.4070

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TILTON	TILTON	0.7201	Confirmed LTF	0.7201
GIBSON	GIBSON	0.6519	Confirmed LTF	0.6519
BLUEG	BLUEG	2.0138	Confirmed LTF	2.0138
TRIMBLE	TRIMBLE	0.6389	Confirmed LTF	0.6389
CATAWBA	CATAWBA	1.1585	Confirmed LTF	1.1585

13.5.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98090373	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P1-2: LN 246	single	678.68	113.38	116.46	DC	20.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1786	80/20	0.1786
314574	6EVERETS	0.2978	80/20	0.2978
314582	3KELFORD	0.5911	80/20	0.5911
314589	3MURPHYS	0.1034	80/20	0.1034
314623	3WITAKRS	0.2748	80/20	0.2748
314704	3LAWRENC	0.6598	80/20	0.6598
315126	1ROARAP2	2.4069	80/20	2.4069
315128	1ROARAP4	2.2969	80/20	2.2969
315136	1ROSEMG1	4.3510	80/20	4.3510
315137	1ROSEMS1	2.6981	80/20	2.6981
315138	1ROSEMG2	2.0392	80/20	2.0392
315139	1GASTONA	6.6397	80/20	6.6397
315141	1GASTONB	6.6397	80/20	6.6397
315158	1KERR 1	0.4004	80/20	0.4004
315159	1KERR 2	1.1211	80/20	1.1211
315160	1KERR 3	1.1211	80/20	1.1211
315161	1KERR 4	1.1211	80/20	1.1211
315162	1KERR 5	1.1211	80/20	1.1211
315163	1KERR 6	1.1211	80/20	1.1211
315164	1KERR 7	1.1211	80/20	1.1211
315292	1DOMTR78	1.2113	80/20	1.2113
315294	1DOMTR10	7.7360	Adder	9.1
315601	1CONETOE2SOL	1.6679	80/20	1.6679
315602	1HOLLOMANSOL	1.9050	80/20	1.9050
315606	3AA2-053SOLA	2.3998	80/20	2.3998
315607	3AA1-063SOLA	2.0776	80/20	2.0776
315608	3AA2-088SOLA	1.0877	80/20	1.0877
315612	3AA2-057SOLA	1.5532	80/20	1.5532
920591	AA2-165 C	0.1842	80/20	0.1842
920671	AA2-174 C OP	0.1099	80/20	0.1099
922922	AB1-081 C OP	9.9915	80/20	9.9915
923262	AB1-132 C OP (Suspended)	29.3941	80/20	29.3941
923572	AB1-173 C OP	4.9282	80/20	4.9282
923582	AB1-173AC OP	4.9282	80/20	4.9282
923801	AB2-015 C OP	4.4408	Adder	5.22
923911	AB2-031 C O1	4.8917	80/20	4.8917
923991	AB2-040 C O1	16.0622	80/20	16.0622
924021	AB2-043 C O1	0.4591	80/20	0.4591
924151	AB2-059 C OP	2.0312	80/20	2.0312
924301	AB2-077 C O1 (Suspended)	1.4190	Adder	1.67

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	1.4190	Adder	1.67
924321	AB2-079 C O1 (Suspended)	1.4190	Adder	1.67
924501	AB2-099 C (Suspended)	0.7159	80/20	0.7159
924511	AB2-100 C	6.1828	80/20	6.1828
925121	AB2-169 C	0.9963	80/20	0.9963
925171	AB2-174 C O1	2.7816	80/20	2.7816
925591	AC1-034 C	7.6275	80/20	7.6275
925611	AC1-036 C	0.5297	Adder	0.62
925781	AC1-054 C O1	8.2561	80/20	8.2561
926071	AC1-086 C	43.2863	80/20	43.2863
926201	AC1-098 C	8.1389	80/20	8.1389
926211	AC1-099 C	2.7274	80/20	2.7274
927021	AC1-189 C	9.0769	80/20	9.0769
927141	AC1-208 C	12.4295	80/20	12.4295
932631	AC2-084 C	11.6023	80/20	11.6023
933991	AD1-023 C	11.8446	80/20	11.8446
934331	AD1-057 C O1	15.6425	80/20	15.6425
934521	AD1-076 C	36.3805	Adder	42.8
936261	AD2-033 C	7.6218	Adder	8.97
936361	AD2-046 C O1	8.3608	80/20	8.3608
936401	AD2-051 C O1	10.9988	80/20	10.9988
936481	AD2-063 C O1	9.8440	Adder	11.58
938171	AE1-026 C O1	31.0221	80/20	31.0221
938221	AE1-035 C	2.7609	80/20	2.7609
939181	AE1-148 C O1	8.2053	80/20	8.2053
940241	AE2-006	0.2695	Adder	0.32
940491	AE2-034 C	3.7003	Adder	4.35
940571	AE2-044 C	4.9958	80/20	4.9958
940661	AE2-053 O1	3.0390	80/20	3.0390
941541	AE2-151 C	1.3703	80/20	1.3703
942451	AE2-258	1.9856	80/20	1.9856
942471	AE2-260 C O1	46.1557	80/20	46.1557
943171	AE2-346 C	1.7182	80/20	1.7182
943911	AF1-059	27.1930	80/20	27.1930
944141	AF1-082	3.2116	80/20	3.2116
945711	AF1-236 C O1	40.5095	Adder	47.66
946281	AF1-292 C	3.8607	80/20	3.8607
957521	AF2-046 C	18.8722	80/20	18.8722
957531	AF2-047 C	4.6601	Adder	10.34
957861	AF2-080 C	8.2440	80/20	8.2440
959231	AF2-214 C	10.7944	80/20	10.7944
959311	AF2-222 C	4.7514	Adder	10.55
959511	AF2-242	7.3963	80/20	7.3963
959731	AF2-264 C	2.6440	80/20	2.6440
960081	AF2-299 C	6.5069	80/20	6.5069
960121	AF2-303 C O2	20.8219	80/20	20.8219
960331	AF2-324 C O2	8.8064	80/20	8.8064
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.8450	80/20	2.8450
960811	AF2-372 C	0.4751	Adder	1.05
960831	AF2-374 C	1.7405	80/20	1.7405

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.1271	Adder	0.28
WEC	WEC	0.3200	Confirmed LTF	0.3200
LGEE	LGEE	0.6013	Confirmed LTF	0.6013
CPL	CPL	3.6442	Confirmed LTF	3.6442
CBM-W2	CBM-W2	12.5798	Confirmed LTF	12.5798
NY	NY	0.3744	Confirmed LTF	0.3744
CBM-W1	CBM-W1	11.9971	Confirmed LTF	11.9971
TVA	TVA	2.6222	Confirmed LTF	2.6222
CBM-S2	CBM-S2	22.6576	Confirmed LTF	22.6576
CBM-S1	CBM-S1	14.6629	Confirmed LTF	14.6629
MADISON	MADISON	0.7096	Confirmed LTF	0.7096
MEC	MEC	1.9179	Confirmed LTF	1.9179
AA2-074	AA2-074	2.4836	LTF	2.4836

13.5.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98090126	314575	6NUCO TP	DVP	957790	AF2-073 TAP	DVP	1	DVP_P1-2: LN 2131	single	571.52	160.54	163.52	DC	17.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0506	80/20	0.0506
314574	6EVERETS	0.4657	80/20	0.4657
314582	3KELFORD	0.7842	80/20	0.7842
314589	3MURPHYS	0.1032	80/20	0.1032
314623	3WITAKRS	0.2359	80/20	0.2359
314704	3LAWRENC	0.1825	80/20	0.1825
315126	1ROARAP2	1.4097	80/20	1.4097
315128	1ROARAP4	1.3452	80/20	1.3452
315136	1ROSEMG1	2.3511	80/20	2.3511
315137	1ROSEMS1	1.4579	80/20	1.4579
315138	1ROSEMG2	1.1019	80/20	1.1019
315139	1GASTONA	3.4385	80/20	3.4385
315141	1GASTONB	3.4385	80/20	3.4385
315159	1KERR 2	0.5966	80/20	0.5966
315160	1KERR 3	0.5966	80/20	0.5966
315161	1KERR 4	0.5966	80/20	0.5966
315162	1KERR 5	0.5966	80/20	0.5966
315163	1KERR 6	0.5966	80/20	0.5966
315164	1KERR 7	0.5966	80/20	0.5966
315292	1DOMTR78	2.8729	80/20	2.8729
315294	1DOMTR10	21.5849	80/20	21.5849
315601	1CONETOE2SOL	1.9914	80/20	1.9914
315602	1HOLLOMANSOL	3.5568	80/20	3.5568
315606	3AA2-053SOLA	1.7258	80/20	1.7258
315607	3AA1-063SOLA	1.2920	80/20	1.2920
315608	3AA2-088SOLA	0.7480	80/20	0.7480
315611	6Z1-036WIND	-2.9421	Adder	-3.46
315612	3AA2-057SOLA	1.3289	80/20	1.3289
315614	AA2-178 C	3.4314	80/20	3.4314
920591	AA2-165 C	0.1576	80/20	0.1576
920671	AA2-174 C OP	0.0790	80/20	0.0790
922922	AB1-081 C OP	8.5938	80/20	8.5938
923262	AB1-132 C OP (Suspended)	15.2225	80/20	15.2225
923572	AB1-173 C OP	1.8023	80/20	1.8023
923582	AB1-173AC OP	1.8023	80/20	1.8023
923831	AB2-022 C	-0.8983	Adder	-1.06
923911	AB2-031 C O1	1.7889	80/20	1.7889
923991	AB2-040 C O1	5.8740	80/20	5.8740
924151	AB2-059 C OP	1.7471	80/20	1.7471
924501	AB2-099 C (Suspended)	1.0074	80/20	1.0074
924511	AB2-100 C	1.2658	80/20	1.2658

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.0776	80/20	2.0776
925171	AB2-174 C O1	0.9219	80/20	0.9219
925591	AC1-034 C	6.5604	80/20	6.5604
925781	AC1-054 C O1	4.5595	80/20	4.5595
926071	AC1-086 C	22.4169	80/20	22.4169
926201	AC1-098 C	8.0374	80/20	8.0374
926211	AC1-099 C	2.6934	80/20	2.6934
927021	AC1-189 C	11.8954	80/20	11.8954
927141	AC1-208 C	10.1471	80/20	10.1471
932631	AC2-084 C	11.4575	80/20	11.4575
933991	AD1-023 C	28.2004	80/20	28.2004
934331	AD1-057 C O1	10.1856	80/20	10.1856
934521	AD1-076 C	113.9255	80/20	113.9255
935111	AD1-144 C	-0.7751	Adder	-0.91
936361	AD2-046 C O1	3.6817	Adder	4.33
936401	AD2-051 C O1	19.8648	80/20	19.8648
937541	AD2-215 C	-0.7831	Adder	-0.92
938171	AE1-026 C O1	69.7636	80/20	69.7636
938221	AE1-035 C	5.1550	80/20	5.1550
940491	AE2-034 C	14.9197	80/20	14.9197
940571	AE2-044 C	4.2969	80/20	4.2969
941541	AE2-151 C	2.0903	80/20	2.0903
942131	AE2-225 C	-1.0773	Adder	-1.27
942171	AE2-229 C	-1.0773	Adder	-1.27
942471	AE2-260 C O1	8.3171	80/20	8.3171
942851	AE2-304 C	-0.2716	Adder	-0.32
943171	AE2-346 C	2.4178	80/20	2.4178
943911	AF1-059	8.3370	80/20	8.3370
944141	AF1-082	2.7623	80/20	2.7623
945711	AF1-236 C O1	163.3348	80/20	163.3348
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4520	80/20	35.4520
957861	AF2-080 C	10.8039	80/20	10.8039
959231	AF2-214 C	9.2843	80/20	9.2843
959511	AF2-242	13.9123	80/20	13.9123
959731	AF2-264 C	3.3334	80/20	3.3334
960081	AF2-299 C	1.6616	80/20	1.6616
960121	AF2-303 C O2	17.7537	80/20	17.7537
960331	AF2-324 C O2	7.7138	80/20	7.7138
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.4520	80/20	2.4520
960831	AF2-374 C	2.1136	80/20	2.1136
WEC	WEC	0.3333	Confirmed LTF	0.3333
LGEE	LGEE	0.6224	Confirmed LTF	0.6224
CPLE	CPLE	3.7739	Confirmed LTF	3.7739
CBM-W2	CBM-W2	12.8665	Confirmed LTF	12.8665
NY	NY	0.2909	Confirmed LTF	0.2909
CBM-W1	CBM-W1	12.5600	Confirmed LTF	12.5600
TVA	TVA	2.6600	Confirmed LTF	2.6600
CBM-S2	CBM-S2	22.9639	Confirmed LTF	22.9639
CBM-S1	CBM-S1	14.9015	Confirmed LTF	14.9015
MADISON	MADISON	0.7056	Confirmed LTF	0.7056

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MEC	MEC	1.9799	Confirmed LTF	1.9799
AA2-074	AA2-074	2.5717	LTF	2.5717

13.5.4 Index 4

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
96976152	314591	6NASH	DVP	304226	6PA-RMOUNT#4	CPL	1	DVP_P1-2: LN 2058	single	478.0	96.29	107.28	DC	52.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.1795	80/20	0.1795
314572	3EMPORIA	0.0495	80/20	0.0495
314574	6EVERETS	0.2332	80/20	0.2332
314582	3KELFORD	0.3455	80/20	0.3455
314589	3MURPHYS	0.0594	80/20	0.0594
314623	3WITAKRS	0.2214	80/20	0.2214
314704	3LAWRENC	0.1687	80/20	0.1687
315115	1S HAMPT1	0.7687	80/20	0.7687
315126	1ROARAP2	1.1465	80/20	1.1465
315128	1ROARAP4	1.0941	80/20	1.0941
315136	1ROSEMG1	2.9849	80/20	2.9849
315137	1ROSEMS1	1.8510	80/20	1.8510
315138	1ROSEMG2	1.3990	80/20	1.3990
315139	1GASTONA	3.6772	80/20	3.6772
315141	1GASTONB	3.6772	80/20	3.6772
315292	1DOMTR78	0.8777	80/20	0.8777
315294	1DOMTR10	6.5947	80/20	6.5947
315601	1CONETOE2SOL	2.8147	80/20	2.8147
315602	1HOLLOMANSOL	1.0595	80/20	1.0595
315605	6W1-029WIND	0.2467	80/20	0.2467
315606	3AA2-053SOLA	1.1705	80/20	1.1705
315607	3AA1-063SOLA	1.0545	80/20	1.0545
315608	3AA2-088SOLA	0.6494	80/20	0.6494
315611	6Z1-036WIND	2.4749	80/20	2.4749
315612	3AA2-057SOLA	1.1428	80/20	1.1428
315614	AA2-178 C	0.7978	80/20	0.7978
920591	AA2-165 C	0.1355	80/20	0.1355
920671	AA2-174 C OP	0.0536	80/20	0.0536
922922	AB1-081 C OP	10.5510	80/20	10.5510
923262	AB1-132 C OP (Suspended)	16.2792	80/20	16.2792
923572	AB1-173 C OP	1.6336	80/20	1.6336
923582	AB1-173AC OP	1.6336	80/20	1.6336
923801	AB2-015 C OP	3.9820	80/20	3.9820
923911	AB2-031 C O1	1.6215	80/20	1.6215
923991	AB2-040 C O1	5.3244	80/20	5.3244
924151	AB2-059 C OP	2.1450	80/20	2.1450
924501	AB2-099 C (Suspended)	0.4014	80/20	0.4014
924511	AB2-100 C	1.4928	80/20	1.4928
925121	AB2-169 C	0.7426	80/20	0.7426
925171	AB2-174 C O1	0.8593	80/20	0.8593
925591	AC1-034 C	8.0545	80/20	8.0545

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925781	AC1-054 C O1	2.8182	80/20	2.8182
926071	AC1-086 C	23.9731	80/20	23.9731
926201	AC1-098 C	5.1403	80/20	5.1403
926211	AC1-099 C	1.7225	80/20	1.7225
927021	AC1-189 C	12.7300	80/20	12.7300
927141	AC1-208 C	7.7959	80/20	7.7959
932631	AC2-084 C	7.3277	80/20	7.3277
933991	AD1-023 C	7.7172	80/20	7.7172
934331	AD1-057 C O1	20.9211	80/20	20.9211
934521	AD1-076 C	30.1201	80/20	30.1201
936401	AD2-051 C O1	6.1146	80/20	6.1146
938171	AE1-026 C O1	19.4515	80/20	19.4515
938221	AE1-035 C	1.5355	80/20	1.5355
938771	AE1-103 C O1	1.5796	80/20	1.5796
940481	AE2-033 C	7.3096	80/20	7.3096
940491	AE2-034 C	3.4688	80/20	3.4688
940571	AE2-044 C	5.2755	80/20	5.2755
941501	AE2-147 C	4.7673	80/20	4.7673
941541	AE2-151 C	0.7628	80/20	0.7628
942471	AE2-260 C O1	10.0150	80/20	10.0150
942851	AE2-304 C	0.2096	80/20	0.2096
943171	AE2-346 C	0.9633	80/20	0.9633
943911	AF1-059	6.8380	80/20	6.8380
944141	AF1-082	3.3914	80/20	3.3914
944871	AF1-152 C	1.5891	80/20	1.5891
945711	AF1-236 C O1	37.9749	80/20	37.9749
946011	AF1-266	6.1187	80/20	6.1187
946281	AF1-292 C	0.9992	80/20	0.9992
957521	AF2-046 C	10.7844	80/20	10.7844
957531	AF2-047 C	8.2425	80/20	8.2425
957791	AF2-073 C (Withdrawn : 07/02/2020)	3.4329	80/20	3.4329
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.5257	80/20	1.5257
957861	AF2-080 C	11.5619	80/20	11.5619
959231	AF2-214 C	11.3988	80/20	11.3988
959511	AF2-242	5.6218	80/20	5.6218
959731	AF2-264 C	1.4952	80/20	1.4952
960081	AF2-299 C	1.6841	80/20	1.6841
960121	AF2-303 C O2	52.5170	80/20	52.5170
960331	AF2-324 C O2	21.7111	80/20	21.7111
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.5194	80/20	2.5194
960831	AF2-374 C	0.9226	80/20	0.9226
961091	AF2-400 C	0.2150	80/20	0.2150
NEWTON	NEWTON	1.3582	Confirmed LTF	1.3582
FARMERCITY	FARMERCITY	0.0779	Confirmed LTF	0.0779
G-007A	G-007A	0.9063	Confirmed LTF	0.9063
VFT	VFT	2.4123	Confirmed LTF	2.4123
CALDERWOOD	CALDERWOOD	1.0810	Confirmed LTF	1.0810
PRAIRIE	PRAIRIE	3.6653	Confirmed LTF	3.6653
CHEOAH	CHEOAH	1.1086	Confirmed LTF	1.1086
EDWARDS	EDWARDS	0.4095	Confirmed LTF	0.4095

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TILTON	TILTON	0.7245	Confirmed LTF	0.7245
GIBSON	GIBSON	0.6557	Confirmed LTF	0.6557
BLUEG	BLUEG	2.0259	Confirmed LTF	2.0259
TRIMBLE	TRIMBLE	0.6428	Confirmed LTF	0.6428
CATAWBA	CATAWBA	1.1687	Confirmed LTF	1.1687

13.5.5 Index 5

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97459093	313844	3HATHAWAY	DVP	314554	3BTLEBRO	DVP	1	DVP_P7-1: LN 2058-2181	tower	301.0	112.63	129.69	DC	51.37

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315136	1ROSEMG1	1.4855	50/50	1.4855
315137	1ROSEMS1	0.9212	50/50	0.9212
315138	1ROSEMG2	0.6962	50/50	0.6962
315601	1CONETOE2SOL	1.6496	50/50	1.6496
917512	Z2-088 E OP1	4.0985	50/50	4.0985
918532	AA1-067 E	0.2783	Adder	0.33
922922	AB1-081 C OP	32.2196	50/50	32.2196
922923	AB1-081 E OP	13.8084	50/50	13.8084
923262	AB1-132 C OP (Suspended)	6.4581	Adder	7.6
923263	AB1-132 E OP (Suspended)	2.7678	Adder	3.26
924151	AB2-059 C OP	6.5501	50/50	6.5501
924152	AB2-059 E OP	19.5619	50/50	19.5619
925591	AC1-034 C	24.5962	50/50	24.5962
925592	AC1-034 E	18.5550	50/50	18.5550
926071	AC1-086 C	9.5104	Adder	11.19
926072	AC1-086 E	4.3285	Adder	5.09
926211	AC1-099 C	-1.4621	Adder	-1.72
927021	AC1-189 C	7.4141	50/50	7.4141
927022	AC1-189 E	3.6931	50/50	3.6931
934331	AD1-057 C O1	11.7322	50/50	11.7322
934332	AD1-057 E O1	6.2585	50/50	6.2585
940571	AE2-044 C	16.1098	50/50	16.1098
940572	AE2-044 E	6.9042	50/50	6.9042
944141	AF1-082	10.3563	50/50	10.3563
957861	AF2-080 C	6.7337	50/50	6.7337
957862	AF2-080 E	2.9851	50/50	2.9851
959231	AF2-214 C	34.8087	50/50	34.8087
959232	AF2-214 E	52.1842	50/50	52.1842
960121	AF2-303 C O2	31.0903	50/50	31.0903
960122	AF2-303 E O2	20.2763	50/50	20.2763
960331	AF2-324 C O2	12.8471	50/50	12.8471
960332	AF2-324 E O2	6.8974	50/50	6.8974
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	3.8947	50/50	3.8947
NEWTON	NEWTON	0.5426	Confirmed LTF	0.5426
FARMERCITY	FARMERCITY	0.0310	Confirmed LTF	0.0310
G-007A	G-007A	0.3476	Confirmed LTF	0.3476
VFT	VFT	0.9223	Confirmed LTF	0.9223
CALDERWOOD	CALDERWOOD	0.4289	Confirmed LTF	0.4289

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
PRAIRIE	PRAIRIE	1.4620	Confirmed LTF	1.4620
CHEOAH	CHEOAH	0.4399	Confirmed LTF	0.4399
EDWARDS	EDWARDS	0.1638	Confirmed LTF	0.1638
TILTON	TILTON	0.2898	Confirmed LTF	0.2898
GIBSON	GIBSON	0.2621	Confirmed LTF	0.2621
BLUEG	BLUEG	0.8107	Confirmed LTF	0.8107
TRIMBLE	TRIMBLE	0.2571	Confirmed LTF	0.2571
CATAWBA	CATAWBA	0.4630	Confirmed LTF	0.4630

13.5.6 Index 6

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
95879007	242631	05EDAN 1	AEP	242620	05DANVL 2	AEP	1	AEP_P4_#11112_05J.FER R 765_A1	breaker	402.0	113.29	114.83	DC	13.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
244012	05PINNACLE	-1.8090	Adder	-2.13
917332	Z2-043 E	0.3416	Adder	0.4
917342	Z2-044 E	0.2131	Adder	0.25
917512	Z2-088 E OP1	1.3831	Adder	1.63
918492	AA1-063AE OP	1.1318	Adder	1.33
918532	AA1-067 E	0.2426	Adder	0.29
919692	AA2-053 E OP	1.0995	Adder	1.29
919702	AA2-057 E OP	1.2081	Adder	1.42
920592	AA2-165 E	0.1660	Adder	0.2
920672	AA2-174 E OP	0.1271	Adder	0.15
922922	AB1-081 C OP	3.4267	Adder	4.03
922923	AB1-081 E OP	1.4686	Adder	1.73
923262	AB1-132 C OP (Suspended)	4.0634	Adder	4.78
923263	AB1-132 E OP (Suspended)	1.7414	Adder	2.05
923572	AB1-173 C OP	0.6354	Adder	0.75
923573	AB1-173 E OP	0.2965	Adder	0.35
923582	AB1-173AC OP	0.6354	Adder	0.75
923583	AB1-173AE OP	0.2965	Adder	0.35
923911	AB2-031 C O1	0.6307	Adder	0.74
923912	AB2-031 E O1	0.3106	Adder	0.37
923991	AB2-040 C O1	2.0708	Adder	2.44
923992	AB2-040 E O1	1.6943	Adder	1.99
924022	AB2-043 E O1	0.8878	Adder	1.04
924152	AB2-059 E OP	2.0805	Adder	2.45
924162	AB2-060 E OP	1.3365	Adder	1.57
924301	AB2-077 C O1 (Suspended)	0.6357	Adder	0.75
924302	AB2-077 E O1 (Suspended)	0.4238	Adder	0.5
924311	AB2-078 C O1 (Suspended)	0.6357	Adder	0.75
924312	AB2-078 E O1 (Suspended)	0.4238	Adder	0.5
924321	AB2-079 C O1 (Suspended)	0.6357	Adder	0.75
924322	AB2-079 E O1 (Suspended)	0.4238	Adder	0.5
924501	AB2-099 C (Suspended)	0.1611	Adder	0.19
924502	AB2-099 E (Suspended)	0.0690	Adder	0.08
925122	AB2-169 E	1.6847	Adder	1.98
925172	AB2-174 E O1	1.7694	Adder	2.08

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925591	AC1-034 C	2.6159	Adder	3.08
925592	AC1-034 E	1.9734	Adder	2.32
925611	AC1-036 C	0.2686	Adder	0.32
925612	AC1-036 E	0.4382	Adder	0.52
925781	AC1-054 C O1	2.4980	Adder	2.94
925782	AC1-054 E O1	1.1507	Adder	1.35
926051	AC1-083 C O1	3.9626	50/50	3.9626
926052	AC1-083 E O1	6.4654	50/50	6.4654
926071	AC1-086 C	5.9838	Adder	7.04
926072	AC1-086 E	2.7234	Adder	3.2
926201	AC1-098 C	1.9882	Adder	2.34
926202	AC1-098 E	1.1845	Adder	1.39
926211	AC1-099 C	0.6663	Adder	0.78
926212	AC1-099 E	0.3913	Adder	0.46
926271	AC1-105 C O1 (Suspended)	1.9582	Adder	2.3
926272	AC1-105 E O1 (Suspended)	0.9748	Adder	1.15
927021	AC1-189 C	3.0130	Adder	3.54
927022	AC1-189 E	1.5009	Adder	1.77
927141	AC1-208 C	2.9907	Adder	3.52
927142	AC1-208 E	1.3280	Adder	1.56
927251	AC1-221 C	1.5648	50/50	1.5648
927252	AC1-221 E	1.5648	50/50	1.5648
927261	AC1-222 C	1.2518	Adder	1.47
927262	AC1-222 E	1.1917	Adder	1.4
932631	AC2-084 C	2.8343	Adder	3.33
932632	AC2-084 E	1.3960	Adder	1.64
932761	AC2-100 C	3.6012	50/50	3.6012
932762	AC2-100 E	1.7578	50/50	1.7578
933941	AD1-017 C	0.7925	50/50	0.7925
933942	AD1-017 E	1.2931	50/50	1.2931
934311	AD1-055 C	0.8691	Adder	1.02
934312	AD1-055 E	0.2241	Adder	0.26
934331	AD1-057 C O1	3.4134	Adder	4.02
934332	AD1-057 E O1	1.8209	Adder	2.14
934341	AD1-058 C	3.9228	50/50	3.9228
934342	AD1-058 E	0.9968	50/50	0.9968
934611	AD1-087 C O1	2.7885	Adder	3.28
934612	AD1-087 E O1	1.3105	Adder	1.54
934991	AD1-131 C	1.2862	50/50	1.2862
934992	AD1-131 E	0.8574	50/50	0.8574
935171	AD1-152 C O1	2.7711	Adder	3.26
935172	AD1-152 E O1	1.8474	Adder	2.17
936161	AD2-022 C O1	10.5804	50/50	10.5804
936162	AD2-022 E O1	6.3482	50/50	6.3482
936171	AD2-023 C O1	6.1719	50/50	6.1719
936172	AD2-023 E O1	3.3505	50/50	3.3505
936261	AD2-033 C	3.7513	Adder	4.41
936262	AD2-033 E	2.5008	Adder	2.94
936361	AD2-046 C O1	3.1497	Adder	3.71
936362	AD2-046 E O1	1.4484	Adder	1.7
936481	AD2-063 C O1	4.5403	Adder	5.34

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936482	AD2-063 E O1	3.0016	Adder	3.53
937481	AD2-202 C O1	0.7390	Adder	0.87
937482	AD2-202 E O1	0.4157	Adder	0.49
939181	AE1-148 C O1	3.0900	Adder	3.64
939182	AE1-148 E O1	2.0600	Adder	2.42
939441	AE1-176	-0.1149	Adder	-0.14
940081	AE1-250 C	14.0508	50/50	14.0508
940082	AE1-250 E	9.3672	50/50	9.3672
940241	AE2-006	0.1366	Adder	0.16
940571	AE2-044 C	1.7134	Adder	2.02
940572	AE2-044 E	0.7343	Adder	0.86
940661	AE2-053 O1	1.1444	Adder	1.35
941541	AE2-151 C	0.3022	Adder	0.36
941542	AE2-151 E	0.1627	Adder	0.19
942451	AE2-258	0.7407	Adder	0.87
943171	AE2-346 C	0.3866	Adder	0.45
943172	AE2-346 E	0.1657	Adder	0.19
943901	AF1-058 C	0.7057	Adder	0.83
943902	AF1-058 E	0.4705	Adder	0.55
943911	AF1-059	4.9266	Adder	5.8
944141	AF1-082	1.1014	Adder	1.3
945811	AF1-246 C O1	1.9428	Adder	2.29
945812	AF1-246 E O1	2.6829	Adder	3.16
957481	AF2-042 C O2	7.3549	Adder	16.33
957482	AF2-042 E O2	4.9032	Adder	10.88
957861	AF2-080 C	1.4504	Adder	3.22
957862	AF2-080 E	0.6429	Adder	1.43
959231	AF2-214 C	1.9621	Adder	4.36
959232	AF2-214 E	2.9415	Adder	6.53
959311	AF2-222 C	2.4620	Adder	5.47
959312	AF2-222 E	1.6495	Adder	3.66
959511	AF2-242	1.2786	Adder	2.84
959751	AF2-266 O2	1.2258	Adder	2.72
960061	AF2-297 C O2	1.6795	Adder	3.73
960062	AF2-297 E O2	1.1197	Adder	2.49
960121	AF2-303 C O2	3.7421	Adder	8.31
960122	AF2-303 E O2	2.4405	Adder	5.42
960331	AF2-324 C O2	1.5809	Adder	3.51
960332	AF2-324 E O2	0.8488	Adder	1.88
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.5185	Adder	1.15
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1296	Adder	0.29
960811	AF2-372 C	0.2128	Adder	0.47
960812	AF2-372 E	0.3473	Adder	0.77
960821	AF2-373 C	0.1698	Adder	0.38
960822	AF2-373 E	0.2547	Adder	0.57
960831	AF2-374 C	0.1904	Adder	0.42
960832	AF2-374 E	0.3107	Adder	0.69
NEWTON	NEWTON	0.3567	Confirmed LTF	0.3567
CPLE	CPLE	5.5176	Confirmed LTF	5.5176
G-007A	G-007A	0.6186	Confirmed LTF	0.6186
VFT	VFT	1.6254	Confirmed LTF	1.6254

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W2	CBM-W2	5.2744	Confirmed LTF	5.2744
TVA	TVA	1.9418	Confirmed LTF	1.9418
EDWARDS	EDWARDS	0.1740	Confirmed LTF	0.1740
CBM-S2	CBM-S2	37.0845	Confirmed LTF	37.0845
CBM-S1	CBM-S1	8.5967	Confirmed LTF	8.5967
TILTON	TILTON	0.3856	Confirmed LTF	0.3856
MADISON	MADISON	1.8829	Confirmed LTF	1.8829
GIBSON	GIBSON	0.2905	Confirmed LTF	0.2905
BLUEG	BLUEG	1.2187	Confirmed LTF	1.2187
TRIMBLE	TRIMBLE	0.4096	Confirmed LTF	0.4096
AA2-074	AA2-074	3.7471	LTF	3.7471

13.5.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98090138	313714	6PERQUIMANS	DVP	314662	6S HERTFORD	DVP	1	DVP_P1-2: LN 246	single	733.2	135.31	136.91	DC	12.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0325	80/20	0.0325
314574	6EVERETS	0.3446	80/20	0.3446
314582	3KELFORD	0.4969	80/20	0.4969
314589	3MURPHYS	0.0660	80/20	0.0660
314623	3WITAKRS	0.1596	80/20	0.1596
314704	3LAWRENC	0.1176	80/20	0.1176
315126	1ROARAP2	0.9082	80/20	0.9082
315128	1ROARAP4	0.8667	80/20	0.8667
315136	1ROSEMG1	1.5269	80/20	1.5269
315137	1ROSEMS1	0.9468	80/20	0.9468
315138	1ROSEMG2	0.7156	80/20	0.7156
315139	1GASTONA	2.2149	80/20	2.2149
315141	1GASTONB	2.2149	80/20	2.2149
315159	1KERR 2	0.3901	80/20	0.3901
315160	1KERR 3	0.3901	80/20	0.3901
315161	1KERR 4	0.3901	80/20	0.3901
315162	1KERR 5	0.3901	80/20	0.3901
315163	1KERR 6	0.3901	80/20	0.3901
315164	1KERR 7	0.3901	80/20	0.3901
315292	1DOMTR78	3.3298	80/20	3.3298
315294	1DOMTR10	25.0180	80/20	25.0180
315601	1CONETOE2SOL	1.4398	80/20	1.4398
315602	1HOLLOMANSOL	2.2223	80/20	2.2223
315606	3AA2-053SOLA	1.1036	80/20	1.1036
315607	3AA1-063SOLA	0.8357	80/20	0.8357
315608	3AA2-088SOLA	0.4899	80/20	0.4899
315611	6Z1-036WIND	27.9154	80/20	27.9154
315612	3AA2-057SOLA	0.8869	80/20	0.8869
315614	AA2-178 C	5.2604	80/20	5.2604
920591	AA2-165 C	0.1052	80/20	0.1052
920671	AA2-174 C OP	0.0505	80/20	0.0505
922922	AB1-081 C OP	5.9136	80/20	5.9136
923262	AB1-132 C OP (Suspended)	9.8053	80/20	9.8053
923572	AB1-173 C OP	1.1594	80/20	1.1594
923582	AB1-173AC OP	1.1594	80/20	1.1594
923831	AB2-022 C	-1.6400	Adder	-1.93
923911	AB2-031 C O1	1.1508	80/20	1.1508
923991	AB2-040 C O1	3.7787	80/20	3.7787
924151	AB2-059 C OP	1.2022	80/20	1.2022
924501	AB2-099 C (Suspended)	0.6347	80/20	0.6347
924511	AB2-100 C	0.8106	80/20	0.8106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.1767	80/20	2.1767
925171	AB2-174 C O1	0.5928	80/20	0.5928
925591	AC1-034 C	4.5144	80/20	4.5144
925781	AC1-054 C O1	2.9637	80/20	2.9637
926071	AC1-086 C	14.4395	80/20	14.4395
926201	AC1-098 C	5.2053	80/20	5.2053
926211	AC1-099 C	1.7443	80/20	1.7443
927021	AC1-189 C	8.6764	80/20	8.6764
927141	AC1-208 C	6.6480	80/20	6.6480
932631	AC2-084 C	7.4204	80/20	7.4204
933991	AD1-023 C	30.3123	80/20	30.3123
934331	AD1-057 C O1	6.8258	80/20	6.8258
934521	AD1-076 C	142.1118	80/20	142.1118
936401	AD2-051 C O1	12.4167	80/20	12.4167
938171	AE1-026 C O1	68.2899	80/20	68.2899
938221	AE1-035 C	3.2208	80/20	3.2208
940491	AE2-034 C	22.8724	80/20	22.8724
940571	AE2-044 C	2.9568	80/20	2.9568
941541	AE2-151 C	1.3133	80/20	1.3133
942471	AE2-260 C O1	5.3193	80/20	5.3193
942851	AE2-304 C	-0.7263	Adder	-0.85
943171	AE2-346 C	1.5233	80/20	1.5233
943911	AF1-059	5.3880	80/20	5.3880
944141	AF1-082	1.9008	80/20	1.9008
945711	AF1-236 C O1	250.3979	80/20	250.3979
946281	AF1-292 C	0.6331	80/20	0.6331
957521	AF2-046 C	12.9920	80/20	12.9920
957531	AF2-047 C	54.3491	80/20	54.3491
957861	AF2-080 C	7.8803	80/20	7.8803
959231	AF2-214 C	6.3888	80/20	6.3888
959511	AF2-242	13.1813	80/20	13.1813
959731	AF2-264 C	2.1088	80/20	2.1088
960081	AF2-299 C	1.0671	80/20	1.0671
960121	AF2-303 C O2	12.3223	80/20	12.3223
960331	AF2-324 C O2	5.3743	80/20	5.3743
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.6838	80/20	1.6838
960831	AF2-374 C	1.3333	80/20	1.3333
WEC	WEC	0.2337	Confirmed LTF	0.2337
LGEE	LGEE	0.4364	Confirmed LTF	0.4364
CPLE	CPLE	2.6804	Confirmed LTF	2.6804
CBM-W2	CBM-W2	9.0499	Confirmed LTF	9.0499
NY	NY	0.2068	Confirmed LTF	0.2068
CBM-W1	CBM-W1	8.8070	Confirmed LTF	8.8070
TVA	TVA	1.8732	Confirmed LTF	1.8732
CBM-S2	CBM-S2	16.2476	Confirmed LTF	16.2476
CBM-S1	CBM-S1	10.4966	Confirmed LTF	10.4966
MADISON	MADISON	0.5000	Confirmed LTF	0.5000
MEC	MEC	1.3920	Confirmed LTF	1.3920
AA2-074	AA2-074	1.8270	LTF	1.8270

13.5.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98090334	313845	6HATHAWAY	DVP	314591	6NASH	DVP	1	DVP_P1-2: LN 2058	single	449.32	108.09	119.78	DC	52.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.1795	80/20	0.1795
314572	3EMPORIA	0.0495	80/20	0.0495
314574	6EVERETS	0.2332	80/20	0.2332
314582	3KELFORD	0.3455	80/20	0.3455
314589	3MURPHYS	0.0594	80/20	0.0594
314623	3WITAKRS	0.2214	80/20	0.2214
314704	3LAWRENC	0.1687	80/20	0.1687
315115	1S HAMPT1	0.7687	80/20	0.7687
315126	1ROARAP2	1.1465	80/20	1.1465
315128	1ROARAP4	1.0941	80/20	1.0941
315136	1ROSEMG1	2.9849	80/20	2.9849
315137	1ROSEMS1	1.8510	80/20	1.8510
315138	1ROSEMG2	1.3990	80/20	1.3990
315139	1GASTONA	3.6772	80/20	3.6772
315141	1GASTONB	3.6772	80/20	3.6772
315292	1DOMTR78	0.8777	80/20	0.8777
315294	1DOMTR10	6.5947	80/20	6.5947
315601	1CONETOE2SOL	2.8147	80/20	2.8147
315602	1HOLLOMANSOL	1.0595	80/20	1.0595
315605	6W1-029WIND	0.2467	80/20	0.2467
315606	3AA2-053SOLA	1.1705	80/20	1.1705
315607	3AA1-063SOLA	1.0545	80/20	1.0545
315608	3AA2-088SOLA	0.6494	80/20	0.6494
315611	6Z1-036WIND	2.4749	80/20	2.4749
315612	3AA2-057SOLA	1.1428	80/20	1.1428
315614	AA2-178 C	0.7978	80/20	0.7978
920591	AA2-165 C	0.1355	80/20	0.1355
920671	AA2-174 C OP	0.0536	80/20	0.0536
922922	AB1-081 C OP	10.5510	80/20	10.5510
923262	AB1-132 C OP (Suspended)	16.2792	80/20	16.2792
923572	AB1-173 C OP	1.6336	80/20	1.6336
923582	AB1-173AC OP	1.6336	80/20	1.6336
923801	AB2-015 C OP	3.9820	80/20	3.9820
923911	AB2-031 C O1	1.6215	80/20	1.6215
923991	AB2-040 C O1	5.3244	80/20	5.3244
924151	AB2-059 C OP	2.1450	80/20	2.1450
924501	AB2-099 C (Suspended)	0.4014	80/20	0.4014
924511	AB2-100 C	1.4928	80/20	1.4928
925121	AB2-169 C	0.7426	80/20	0.7426
925171	AB2-174 C O1	0.8593	80/20	0.8593
925591	AC1-034 C	8.0545	80/20	8.0545

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925781	AC1-054 C O1	2.8182	80/20	2.8182
926071	AC1-086 C	23.9731	80/20	23.9731
926201	AC1-098 C	5.1403	80/20	5.1403
926211	AC1-099 C	1.7225	80/20	1.7225
927021	AC1-189 C	12.7300	80/20	12.7300
927141	AC1-208 C	7.7959	80/20	7.7959
932631	AC2-084 C	7.3277	80/20	7.3277
933991	AD1-023 C	7.7172	80/20	7.7172
934331	AD1-057 C O1	20.9211	80/20	20.9211
934521	AD1-076 C	30.1201	80/20	30.1201
936401	AD2-051 C O1	6.1146	80/20	6.1146
938171	AE1-026 C O1	19.4515	80/20	19.4515
938221	AE1-035 C	1.5355	80/20	1.5355
938771	AE1-103 C O1	1.5796	80/20	1.5796
940481	AE2-033 C	7.3096	80/20	7.3096
940491	AE2-034 C	3.4688	80/20	3.4688
940571	AE2-044 C	5.2755	80/20	5.2755
941501	AE2-147 C	4.7673	80/20	4.7673
941541	AE2-151 C	0.7628	80/20	0.7628
942471	AE2-260 C O1	10.0150	80/20	10.0150
942851	AE2-304 C	0.2096	80/20	0.2096
943171	AE2-346 C	0.9633	80/20	0.9633
943911	AF1-059	6.8380	80/20	6.8380
944141	AF1-082	3.3914	80/20	3.3914
944871	AF1-152 C	1.5891	80/20	1.5891
945711	AF1-236 C O1	37.9749	80/20	37.9749
946011	AF1-266	6.1187	80/20	6.1187
946281	AF1-292 C	0.9992	80/20	0.9992
957521	AF2-046 C	10.7844	80/20	10.7844
957531	AF2-047 C	8.2425	80/20	8.2425
957791	AF2-073 C (Withdrawn : 07/02/2020)	3.4329	80/20	3.4329
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.5257	80/20	1.5257
957861	AF2-080 C	11.5619	80/20	11.5619
959231	AF2-214 C	11.3988	80/20	11.3988
959511	AF2-242	5.6218	80/20	5.6218
959731	AF2-264 C	1.4952	80/20	1.4952
960081	AF2-299 C	1.6841	80/20	1.6841
960121	AF2-303 C O2	52.5170	80/20	52.5170
960331	AF2-324 C O2	21.7111	80/20	21.7111
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.5194	80/20	2.5194
960831	AF2-374 C	0.9226	80/20	0.9226
961091	AF2-400 C	0.2150	80/20	0.2150
NEWTON	NEWTON	1.3582	Confirmed LTF	1.3582
FARMERCITY	FARMERCITY	0.0779	Confirmed LTF	0.0779
G-007A	G-007A	0.9063	Confirmed LTF	0.9063
VFT	VFT	2.4123	Confirmed LTF	2.4123
CALDERWOOD	CALDERWOOD	1.0810	Confirmed LTF	1.0810
PRAIRIE	PRAIRIE	3.6653	Confirmed LTF	3.6653
CHEOAH	CHEOAH	1.1086	Confirmed LTF	1.1086
EDWARDS	EDWARDS	0.4095	Confirmed LTF	0.4095

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TILTON	TILTON	0.7245	Confirmed LTF	0.7245
GIBSON	GIBSON	0.6557	Confirmed LTF	0.6557
BLUEG	BLUEG	2.0259	Confirmed LTF	2.0259
TRIMBLE	TRIMBLE	0.6428	Confirmed LTF	0.6428
CATAWBA	CATAWBA	1.1687	Confirmed LTF	1.1687

13.5.9 Index 9

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
148844322	313851	6ECITYDP2	DVP	314638	6ELIZ CT	DVP	1	DVP_P4-2: 24662	breaker	1204.0	146.51	147.16	DC	17.34

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2965	50/50	0.2965
314582	3KELFORD	0.3850	50/50	0.3850
314639	6TANGLEW	1.7882	50/50	1.7882
315292	1DOMTR78	2.8458	50/50	2.8458
315294	1DOMTR10	21.3814	50/50	21.3814
315601	1CONETOE2SOL	1.2342	50/50	1.2342
315602	1HOLLOMANSOL	1.9263	50/50	1.9263
315605	6W1-029WIND	3.1460	50/50	3.1460
315611	6Z1-036WIND	23.7062	50/50	23.7062
315614	AA2-178 C	4.4799	50/50	4.4799
900672	V4-068 E	0.1418	Adder	0.17
901082	W1-029 E	122.2655	50/50	122.2655
916042	Z1-036 E (Suspended)	158.8312	50/50	158.8312
917122	Z2-027 E	4.4429	50/50	4.4429
917332	Z2-043 E	0.9705	50/50	0.9705
917342	Z2-044 E	0.2817	Adder	0.33
917512	Z2-088 E OP1	3.0665	50/50	3.0665
918512	AA1-065 E OP	5.0004	50/50	5.0004
918532	AA1-067 E	0.7366	50/50	0.7366
919692	AA2-053 E OP	1.8939	Adder	2.23
919702	AA2-057 E OP	1.7076	Adder	2.01
920592	AA2-165 E	0.2347	Adder	0.28
920672	AA2-174 E OP	0.2189	Adder	0.26
920692	AA2-178 E	11.1307	50/50	11.1307
923262	AB1-132 C OP (Suspended)	7.1179	Adder	8.37
923263	AB1-132 E OP (Suspended)	3.0505	Adder	3.59
923831	AB2-022 C	-2.4765	Adder	-2.91
924501	AB2-099 C (Suspended)	0.4884	50/50	0.4884
924502	AB2-099 E (Suspended)	0.2093	50/50	0.2093
925121	AB2-169 C	1.8626	50/50	1.8626
925122	AB2-169 E	9.6908	50/50	9.6908
926071	AC1-086 C	10.4819	Adder	12.33
926072	AC1-086 E	4.7707	Adder	5.61
926201	AC1-098 C	4.1717	50/50	4.1717
926202	AC1-098 E	2.4853	50/50	2.4853
926211	AC1-099 C	1.3980	50/50	1.3980
926212	AC1-099 E	0.8210	50/50	0.8210
927021	AC1-189 C	7.4477	50/50	7.4477
927022	AC1-189 E	3.7099	50/50	3.7099
927141	AC1-208 C	4.6261	Adder	5.44

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927142	AC1-208 E	2.0542	Adder	2.42
932631	AC2-084 C	5.9469	50/50	5.9469
932632	AC2-084 E	2.9291	50/50	2.9291
933991	AD1-023 C	25.9479	50/50	25.9479
933992	AD1-023 E	14.1261	50/50	14.1261
934331	AD1-057 C O1	4.9484	Adder	5.82
934332	AD1-057 E O1	2.6397	Adder	3.11
934521	AD1-076 C	121.3529	50/50	121.3529
934522	AD1-076 E	61.7927	50/50	61.7927
936401	AD2-051 C O1	10.7603	50/50	10.7603
936402	AD2-051 E O1	4.6204	50/50	4.6204
938171	AE1-026 C O1	58.5576	50/50	58.5576
938172	AE1-026 E O1	15.4488	50/50	15.4488
938221	AE1-035 C	2.7919	50/50	2.7919
938222	AE1-035 E	1.3751	50/50	1.3751
940491	AE2-034 C	19.4788	50/50	19.4788
940492	AE2-034 E	8.3480	50/50	8.3480
941501	AE2-147 C	60.7950	50/50	60.7950
941502	AE2-147 E	40.5300	50/50	40.5300
941541	AE2-151 C	1.0040	50/50	1.0040
941542	AE2-151 E	0.5406	50/50	0.5406
942851	AE2-304 C	2.3303	50/50	2.3303
942852	AE2-304 E	0.9062	50/50	0.9062
943171	AE2-346 C	1.1722	50/50	1.1722
943172	AE2-346 E	0.5024	50/50	0.5024
944871	AF1-152 C	20.2650	50/50	20.2650
944872	AF1-152 E	13.5100	50/50	13.5100
945711	AF1-236 C O1	213.2460	50/50	213.2460
945712	AF1-236 E O1	347.9278	50/50	347.9278
957521	AF2-046 C	10.2515	50/50	10.2515
957522	AF2-046 E	5.1565	50/50	5.1565
957531	AF2-047 C	46.2852	50/50	46.2852
957532	AF2-047 E	23.2818	50/50	23.2818
957821	AF2-076 C O2	20.2647	50/50	20.2647
957822	AF2-076 E O2	13.5098	50/50	13.5098
957861	AF2-080 C	6.7643	50/50	6.7643
957862	AF2-080 E	2.9986	50/50	2.9986
959511	AF2-242	11.2944	50/50	11.2944
959731	AF2-264 C	1.6387	50/50	1.6387
959732	AF2-264 E	0.8071	50/50	0.8071
960121	AF2-303 C O2	4.7285	Adder	10.5
960122	AF2-303 E O2	3.0838	Adder	6.85
960331	AF2-324 C O2	2.0637	Adder	4.58
960332	AF2-324 E O2	1.1080	Adder	2.46
960831	AF2-374 C	1.0337	50/50	1.0337
960832	AF2-374 E	1.6865	50/50	1.6865
WEC	WEC	0.1953	Confirmed LTF	0.1953
LGEE	LGEE	0.3645	Confirmed LTF	0.3645
CPL	CPL	2.2809	Confirmed LTF	2.2809
CBM-W2	CBM-W2	7.6167	Confirmed LTF	7.6167
NY	NY	0.1841	Confirmed LTF	0.1841
CBM-W1	CBM-W1	7.3559	Confirmed LTF	7.3559

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TVA	TVA	1.5792	Confirmed LTF	1.5792
O-066	O-066	2.7082	Confirmed LTF	2.7082
CBM-S2	CBM-S2	13.7911	Confirmed LTF	13.7911
CBM-S1	CBM-S1	8.8438	Confirmed LTF	8.8438
G-007	G-007	0.4233	Confirmed LTF	0.4233
MADISON	MADISON	0.4254	Confirmed LTF	0.4254
MEC	MEC	1.1663	Confirmed LTF	1.1663
AA2-074	AA2-074	1.5543	LTF	1.5543

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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
98090225	313885	6WALBMRL	DVP	313714	6PERQUIMANS	DVP	1	DVP_P1-2: LN 246	single	733.2	130.23	131.83	DC	12.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0325	80/20	0.0325
314574	6EVERETS	0.3446	80/20	0.3446
314582	3KELFORD	0.4969	80/20	0.4969
314589	3MURPHYS	0.0660	80/20	0.0660
314623	3WITAKRS	0.1596	80/20	0.1596
314704	3LAWRENC	0.1176	80/20	0.1176
315126	1ROARAP2	0.9082	80/20	0.9082
315128	1ROARAP4	0.8667	80/20	0.8667
315136	1ROSEMG1	1.5269	80/20	1.5269
315137	1ROSEMS1	0.9468	80/20	0.9468
315138	1ROSEMG2	0.7156	80/20	0.7156
315139	1GASTONA	2.2149	80/20	2.2149
315141	1GASTONB	2.2149	80/20	2.2149
315159	1KERR 2	0.3901	80/20	0.3901
315160	1KERR 3	0.3901	80/20	0.3901
315161	1KERR 4	0.3901	80/20	0.3901
315162	1KERR 5	0.3901	80/20	0.3901
315163	1KERR 6	0.3901	80/20	0.3901
315164	1KERR 7	0.3901	80/20	0.3901
315292	1DOMTR78	3.3298	80/20	3.3298
315294	1DOMTR10	25.0180	80/20	25.0180
315601	1CONETOE2SOL	1.4398	80/20	1.4398
315602	1HOLLOMANSOL	2.2223	80/20	2.2223
315606	3AA2-053SOLA	1.1036	80/20	1.1036
315607	3AA1-063SOLA	0.8357	80/20	0.8357
315608	3AA2-088SOLA	0.4899	80/20	0.4899
315611	6Z1-036WIND	-9.4219	Adder	-11.08
315612	3AA2-057SOLA	0.8869	80/20	0.8869
315614	AA2-178 C	5.2604	80/20	5.2604
920591	AA2-165 C	0.1052	80/20	0.1052
920671	AA2-174 C OP	0.0505	80/20	0.0505
922922	AB1-081 C OP	5.9136	80/20	5.9136
923262	AB1-132 C OP (Suspended)	9.8053	80/20	9.8053
923572	AB1-173 C OP	1.1594	80/20	1.1594
923582	AB1-173AC OP	1.1594	80/20	1.1594
923831	AB2-022 C	-1.6400	Adder	-1.93
923911	AB2-031 C O1	1.1508	80/20	1.1508
923991	AB2-040 C O1	3.7787	80/20	3.7787
924151	AB2-059 C OP	1.2022	80/20	1.2022
924501	AB2-099 C (Suspended)	0.6347	80/20	0.6347
924511	AB2-100 C	0.8106	80/20	0.8106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.1767	80/20	2.1767
925171	AB2-174 C O1	0.5928	80/20	0.5928
925591	AC1-034 C	4.5144	80/20	4.5144
925781	AC1-054 C O1	2.9637	80/20	2.9637
926071	AC1-086 C	14.4395	80/20	14.4395
926201	AC1-098 C	5.2053	80/20	5.2053
926211	AC1-099 C	1.7443	80/20	1.7443
927021	AC1-189 C	8.6764	80/20	8.6764
927141	AC1-208 C	6.6480	80/20	6.6480
932631	AC2-084 C	7.4204	80/20	7.4204
933991	AD1-023 C	30.3123	80/20	30.3123
934331	AD1-057 C O1	6.8258	80/20	6.8258
934521	AD1-076 C	142.1118	80/20	142.1118
936401	AD2-051 C O1	12.4167	80/20	12.4167
938171	AE1-026 C O1	68.2899	80/20	68.2899
938221	AE1-035 C	3.2208	80/20	3.2208
940491	AE2-034 C	22.8724	80/20	22.8724
940571	AE2-044 C	2.9568	80/20	2.9568
941541	AE2-151 C	1.3133	80/20	1.3133
942471	AE2-260 C O1	5.3193	80/20	5.3193
942851	AE2-304 C	-0.7263	Adder	-0.85
943171	AE2-346 C	1.5233	80/20	1.5233
943911	AF1-059	5.3880	80/20	5.3880
944141	AF1-082	1.9008	80/20	1.9008
945711	AF1-236 C O1	250.3979	80/20	250.3979
946281	AF1-292 C	0.6331	80/20	0.6331
957521	AF2-046 C	12.9920	80/20	12.9920
957531	AF2-047 C	54.3491	80/20	54.3491
957861	AF2-080 C	7.8803	80/20	7.8803
959231	AF2-214 C	6.3888	80/20	6.3888
959511	AF2-242	13.1813	80/20	13.1813
959731	AF2-264 C	2.1088	80/20	2.1088
960081	AF2-299 C	1.0671	80/20	1.0671
960121	AF2-303 C O2	12.3223	80/20	12.3223
960331	AF2-324 C O2	5.3743	80/20	5.3743
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.6838	80/20	1.6838
960831	AF2-374 C	1.3333	80/20	1.3333
WEC	WEC	0.2337	Confirmed LTF	0.2337
LGEE	LGEE	0.4364	Confirmed LTF	0.4364
CPLE	CPLE	2.6804	Confirmed LTF	2.6804
CBM-W2	CBM-W2	9.0499	Confirmed LTF	9.0499
NY	NY	0.2068	Confirmed LTF	0.2068
CBM-W1	CBM-W1	8.8070	Confirmed LTF	8.8070
TVA	TVA	1.8732	Confirmed LTF	1.8732
CBM-S2	CBM-S2	16.2476	Confirmed LTF	16.2476
CBM-S1	CBM-S1	10.4966	Confirmed LTF	10.4966
MADISON	MADISON	0.5000	Confirmed LTF	0.5000
MEC	MEC	1.3920	Confirmed LTF	1.3920
AA2-074	AA2-074	1.8270	LTF	1.8270

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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
98090199	314203	6MACKEYS	DVP	314637	6EDENTON	DVP	1	DVP_P1-2: LN 246	single	731.32	134.38	135.98	DC	12.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0325	80/20	0.0325
314574	6EVERETS	0.3446	80/20	0.3446
314582	3KELFORD	0.4969	80/20	0.4969
314589	3MURPHYS	0.0660	80/20	0.0660
314623	3WITAKRS	0.1596	80/20	0.1596
314704	3LAWRENC	0.1176	80/20	0.1176
315126	1ROARAP2	0.9082	80/20	0.9082
315128	1ROARAP4	0.8667	80/20	0.8667
315136	1ROSEMG1	1.5269	80/20	1.5269
315137	1ROSEMS1	0.9468	80/20	0.9468
315138	1ROSEMG2	0.7156	80/20	0.7156
315139	1GASTONA	2.2149	80/20	2.2149
315141	1GASTONB	2.2149	80/20	2.2149
315159	1KERR 2	0.3901	80/20	0.3901
315160	1KERR 3	0.3901	80/20	0.3901
315161	1KERR 4	0.3901	80/20	0.3901
315162	1KERR 5	0.3901	80/20	0.3901
315163	1KERR 6	0.3901	80/20	0.3901
315164	1KERR 7	0.3901	80/20	0.3901
315292	1DOMTR78	3.3298	80/20	3.3298
315294	1DOMTR10	25.0180	80/20	25.0180
315601	1CONETOE2SOL	1.4398	80/20	1.4398
315602	1HOLLOMANSOL	2.2223	80/20	2.2223
315606	3AA2-053SOLA	1.1036	80/20	1.1036
315607	3AA1-063SOLA	0.8357	80/20	0.8357
315608	3AA2-088SOLA	0.4899	80/20	0.4899
315611	6Z1-036WIND	-9.4219	Adder	-11.08
315612	3AA2-057SOLA	0.8869	80/20	0.8869
315614	AA2-178 C	5.2604	80/20	5.2604
920591	AA2-165 C	0.1052	80/20	0.1052
920671	AA2-174 C OP	0.0505	80/20	0.0505
922922	AB1-081 C OP	5.9136	80/20	5.9136
923262	AB1-132 C OP (Suspended)	9.8053	80/20	9.8053
923572	AB1-173 C OP	1.1594	80/20	1.1594
923582	AB1-173AC OP	1.1594	80/20	1.1594
923831	AB2-022 C	-1.6400	Adder	-1.93
923911	AB2-031 C O1	1.1508	80/20	1.1508
923991	AB2-040 C O1	3.7787	80/20	3.7787
924151	AB2-059 C OP	1.2022	80/20	1.2022
924501	AB2-099 C (Suspended)	0.6347	80/20	0.6347
924511	AB2-100 C	0.8106	80/20	0.8106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.1767	80/20	2.1767
925171	AB2-174 C O1	0.5928	80/20	0.5928
925591	AC1-034 C	4.5144	80/20	4.5144
925781	AC1-054 C O1	2.9637	80/20	2.9637
926071	AC1-086 C	14.4395	80/20	14.4395
926201	AC1-098 C	5.2053	80/20	5.2053
926211	AC1-099 C	1.7443	80/20	1.7443
927021	AC1-189 C	8.6764	80/20	8.6764
927141	AC1-208 C	6.6480	80/20	6.6480
932631	AC2-084 C	7.4204	80/20	7.4204
933991	AD1-023 C	30.3123	80/20	30.3123
934331	AD1-057 C O1	6.8258	80/20	6.8258
934521	AD1-076 C	142.1118	80/20	142.1118
936401	AD2-051 C O1	12.4167	80/20	12.4167
938171	AE1-026 C O1	68.2899	80/20	68.2899
938221	AE1-035 C	3.2208	80/20	3.2208
940491	AE2-034 C	22.8724	80/20	22.8724
940571	AE2-044 C	2.9568	80/20	2.9568
941541	AE2-151 C	1.3133	80/20	1.3133
942471	AE2-260 C O1	5.3193	80/20	5.3193
942851	AE2-304 C	-0.7263	Adder	-0.85
943171	AE2-346 C	1.5233	80/20	1.5233
943911	AF1-059	5.3880	80/20	5.3880
944141	AF1-082	1.9008	80/20	1.9008
945711	AF1-236 C O1	250.3979	80/20	250.3979
946281	AF1-292 C	0.6331	80/20	0.6331
957521	AF2-046 C	12.9920	80/20	12.9920
957531	AF2-047 C	54.3491	80/20	54.3491
957861	AF2-080 C	7.8803	80/20	7.8803
959231	AF2-214 C	6.3888	80/20	6.3888
959511	AF2-242	13.1813	80/20	13.1813
959731	AF2-264 C	2.1088	80/20	2.1088
960081	AF2-299 C	1.0671	80/20	1.0671
960121	AF2-303 C O2	12.3223	80/20	12.3223
960331	AF2-324 C O2	5.3743	80/20	5.3743
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.6838	80/20	1.6838
960831	AF2-374 C	1.3333	80/20	1.3333
WEC	WEC	0.2337	Confirmed LTF	0.2337
LGEE	LGEE	0.4364	Confirmed LTF	0.4364
CPLE	CPLE	2.6804	Confirmed LTF	2.6804
CBM-W2	CBM-W2	9.0499	Confirmed LTF	9.0499
NY	NY	0.2068	Confirmed LTF	0.2068
CBM-W1	CBM-W1	8.8070	Confirmed LTF	8.8070
TVA	TVA	1.8732	Confirmed LTF	1.8732
CBM-S2	CBM-S2	16.2476	Confirmed LTF	16.2476
CBM-S1	CBM-S1	10.4966	Confirmed LTF	10.4966
MADISON	MADISON	0.5000	Confirmed LTF	0.5000
MEC	MEC	1.3920	Confirmed LTF	1.3920
AA2-074	AA2-074	1.8270	LTF	1.8270

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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
97804360	314282	6CARSON	DVP	314285	6CHRL249	DVP	1	DVP_P4-2: 562T563	breaker	684.0	172.71	173.73	DC	15.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.4961	50/50	0.4961
314572	3EMPORIA	0.0563	50/50	0.0563
314704	3LAWRENC	0.2225	50/50	0.2225
314947	8GREENSVILLE	28.5101	50/50	28.5101
315073	1STONECA	-2.3873	Adder	-2.81
315136	1ROSEMG1	1.4393	50/50	1.4393
315137	1ROSEMS1	0.8925	50/50	0.8925
315138	1ROSEMG2	0.6746	50/50	0.6746
315139	1GASTONA	2.1424	50/50	2.1424
315141	1GASTONB	2.1424	50/50	2.1424
315294	1DOMTR10	3.2046	Adder	3.77
900672	V4-068 E	0.1060	Adder	0.12
917332	Z2-043 E	0.4484	Adder	0.53
917342	Z2-044 E	0.2477	Adder	0.29
917512	Z2-088 E OP1	1.5190	Adder	1.79
918492	AA1-063AE OP	1.7603	Adder	2.07
918512	AA1-065 E OP	1.3711	Adder	1.61
918532	AA1-067 E	0.2627	Adder	0.31
919692	AA2-053 E OP	1.7687	Adder	2.08
919702	AA2-057 E OP	1.4762	Adder	1.74
920042	AA2-088 E OP	3.5841	Adder	4.22
920592	AA2-165 E	0.2029	Adder	0.24
920672	AA2-174 E OP	0.2044	Adder	0.24
922922	AB1-081 C OP	3.7942	Adder	4.46
922923	AB1-081 E OP	1.6261	Adder	1.91
923262	AB1-132 C OP (Suspended)	9.4844	50/50	9.4844
923263	AB1-132 E OP (Suspended)	4.0648	50/50	4.0648
923572	AB1-173 C OP	1.5987	50/50	1.5987
923573	AB1-173 E OP	0.7460	50/50	0.7460
923582	AB1-173AC OP	1.5987	50/50	1.5987
923583	AB1-173AE OP	0.7460	50/50	0.7460
923852	AB2-025 E	1.2920	50/50	1.2920
923911	AB2-031 C O1	1.5868	50/50	1.5868
923912	AB2-031 E O1	0.7816	50/50	0.7816
923991	AB2-040 C O1	5.2105	50/50	5.2105
923992	AB2-040 E O1	4.2631	50/50	4.2631
924022	AB2-043 E O1	1.0637	Adder	1.25
924152	AB2-059 E OP	2.3036	Adder	2.71
924162	AB2-060 E OP	1.5967	Adder	1.88

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	0.7548	Adder	0.89
924302	AB2-077 E O1 (Suspended)	0.5032	Adder	0.59
924311	AB2-078 C O1 (Suspended)	0.7548	Adder	0.89
924312	AB2-078 E O1 (Suspended)	0.5032	Adder	0.59
924321	AB2-079 C O1 (Suspended)	0.7548	Adder	0.89
924322	AB2-079 E O1 (Suspended)	0.5032	Adder	0.59
924501	AB2-099 C (Suspended)	0.2125	Adder	0.25
924502	AB2-099 E (Suspended)	0.0911	Adder	0.11
924511	AB2-100 C	1.8239	50/50	1.8239
924512	AB2-100 E	5.2081	50/50	5.2081
925122	AB2-169 E	1.8308	Adder	2.15
925171	AB2-174 C O1	0.8914	50/50	0.8914
925172	AB2-174 E O1	4.6755	50/50	4.6755
925591	AC1-034 C	2.8965	Adder	3.41
925592	AC1-034 E	2.1851	Adder	2.57
925611	AC1-036 C	0.3066	Adder	0.36
925612	AC1-036 E	0.5003	Adder	0.59
925781	AC1-054 C O1	3.1051	Adder	3.65
925782	AC1-054 E O1	1.4304	Adder	1.68
926071	AC1-086 C	13.9670	50/50	13.9670
926072	AC1-086 E	6.3568	50/50	6.3568
926201	AC1-098 C	2.6095	Adder	3.07
926202	AC1-098 E	1.5546	Adder	1.83
926211	AC1-099 C	0.8745	Adder	1.03
926212	AC1-099 E	0.5136	Adder	0.6
926271	AC1-105 C O1 (Suspended)	1.9829	Adder	2.33
926272	AC1-105 E O1 (Suspended)	0.9871	Adder	1.16
927021	AC1-189 C	3.2944	Adder	3.88
927022	AC1-189 E	1.6410	Adder	1.93
927141	AC1-208 C	4.0314	Adder	4.74
927142	AC1-208 E	1.7901	Adder	2.11
927251	AC1-221 C	0.7780	Adder	0.92
927252	AC1-221 E	0.7780	Adder	0.92
927261	AC1-222 C	1.2345	Adder	1.45
927262	AC1-222 E	1.1752	Adder	1.38
932631	AC2-084 C	3.7200	Adder	4.38
932632	AC2-084 E	1.8322	Adder	2.16
932761	AC2-100 C	1.7904	Adder	2.11
932762	AC2-100 E	0.8739	Adder	1.03
933991	AD1-023 C	3.8491	Adder	4.53
933992	AD1-023 E	2.0955	Adder	2.47
934311	AD1-055 C	0.8571	Adder	1.01
934312	AD1-055 E	0.2210	Adder	0.26
934331	AD1-057 C O1	4.9302	Adder	5.8
934332	AD1-057 E O1	2.6300	Adder	3.09

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934341	AD1-058 C	1.9503	Adder	2.29
934342	AD1-058 E	0.4956	Adder	0.58
934611	AD1-087 C O1	3.0816	Adder	3.63
934612	AD1-087 E O1	1.4483	Adder	1.7
934991	AD1-131 C	0.6394	Adder	0.75
934992	AD1-131 E	0.4263	Adder	0.5
935171	AD1-152 C O1	3.0624	Adder	3.6
935172	AD1-152 E O1	2.0416	Adder	2.4
936261	AD2-033 C	4.3247	Adder	5.09
936262	AD2-033 E	2.8832	Adder	3.39
936361	AD2-046 C O1	3.5694	Adder	4.2
936362	AD2-046 E O1	1.6414	Adder	1.93
936401	AD2-051 C O1	3.0488	Adder	3.59
936402	AD2-051 E O1	1.3091	Adder	1.54
936481	AD2-063 C O1	5.3473	Adder	6.29
936482	AD2-063 E O1	3.5352	Adder	4.16
936762	AD2-097 E	-3.4441	Adder	-4.05
937481	AD2-202 C O1	0.8167	Adder	0.96
937482	AD2-202 E O1	0.4594	Adder	0.54
938171	AE1-026 C O1	9.7010	Adder	11.41
938172	AE1-026 E O1	2.5594	Adder	3.01
938221	AE1-035 C	0.7655	Adder	0.9
938222	AE1-035 E	0.3770	Adder	0.44
938491	AE1-068 C O1	33.0088	50/50	33.0088
938492	AE1-068 E O1	18.2312	50/50	18.2312
938501	AE1-069 C O1	25.8063	50/50	25.8063
938502	AE1-069 E O1	14.7537	50/50	14.7537
939181	AE1-148 C O1	3.5109	Adder	4.13
939182	AE1-148 E O1	2.3406	Adder	2.75
939411	AE1-173 C	31.3874	Adder	36.93
939412	AE1-173 E	20.9250	Adder	24.62
940241	AE2-006	0.1560	Adder	0.18
940471	AE2-031 C	17.9777	50/50	17.9777
940472	AE2-031 E	11.9851	50/50	11.9851
940481	AE2-033 C	17.9557	50/50	17.9557
940482	AE2-033 E	12.1050	50/50	12.1050
940542	AE2-040 BAT	4.1423	50/50	4.1423
940571	AE2-044 C	1.8971	Adder	2.23
940572	AE2-044 E	0.8130	Adder	0.96
940661	AE2-053 O1	1.3003	Adder	1.53
941031	AE2-094 C	21.6524	50/50	21.6524
941032	AE2-094 E	9.6976	50/50	9.6976
941541	AE2-151 C	0.3965	Adder	0.47
941542	AE2-151 E	0.2135	Adder	0.25
942451	AE2-258	0.8875	Adder	1.04
942471	AE2-260 C O1	13.5157	50/50	13.5157
942472	AE2-260 E O1	19.1703	50/50	19.1703
942931	AE2-313 C	19.4655	50/50	19.4655
942932	AE2-313 E	12.9770	50/50	12.9770
943171	AE2-346 C	0.5101	Adder	0.6
943172	AE2-346 E	0.2186	Adder	0.26
943901	AF1-058 C	0.6841	Adder	0.8

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943902	AF1-058 E	0.4561	Adder	0.54
943911	AF1-059	10.1430	50/50	10.1430
944011	AF1-069 C	7.0746	50/50	7.0746
944012	AF1-069 E	2.7483	50/50	2.7483
944141	AF1-082	1.2196	Adder	1.43
945811	AF1-246 C O1	3.0955	Adder	3.64
945812	AF1-246 E O1	4.2748	Adder	5.03
946011	AF1-266	15.0304	50/50	15.0304
946281	AF1-292 C	1.2035	50/50	1.2035
946282	AF1-292 E	0.8114	50/50	0.8114
957481	AF2-042 C O2	11.7189	Adder	26.01
957482	AF2-042 E O2	7.8126	Adder	17.34
957521	AF2-046 C	3.1764	Adder	7.05
957522	AF2-046 E	1.5978	Adder	3.55
957861	AF2-080 C	1.5858	Adder	3.52
957862	AF2-080 E	0.7030	Adder	1.56
958142	AF2-108 BAT	2.9355	50/50	2.9355
959231	AF2-214 C	2.1725	Adder	4.82
959232	AF2-214 E	3.2570	Adder	7.23
959311	AF2-222 C	2.7922	Adder	6.2
959312	AF2-222 E	1.8708	Adder	4.15
959511	AF2-242	1.3876	Adder	3.08
959731	AF2-264 C	0.4290	Adder	0.95
959732	AF2-264 E	0.2113	Adder	0.47
959751	AF2-266 O2	1.9531	Adder	4.34
960061	AF2-297 C O2	1.5206	Adder	3.38
960062	AF2-297 E O2	1.0137	Adder	2.25
960081	AF2-299 C	2.0285	50/50	2.0285
960082	AF2-299 E	1.3523	50/50	1.3523
960121	AF2-303 C O2	4.1612	Adder	9.24
960122	AF2-303 E O2	2.7138	Adder	6.02
960331	AF2-324 C O2	1.7566	Adder	3.9
960332	AF2-324 E O2	0.9431	Adder	2.09
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.5735	Adder	1.27
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1434	Adder	0.32
960811	AF2-372 C	0.2527	Adder	0.56
960812	AF2-372 E	0.4124	Adder	0.92
960821	AF2-373 C	0.1796	Adder	0.4
960822	AF2-373 E	0.2695	Adder	0.6
960831	AF2-374 C	0.2693	Adder	0.6
960832	AF2-374 E	0.4394	Adder	0.98
WEC	WEC	0.3667	Confirmed LTF	0.3667
LGEE	LGEE	0.6920	Confirmed LTF	0.6920
CPL	CPL	3.8076	Confirmed LTF	3.8076
CBM-W2	CBM-W2	14.7420	Confirmed LTF	14.7420
NY	NY	0.5176	Confirmed LTF	0.5176
CBM-W1	CBM-W1	13.6859	Confirmed LTF	13.6859
TVA	TVA	3.0996	Confirmed LTF	3.0996
O-066	O-066	7.3450	Confirmed LTF	7.3450
CBM-S2	CBM-S2	25.9522	Confirmed LTF	25.9522
CBM-S1	CBM-S1	17.2786	Confirmed LTF	17.2786

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
G-007	G-007	1.1461	Confirmed LTF	1.1461
MADISON	MADISON	0.8669	Confirmed LTF	0.8669
MEC	MEC	2.2214	Confirmed LTF	2.2214
AA2-074	AA2-074	2.5952	LTF	2.5952

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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
97804549	314282	6CARSON	DVP	314331	6POE	DVP	1	DVP_P4-2: 562T563	breaker	830.0	115.91	116.62	DC	12.98

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.4549	50/50	0.4549
314572	3EMPORIA	0.0497	50/50	0.0497
314704	3LAWRENC	0.1970	50/50	0.1970
315073	1STONECA	-2.5521	Adder	-3.0
917332	Z2-043 E	0.3563	Adder	0.42
917342	Z2-044 E	0.2089	Adder	0.25
917512	Z2-088 E OP1	1.2619	Adder	1.48
918492	AA1-063AE OP	1.3792	Adder	1.62
918512	AA1-065 E OP	1.0567	Adder	1.24
918532	AA1-067 E	0.2124	Adder	0.25
919692	AA2-053 E OP	1.4696	Adder	1.73
919702	AA2-057 E OP	1.2393	Adder	1.46
920592	AA2-165 E	0.1703	Adder	0.2
920672	AA2-174 E OP	0.1698	Adder	0.2
922922	AB1-081 C OP	3.2187	Adder	3.79
922923	AB1-081 E OP	1.3794	Adder	1.62
923262	AB1-132 C OP (Suspended)	6.9915	Adder	8.23
923263	AB1-132 E OP (Suspended)	2.9964	Adder	3.53
923572	AB1-173 C OP	1.3921	50/50	1.3921
923573	AB1-173 E OP	0.6497	50/50	0.6497
923582	AB1-173AC OP	1.3921	50/50	1.3921
923583	AB1-173AE OP	0.6497	50/50	0.6497
923852	AB2-025 E	1.1848	50/50	1.1848
923911	AB2-031 C O1	1.3818	50/50	1.3818
923912	AB2-031 E O1	0.6806	50/50	0.6806
923991	AB2-040 C O1	4.5373	50/50	4.5373
923992	AB2-040 E O1	3.7123	50/50	3.7123
924022	AB2-043 E O1	0.9273	Adder	1.09
924152	AB2-059 E OP	1.9542	Adder	2.3
924162	AB2-060 E OP	1.3922	Adder	1.64
924301	AB2-077 C O1 (Suspended)	0.6577	Adder	0.77
924302	AB2-077 E O1 (Suspended)	0.4385	Adder	0.52
924311	AB2-078 C O1 (Suspended)	0.6577	Adder	0.77
924312	AB2-078 E O1 (Suspended)	0.4385	Adder	0.52
924321	AB2-079 C O1 (Suspended)	0.6577	Adder	0.77

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924322	AB2-079 E O1 (Suspended)	0.4385	Adder	0.52
924501	AB2-099 C (Suspended)	0.1609	Adder	0.19
924502	AB2-099 E (Suspended)	0.0690	Adder	0.08
924511	AB2-100 C	1.6389	50/50	1.6389
924512	AB2-100 E	4.6797	50/50	4.6797
925171	AB2-174 C O1	0.7809	50/50	0.7809
925172	AB2-174 E O1	4.0960	50/50	4.0960
925331	AB2-190 C	-4.8628	Adder	-5.72
925591	AC1-034 C	2.4571	Adder	2.89
925592	AC1-034 E	1.8536	Adder	2.18
925611	AC1-036 C	0.2681	Adder	0.32
925612	AC1-036 E	0.4374	Adder	0.51
925781	AC1-054 C O1	2.6549	Adder	3.12
925782	AC1-054 E O1	1.2231	Adder	1.44
926071	AC1-086 C	10.2958	Adder	12.11
926072	AC1-086 E	4.6860	Adder	5.51
926201	AC1-098 C	2.1487	Adder	2.53
926202	AC1-098 E	1.2801	Adder	1.51
926211	AC1-099 C	0.7200	Adder	0.85
926212	AC1-099 E	0.4229	Adder	0.5
926271	AC1-105 C O1 (Suspended)	1.7319	Adder	2.04
926272	AC1-105 E O1 (Suspended)	0.8621	Adder	1.01
927021	AC1-189 C	2.7143	Adder	3.19
927022	AC1-189 E	1.3521	Adder	1.59
927141	AC1-208 C	3.3646	Adder	3.96
927142	AC1-208 E	1.4940	Adder	1.76
927251	AC1-221 C	0.6771	Adder	0.8
927252	AC1-221 E	0.6771	Adder	0.8
927261	AC1-222 C	1.0789	Adder	1.27
927262	AC1-222 E	1.0271	Adder	1.21
932631	AC2-084 C	3.0630	Adder	3.6
932632	AC2-084 E	1.5086	Adder	1.77
932761	AC2-100 C	1.5582	Adder	1.83
932762	AC2-100 E	0.7606	Adder	0.89
934311	AD1-055 C	0.7491	Adder	0.88
934312	AD1-055 E	0.1932	Adder	0.23
934331	AD1-057 C O1	4.2361	Adder	4.98
934332	AD1-057 E O1	2.2597	Adder	2.66
934341	AD1-058 C	1.6974	Adder	2.0
934342	AD1-058 E	0.4313	Adder	0.51
934611	AD1-087 C O1	2.7039	Adder	3.18
934612	AD1-087 E O1	1.2708	Adder	1.5
934991	AD1-131 C	0.5565	Adder	0.65
934992	AD1-131 E	0.3710	Adder	0.44
935171	AD1-152 C O1	2.6871	Adder	3.16
935172	AD1-152 E O1	1.7914	Adder	2.11
936261	AD2-033 C	3.7784	Adder	4.45
936262	AD2-033 E	2.5190	Adder	2.96
936361	AD2-046 C O1	3.0803	Adder	3.62
936362	AD2-046 E O1	1.4165	Adder	1.67

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936401	AD2-051 C O1	2.3624	Adder	2.78
936402	AD2-051 E O1	1.0144	Adder	1.19
936481	AD2-063 C O1	4.6665	Adder	5.49
936482	AD2-063 E O1	3.0851	Adder	3.63
936762	AD2-097 E	-2.8602	Adder	-3.36
937481	AD2-202 C O1	0.7166	Adder	0.84
937482	AD2-202 E O1	0.4031	Adder	0.47
938221	AE1-035 C	0.5900	Adder	0.69
938222	AE1-035 E	0.2906	Adder	0.34
938491	AE1-068 C O1	24.7200	Adder	29.08
938492	AE1-068 E O1	13.6532	Adder	16.06
938501	AE1-069 C O1	19.3221	Adder	22.73
938502	AE1-069 E O1	11.0467	Adder	13.0
939181	AE1-148 C O1	3.0312	Adder	3.57
939182	AE1-148 E O1	2.0208	Adder	2.38
939411	AE1-173 C	26.2589	Adder	30.89
939412	AE1-173 E	17.5059	Adder	20.6
940063	AE2-000B BAT	19.1715	50/50	19.1715
940241	AE2-006	0.1364	Adder	0.16
940471	AE2-031 C	13.4693	Adder	15.85
940472	AE2-031 E	8.9795	Adder	10.56
940481	AE2-033 C	16.4321	50/50	16.4321
940482	AE2-033 E	11.0778	50/50	11.0778
940571	AE2-044 C	1.6094	Adder	1.89
940572	AE2-044 E	0.6897	Adder	0.81
940652	AE2-052 BAT	5.2146	50/50	5.2146
940661	AE2-053 O1	1.1227	Adder	1.32
941031	AE2-094 C	16.2224	Adder	19.09
941032	AE2-094 E	7.2656	Adder	8.55
941533	AE2-150 BAT	8.9640	50/50	8.9640
941541	AE2-151 C	0.3076	Adder	0.36
941542	AE2-151 E	0.1656	Adder	0.19
942451	AE2-258	0.7736	Adder	0.91
942471	AE2-260 C O1	12.1817	50/50	12.1817
942472	AE2-260 E O1	17.2783	50/50	17.2783
942931	AE2-313 C	14.5839	Adder	17.16
942932	AE2-313 E	9.7226	Adder	11.44
943171	AE2-346 C	0.3863	Adder	0.45
943172	AE2-346 E	0.1655	Adder	0.19
943901	AF1-058 C	0.5979	Adder	0.7
943902	AF1-058 E	0.3986	Adder	0.47
943911	AF1-059	7.6007	Adder	8.94
944011	AF1-069 C	5.3005	Adder	6.24
944012	AF1-069 E	2.0591	Adder	2.42
944141	AF1-082	1.0346	Adder	1.22
945811	AF1-246 C O1	2.7243	Adder	3.21
945812	AF1-246 E O1	3.7621	Adder	4.43
946011	AF1-266	13.7549	50/50	13.7549
946281	AF1-292 C	1.0691	50/50	1.0691
946282	AF1-292 E	0.7207	50/50	0.7207
957481	AF2-042 C O2	10.3133	Adder	22.89
957482	AF2-042 E O2	6.8755	Adder	15.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957521	AF2-046 C	2.2565	Adder	5.01
957522	AF2-046 E	1.1351	Adder	2.52
957861	AF2-080 C	1.3066	Adder	2.9
957862	AF2-080 E	0.5792	Adder	1.29
959231	AF2-214 C	1.8430	Adder	4.09
959232	AF2-214 E	2.7630	Adder	6.13
959311	AF2-222 C	2.4422	Adder	5.42
959312	AF2-222 E	1.6362	Adder	3.63
959511	AF2-242	1.0892	Adder	2.42
959731	AF2-264 C	0.3155	Adder	0.7
959732	AF2-264 E	0.1554	Adder	0.34
959751	AF2-266 O2	1.7189	Adder	3.82
960061	AF2-297 C O2	1.3310	Adder	2.95
960062	AF2-297 E O2	0.8873	Adder	1.97
960081	AF2-299 C	1.8018	50/50	1.8018
960082	AF2-299 E	1.2012	50/50	1.2012
960121	AF2-303 C O2	3.5385	Adder	7.85
960122	AF2-303 E O2	2.3077	Adder	5.12
960331	AF2-324 C O2	1.4914	Adder	3.31
960332	AF2-324 E O2	0.8007	Adder	1.78
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4863	Adder	1.08
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1216	Adder	0.27
960363	AF2-327 BAT (Withdrawn : 07/22/2020)	1.5823	50/50	1.5823
960811	AF2-372 C	0.2202	Adder	0.49
960812	AF2-372 E	0.3593	Adder	0.8
960821	AF2-373 C	0.1568	Adder	0.35
960822	AF2-373 E	0.2353	Adder	0.52
960831	AF2-374 C	0.2148	Adder	0.48
960832	AF2-374 E	0.3504	Adder	0.78
WEC	WEC	0.3216	Confirmed LTF	0.3216
LGEE	LGEE	0.6070	Confirmed LTF	0.6070
CPL	CPL	3.2877	Confirmed LTF	3.2877
CBM-W2	CBM-W2	12.8665	Confirmed LTF	12.8665
NY	NY	0.4380	Confirmed LTF	0.4380
CBM-W1	CBM-W1	12.0221	Confirmed LTF	12.0221
TVA	TVA	2.7006	Confirmed LTF	2.7006
O-066	O-066	6.2362	Confirmed LTF	6.2362
CBM-S2	CBM-S2	22.4784	Confirmed LTF	22.4784
CBM-S1	CBM-S1	15.0634	Confirmed LTF	15.0634
G-007	G-007	0.9734	Confirmed LTF	0.9734
MADISON	MADISON	0.7479	Confirmed LTF	0.7479
MEC	MEC	1.9449	Confirmed LTF	1.9449
AA2-074	AA2-074	2.2410	LTF	2.2410

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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
97804370	314285	6CHRL249	DVP	314316	6LOCKS	DVP	1	DVP_P4-2: 562T563	breaker	684.0	169.63	170.64	DC	15.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.4961	50/50	0.4961
314572	3EMPORIA	0.0563	50/50	0.0563
314704	3LAWRENC	0.2225	50/50	0.2225
314947	8GREENSVILLE	28.5101	50/50	28.5101
315073	1STONECA	-2.3873	Adder	-2.81
315136	1ROSEMG1	1.4393	50/50	1.4393
315137	1ROSEMS1	0.8925	50/50	0.8925
315138	1ROSEMG2	0.6746	50/50	0.6746
315139	1GASTONA	2.1424	50/50	2.1424
315141	1GASTONB	2.1424	50/50	2.1424
315294	1DOMTR10	3.2046	Adder	3.77
900672	V4-068 E	0.1060	Adder	0.12
917332	Z2-043 E	0.4484	Adder	0.53
917342	Z2-044 E	0.2477	Adder	0.29
917512	Z2-088 E OP1	1.5190	Adder	1.79
918492	AA1-063AE OP	1.7603	Adder	2.07
918512	AA1-065 E OP	1.3711	Adder	1.61
918532	AA1-067 E	0.2627	Adder	0.31
919692	AA2-053 E OP	1.7687	Adder	2.08
919702	AA2-057 E OP	1.4762	Adder	1.74
920042	AA2-088 E OP	3.5841	Adder	4.22
920592	AA2-165 E	0.2029	Adder	0.24
920672	AA2-174 E OP	0.2044	Adder	0.24
922922	AB1-081 C OP	3.7942	Adder	4.46
922923	AB1-081 E OP	1.6261	Adder	1.91
923262	AB1-132 C OP (Suspended)	9.4844	50/50	9.4844
923263	AB1-132 E OP (Suspended)	4.0648	50/50	4.0648
923572	AB1-173 C OP	1.5987	50/50	1.5987
923573	AB1-173 E OP	0.7460	50/50	0.7460
923582	AB1-173AC OP	1.5987	50/50	1.5987
923583	AB1-173AE OP	0.7460	50/50	0.7460
923852	AB2-025 E	1.2920	50/50	1.2920
923911	AB2-031 C O1	1.5868	50/50	1.5868
923912	AB2-031 E O1	0.7816	50/50	0.7816
923991	AB2-040 C O1	5.2105	50/50	5.2105
923992	AB2-040 E O1	4.2631	50/50	4.2631
924022	AB2-043 E O1	1.0637	Adder	1.25
924152	AB2-059 E OP	2.3036	Adder	2.71
924162	AB2-060 E OP	1.5967	Adder	1.88

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924301	AB2-077 C O1 (Suspended)	0.7548	Adder	0.89
924302	AB2-077 E O1 (Suspended)	0.5032	Adder	0.59
924311	AB2-078 C O1 (Suspended)	0.7548	Adder	0.89
924312	AB2-078 E O1 (Suspended)	0.5032	Adder	0.59
924321	AB2-079 C O1 (Suspended)	0.7548	Adder	0.89
924322	AB2-079 E O1 (Suspended)	0.5032	Adder	0.59
924501	AB2-099 C (Suspended)	0.2125	Adder	0.25
924502	AB2-099 E (Suspended)	0.0911	Adder	0.11
924511	AB2-100 C	1.8239	50/50	1.8239
924512	AB2-100 E	5.2081	50/50	5.2081
925122	AB2-169 E	1.8308	Adder	2.15
925171	AB2-174 C O1	0.8914	50/50	0.8914
925172	AB2-174 E O1	4.6755	50/50	4.6755
925591	AC1-034 C	2.8965	Adder	3.41
925592	AC1-034 E	2.1851	Adder	2.57
925611	AC1-036 C	0.3066	Adder	0.36
925612	AC1-036 E	0.5003	Adder	0.59
925781	AC1-054 C O1	3.1051	Adder	3.65
925782	AC1-054 E O1	1.4304	Adder	1.68
926071	AC1-086 C	13.9670	50/50	13.9670
926072	AC1-086 E	6.3568	50/50	6.3568
926201	AC1-098 C	2.6095	Adder	3.07
926202	AC1-098 E	1.5546	Adder	1.83
926211	AC1-099 C	0.8745	Adder	1.03
926212	AC1-099 E	0.5136	Adder	0.6
926271	AC1-105 C O1 (Suspended)	1.9829	Adder	2.33
926272	AC1-105 E O1 (Suspended)	0.9871	Adder	1.16
927021	AC1-189 C	3.2944	Adder	3.88
927022	AC1-189 E	1.6410	Adder	1.93
927141	AC1-208 C	4.0314	Adder	4.74
927142	AC1-208 E	1.7901	Adder	2.11
927251	AC1-221 C	0.7780	Adder	0.92
927252	AC1-221 E	0.7780	Adder	0.92
927261	AC1-222 C	1.2345	Adder	1.45
927262	AC1-222 E	1.1752	Adder	1.38
932631	AC2-084 C	3.7200	Adder	4.38
932632	AC2-084 E	1.8322	Adder	2.16
932761	AC2-100 C	1.7904	Adder	2.11
932762	AC2-100 E	0.8739	Adder	1.03
933991	AD1-023 C	3.8491	Adder	4.53
933992	AD1-023 E	2.0955	Adder	2.47
934311	AD1-055 C	0.8571	Adder	1.01
934312	AD1-055 E	0.2210	Adder	0.26
934331	AD1-057 C O1	4.9302	Adder	5.8
934332	AD1-057 E O1	2.6300	Adder	3.09

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934341	AD1-058 C	1.9503	Adder	2.29
934342	AD1-058 E	0.4956	Adder	0.58
934611	AD1-087 C O1	3.0816	Adder	3.63
934612	AD1-087 E O1	1.4483	Adder	1.7
934991	AD1-131 C	0.6394	Adder	0.75
934992	AD1-131 E	0.4263	Adder	0.5
935171	AD1-152 C O1	3.0624	Adder	3.6
935172	AD1-152 E O1	2.0416	Adder	2.4
936261	AD2-033 C	4.3247	Adder	5.09
936262	AD2-033 E	2.8832	Adder	3.39
936361	AD2-046 C O1	3.5694	Adder	4.2
936362	AD2-046 E O1	1.6414	Adder	1.93
936401	AD2-051 C O1	3.0488	Adder	3.59
936402	AD2-051 E O1	1.3091	Adder	1.54
936481	AD2-063 C O1	5.3473	Adder	6.29
936482	AD2-063 E O1	3.5352	Adder	4.16
936762	AD2-097 E	-3.4441	Adder	-4.05
937481	AD2-202 C O1	0.8167	Adder	0.96
937482	AD2-202 E O1	0.4594	Adder	0.54
938171	AE1-026 C O1	9.7010	Adder	11.41
938172	AE1-026 E O1	2.5594	Adder	3.01
938221	AE1-035 C	0.7655	Adder	0.9
938222	AE1-035 E	0.3770	Adder	0.44
938491	AE1-068 C O1	33.0088	50/50	33.0088
938492	AE1-068 E O1	18.2312	50/50	18.2312
938501	AE1-069 C O1	25.8063	50/50	25.8063
938502	AE1-069 E O1	14.7537	50/50	14.7537
939181	AE1-148 C O1	3.5109	Adder	4.13
939182	AE1-148 E O1	2.3406	Adder	2.75
939411	AE1-173 C	31.3874	Adder	36.93
939412	AE1-173 E	20.9250	Adder	24.62
940241	AE2-006	0.1560	Adder	0.18
940471	AE2-031 C	17.9777	50/50	17.9777
940472	AE2-031 E	11.9851	50/50	11.9851
940481	AE2-033 C	17.9557	50/50	17.9557
940482	AE2-033 E	12.1050	50/50	12.1050
940542	AE2-040 BAT	4.1423	50/50	4.1423
940571	AE2-044 C	1.8971	Adder	2.23
940572	AE2-044 E	0.8130	Adder	0.96
940661	AE2-053 O1	1.3003	Adder	1.53
941031	AE2-094 C	21.6524	50/50	21.6524
941032	AE2-094 E	9.6976	50/50	9.6976
941541	AE2-151 C	0.3965	Adder	0.47
941542	AE2-151 E	0.2135	Adder	0.25
942451	AE2-258	0.8875	Adder	1.04
942471	AE2-260 C O1	13.5157	50/50	13.5157
942472	AE2-260 E O1	19.1703	50/50	19.1703
942931	AE2-313 C	19.4655	50/50	19.4655
942932	AE2-313 E	12.9770	50/50	12.9770
943171	AE2-346 C	0.5101	Adder	0.6
943172	AE2-346 E	0.2186	Adder	0.26
943901	AF1-058 C	0.6841	Adder	0.8

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943902	AF1-058 E	0.4561	Adder	0.54
943911	AF1-059	10.1430	50/50	10.1430
944011	AF1-069 C	7.0746	50/50	7.0746
944012	AF1-069 E	2.7483	50/50	2.7483
944141	AF1-082	1.2196	Adder	1.43
945811	AF1-246 C O1	3.0955	Adder	3.64
945812	AF1-246 E O1	4.2748	Adder	5.03
946011	AF1-266	15.0304	50/50	15.0304
946281	AF1-292 C	1.2035	50/50	1.2035
946282	AF1-292 E	0.8114	50/50	0.8114
957481	AF2-042 C O2	11.7189	Adder	26.01
957482	AF2-042 E O2	7.8126	Adder	17.34
957521	AF2-046 C	3.1764	Adder	7.05
957522	AF2-046 E	1.5978	Adder	3.55
957861	AF2-080 C	1.5858	Adder	3.52
957862	AF2-080 E	0.7030	Adder	1.56
958142	AF2-108 BAT	2.9355	50/50	2.9355
959231	AF2-214 C	2.1725	Adder	4.82
959232	AF2-214 E	3.2570	Adder	7.23
959311	AF2-222 C	2.7922	Adder	6.2
959312	AF2-222 E	1.8708	Adder	4.15
959511	AF2-242	1.3876	Adder	3.08
959731	AF2-264 C	0.4290	Adder	0.95
959732	AF2-264 E	0.2113	Adder	0.47
959751	AF2-266 O2	1.9531	Adder	4.34
960061	AF2-297 C O2	1.5206	Adder	3.38
960062	AF2-297 E O2	1.0137	Adder	2.25
960081	AF2-299 C	2.0285	50/50	2.0285
960082	AF2-299 E	1.3523	50/50	1.3523
960121	AF2-303 C O2	4.1612	Adder	9.24
960122	AF2-303 E O2	2.7138	Adder	6.02
960331	AF2-324 C O2	1.7566	Adder	3.9
960332	AF2-324 E O2	0.9431	Adder	2.09
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.5735	Adder	1.27
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1434	Adder	0.32
960811	AF2-372 C	0.2527	Adder	0.56
960812	AF2-372 E	0.4124	Adder	0.92
960821	AF2-373 C	0.1796	Adder	0.4
960822	AF2-373 E	0.2695	Adder	0.6
960831	AF2-374 C	0.2693	Adder	0.6
960832	AF2-374 E	0.4394	Adder	0.98
WEC	WEC	0.3667	Confirmed LTF	0.3667
LGEE	LGEE	0.6920	Confirmed LTF	0.6920
CPL	CPL	3.8076	Confirmed LTF	3.8076
CBM-W2	CBM-W2	14.7420	Confirmed LTF	14.7420
NY	NY	0.5176	Confirmed LTF	0.5176
CBM-W1	CBM-W1	13.6859	Confirmed LTF	13.6859
TVA	TVA	3.0996	Confirmed LTF	3.0996
O-066	O-066	7.3450	Confirmed LTF	7.3450
CBM-S2	CBM-S2	25.9522	Confirmed LTF	25.9522
CBM-S1	CBM-S1	17.2786	Confirmed LTF	17.2786

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
G-007	G-007	1.1461	Confirmed LTF	1.1461
MADISON	MADISON	0.8669	Confirmed LTF	0.8669
MEC	MEC	2.2214	Confirmed LTF	2.2214
AA2-074	AA2-074	2.5952	LTF	2.5952

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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
97804409	314287	6CHESTF B	DVP	314276	6BASIN	DVP	1	DVP_P4-2: 562T563	breaker	812.0	145.64	146.28	DC	11.47

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314314	3LOCKS	0.2012	50/50	0.2012
314435	6SAPONY	0.2953	50/50	0.2953
314539	3UNCAMP	0.7963	Adder	0.94
314541	3WATKINS	0.2289	Adder	0.27
315065	1CHESTF6 (Deactivation : 31/05/2023)	172.2577	50/50	172.2577
315073	1STONECA	4.9609	50/50	4.9609
315076	1HOPPOLC	1.1833	50/50	1.1833
315077	1HOPHCF1	1.8496	50/50	1.8496
315078	1HOPHCF2	1.8496	50/50	1.8496
315079	1HOPHCF3	1.8496	50/50	1.8496
315080	1HOPHCF4	2.8078	50/50	2.8078
315294	1DOMTR10	3.3252	Adder	3.91
315611	6Z1-036WIND	1.9200	Adder	2.26
900672	V4-068 E	0.1014	Adder	0.12
901082	W1-029 E	8.7895	Adder	10.34
907092	X1-038 E	1.9909	Adder	2.34
916042	Z1-036 E (Suspended)	12.8643	Adder	15.13
917332	Z2-043 E	0.3881	Adder	0.46
917342	Z2-044 E	0.1883	Adder	0.22
917512	Z2-088 E OP1	1.2197	Adder	1.43
918492	AA1-063AE OP	1.4402	Adder	1.69
918512	AA1-065 E OP	1.3056	Adder	1.54
918532	AA1-067 E	0.2265	Adder	0.27
919692	AA2-053 E OP	1.3550	Adder	1.59
919702	AA2-057 E OP	1.1304	Adder	1.33
920042	AA2-088 E OP	3.5947	Adder	4.23
920592	AA2-165 E	0.1554	Adder	0.18
920672	AA2-174 E OP	0.1566	Adder	0.18
920692	AA2-178 E	1.2173	Adder	1.43
922922	AB1-081 C OP	2.8617	Adder	3.37
922923	AB1-081 E OP	1.2264	Adder	1.44
923262	AB1-132 C OP (Suspended)	5.6913	Adder	6.7
923263	AB1-132 E OP (Suspended)	2.4391	Adder	2.87
923572	AB1-173 C OP	0.9297	Adder	1.09
923573	AB1-173 E OP	0.4339	Adder	0.51
923582	AB1-173AC OP	0.9297	Adder	1.09
923583	AB1-173AE OP	0.4339	Adder	0.51
923801	AB2-015 C OP	2.8543	Adder	3.36
923802	AB2-015 E OP	2.3405	Adder	2.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923852	AB2-025 E	0.7691	50/50	0.7691
923911	AB2-031 C O1	0.9228	Adder	1.09
923912	AB2-031 E O1	0.4545	Adder	0.53
923991	AB2-040 C O1	3.0301	Adder	3.56
923992	AB2-040 E O1	2.4792	Adder	2.92
924152	AB2-059 E OP	1.7375	Adder	2.04
924501	AB2-099 C (Suspended)	0.1958	Adder	0.23
924502	AB2-099 E (Suspended)	0.0839	Adder	0.1
924511	AB2-100 C	1.1584	50/50	1.1584
924512	AB2-100 E	3.3076	50/50	3.3076
924812	AB2-134 E OP	5.9824	Adder	7.04
925051	AB2-160 C O1 (Suspended)	3.5452	50/50	3.5452
925052	AB2-160 E O1 (Suspended)	5.7844	50/50	5.7844
925061	AB2-161 C O1 (Suspended)	1.6051	Adder	1.89
925062	AB2-161 E O1 (Suspended)	2.6189	Adder	3.08
925122	AB2-169 E	1.7850	Adder	2.1
925172	AB2-174 E O1	2.6793	Adder	3.15
925331	AB2-190 C	11.4699	50/50	11.4699
925332	AB2-190 E	4.9157	50/50	4.9157
925591	AC1-034 C	2.1846	Adder	2.57
925592	AC1-034 E	1.6480	Adder	1.94
925781	AC1-054 C O1	2.1931	Adder	2.58
925782	AC1-054 E O1	1.0103	Adder	1.19
926071	AC1-086 C	8.3811	Adder	9.86
926072	AC1-086 E	3.8145	Adder	4.49
926201	AC1-098 C	2.0819	Adder	2.45
926202	AC1-098 E	1.2403	Adder	1.46
926211	AC1-099 C	0.6976	Adder	0.82
926212	AC1-099 E	0.4097	Adder	0.48
927021	AC1-189 C	2.7052	Adder	3.18
927022	AC1-189 E	1.3476	Adder	1.59
927141	AC1-208 C	3.1013	Adder	3.65
927142	AC1-208 E	1.3771	Adder	1.62
927222	AC1-216 E O1	3.6521	Adder	4.3
932581	AC2-078 C O1	3.0132	50/50	3.0132
932582	AC2-078 E O1	4.9164	50/50	4.9164
932591	AC2-079 C O1	2.3241	Adder	2.73
932592	AC2-079 E O1	3.7919	Adder	4.46
932631	AC2-084 C	2.9678	Adder	3.49
932632	AC2-084 E	1.4617	Adder	1.72
933991	AD1-023 C	4.0664	Adder	4.78
933992	AD1-023 E	2.2137	Adder	2.6
934011	AD1-025 C	7.9822	Adder	9.39
934012	AD1-025 E	4.7283	Adder	5.56
934331	AD1-057 C O1	3.5880	Adder	4.22
934332	AD1-057 E O1	1.9140	Adder	2.25
934521	AD1-076 C	16.5492	Adder	19.47
934522	AD1-076 E	8.4269	Adder	9.91
934571	AD1-082 C	3.6580	Adder	4.3

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934572	AD1-082 E	2.0867	Adder	2.45
935111	AD1-144 C	0.4786	Adder	0.56
935112	AD1-144 E	0.2615	Adder	0.31
935161	AD1-151 C O1	9.2169	50/50	9.2169
935162	AD1-151 E O1	6.1446	50/50	6.1446
936041	AD2-007 C	0.3813	Adder	0.45
936042	AD2-007 E	0.2627	Adder	0.31
936051	AD2-008 C	1.3897	Adder	1.63
936052	AD2-008 E	3.0251	Adder	3.56
936401	AD2-051 C O1	2.8693	Adder	3.38
936402	AD2-051 E O1	1.2320	Adder	1.45
936661	AD2-085 C	1.4056	Adder	1.65
936662	AD2-085 E	2.2934	Adder	2.7
936762	AD2-097 E	-12.3121	Adder	-14.48
937541	AD2-215 C	0.4836	Adder	0.57
937542	AD2-215 E	0.2566	Adder	0.3
938171	AE1-026 C O1	10.0174	Adder	11.79
938172	AE1-026 E O1	2.6428	Adder	3.11
938221	AE1-035 C	0.7290	Adder	0.86
938222	AE1-035 E	0.3590	Adder	0.42
938491	AE1-068 C O1	19.9452	Adder	23.46
938492	AE1-068 E O1	11.0160	Adder	12.96
938501	AE1-069 C O1	15.5884	Adder	18.34
938502	AE1-069 E O1	8.9120	Adder	10.48
938561	AE1-075 C	-0.6325	Adder	-0.74
938631	AE1-085 C O1	6.3710	50/50	6.3710
938632	AE1-085 E O1	3.1855	50/50	3.1855
938771	AE1-103 C O1	1.1945	Adder	1.41
938772	AE1-103 E O1	1.6496	Adder	1.94
939191	AE1-149 C O1	8.2848	50/50	8.2848
939192	AE1-149 E O1	5.5232	50/50	5.5232
939311	AE1-162 C	0.6913	Adder	0.81
939312	AE1-162 E	0.4608	Adder	0.54
939411	AE1-173 C	27.3523	Adder	32.18
939412	AE1-173 E	18.2349	Adder	21.45
940061	AE2-000BC O1	7.6033	Adder	8.95
940062	AE2-000BE O1	5.0689	Adder	5.96
940431	AE2-027 C O1	3.4884	Adder	4.1
940432	AE2-027 E O1	2.3256	Adder	2.74
940471	AE2-031 C	10.8455	Adder	12.76
940472	AE2-031 E	7.2303	Adder	8.51
940481	AE2-033 C	10.7619	50/50	10.7619
940482	AE2-033 E	7.2552	50/50	7.2552
940491	AE2-034 C	2.1302	Adder	2.51
940492	AE2-034 E	0.9130	Adder	1.07
940541	AE2-040 O1	1.8309	50/50	1.8309
940571	AE2-044 C	1.4309	Adder	1.68
940572	AE2-044 E	0.6132	Adder	0.72
940651	AE2-052	2.7616	50/50	2.7616
940891	AE2-078 C	0.7870	Adder	0.93
940892	AE2-078 E	0.4054	Adder	0.48
940901	AE2-079 C	0.7870	Adder	0.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940902	AE2-079 E	0.4054	Adder	0.48
941031	AE2-094 C	13.0910	Adder	15.4
941032	AE2-094 E	5.8632	Adder	6.9
941101	AE2-104 C O1	1.0510	Adder	1.24
941102	AE2-104 E O1	1.6709	Adder	1.97
941501	AE2-147 C	4.3704	Adder	5.14
941502	AE2-147 E	2.9136	Adder	3.43
941541	AE2-151 C	0.3607	Adder	0.42
941542	AE2-151 E	0.1942	Adder	0.23
942001	AE2-212 C	2.5464	50/50	2.5464
942002	AE2-212 E	1.6976	50/50	1.6976
942131	AE2-225 C	0.5847	Adder	0.69
942132	AE2-225 E	0.3898	Adder	0.46
942161	AE2-228 C	2.9190	50/50	2.9190
942162	AE2-228 E	1.9460	50/50	1.9460
942171	AE2-229 C	0.5847	Adder	0.69
942172	AE2-229 E	0.3898	Adder	0.46
942341	AE2-247 C	0.6113	Adder	0.72
942342	AE2-247 E	0.8441	Adder	0.99
942371	AE2-250 C O1	6.2975	50/50	6.2975
942372	AE2-250 E O1	3.3237	50/50	3.3237
942471	AE2-260 C O1	8.5007	50/50	8.5007
942472	AE2-260 E O1	12.0573	50/50	12.0573
942551	AE2-270	12.6786	Adder	14.92
942851	AE2-304 C	0.1758	Adder	0.21
942852	AE2-304 E	0.0684	Adder	0.08
942931	AE2-313 C	11.7431	Adder	13.82
942932	AE2-313 E	7.8287	Adder	9.21
943171	AE2-346 C	0.4698	Adder	0.55
943172	AE2-346 E	0.2013	Adder	0.24
943461	AF1-017 C	0.5530	Adder	0.65
943462	AF1-017 E	0.9023	Adder	1.06
943611	AF1-032 C	0.4775	Adder	0.56
943612	AF1-032 E	0.2534	Adder	0.3
943621	AF1-033 C	0.7870	Adder	0.93
943622	AF1-033 E	0.4054	Adder	0.48
943911	AF1-059	5.6236	Adder	6.62
944011	AF1-069 C	4.2773	Adder	5.03
944012	AF1-069 E	1.6616	Adder	1.95
944141	AF1-082	0.9198	Adder	1.08
944501	AF1-115 C O1	2.3967	Adder	2.82
944502	AF1-115 E O1	1.1805	Adder	1.39
944871	AF1-152 C	1.4568	Adder	1.71
944872	AF1-152 E	0.9712	Adder	1.14
945711	AF1-236 C O1	23.3208	Adder	27.44
945712	AF1-236 E O1	38.0498	Adder	44.76
945811	AF1-246 C O1	2.1420	Adder	2.52
945812	AF1-246 E O1	2.9580	Adder	3.48
946011	AF1-266	9.0085	50/50	9.0085
946261	AF1-291 C	2.9454	50/50	2.9454
946262	AF1-291 E	1.9636	50/50	1.9636
946281	AF1-292 C	0.6661	Adder	0.78

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946282	AF1-292 E	0.4491	Adder	0.53
957481	AF2-042 C O2	8.1090	Adder	18.0
957482	AF2-042 E O2	5.4060	Adder	12.0
957491	AF2-043 C	0.3099	Adder	0.69
957492	AF2-043 E	0.2066	Adder	0.46
957521	AF2-046 C	3.0168	Adder	6.7
957522	AF2-046 E	1.5175	Adder	3.37
957531	AF2-047 C	2.6828	Adder	5.96
957532	AF2-047 E	1.3494	Adder	3.0
957711	AF2-065 C	3.4270	Adder	7.61
957712	AF2-065 E	3.2926	Adder	7.31
957791	AF2-073 C (Withdrawn : 07/02/2020)	1.4644	Adder	3.25
957792	AF2-073 E (Withdrawn : 07/02/2020)	0.9363	Adder	2.08
957801	AF2-074 C (Withdrawn : 07/02/2020)	0.6508	Adder	1.44
957802	AF2-074 E (Withdrawn : 07/02/2020)	0.4161	Adder	0.92
957821	AF2-076 C O2	0.7744	Adder	1.72
957822	AF2-076 E O2	0.5163	Adder	1.15
957861	AF2-080 C	1.3022	Adder	2.89
957862	AF2-080 E	0.5773	Adder	1.28
957912	AF2-085 BAT	0.9406	Merchant Transmission	0.9406
958141	AF2-108	3.0980	50/50	3.0980
958161	AF2-110 C	0.2296	Adder	0.51
958162	AF2-110 E	0.3592	Adder	0.8
958503	AF2-144 BAT	0.3259	Merchant Transmission	0.3259
959231	AF2-214 C	1.6386	Adder	3.64
959232	AF2-214 E	2.4565	Adder	5.45
959511	AF2-242	1.2912	Adder	2.87
959651	AF2-256 C	0.7297	50/50	0.7297
959652	AF2-256 E	0.4865	50/50	0.4865
959661	AF2-257 C	0.7364	50/50	0.7364
959662	AF2-257 E	0.4909	50/50	0.4909
959671	AF2-258 C	0.6366	50/50	0.6366
959672	AF2-258 E	0.4244	50/50	0.4244
959681	AF2-259 C	2.6555	50/50	2.6555
959682	AF2-259 E	1.7703	50/50	1.7703
959731	AF2-264 C	0.4009	Adder	0.89
959732	AF2-264 E	0.1975	Adder	0.44
959751	AF2-266 O2	1.3515	Adder	3.0
960081	AF2-299 C	0.5950	Adder	1.32
960082	AF2-299 E	0.3967	Adder	0.88
960101	AF2-301 C	0.4094	Adder	0.91
960102	AF2-301 E	0.2730	Adder	0.61
960121	AF2-303 C O2	3.1276	Adder	6.94
960122	AF2-303 E O2	2.0398	Adder	4.53
960131	AF2-304 C O2	3.9970	Adder	8.87
960132	AF2-304 E O2	2.7395	Adder	6.08
960331	AF2-324 C O2	1.3261	Adder	2.94
960332	AF2-324 E O2	0.7120	Adder	1.58

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4329	Adder	0.96
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1082	Adder	0.24
960361	AF2-327 C (Withdrawn : 07/22/2020)	1.7320	50/50	1.7320
960362	AF2-327 E (Withdrawn : 07/22/2020)	0.4330	50/50	0.4330
960831	AF2-374 C	0.2298	Adder	0.51
960832	AF2-374 E	0.3750	Adder	0.83
961091	AF2-400 C	0.0817	Adder	0.18
961092	AF2-400 E	0.1340	Adder	0.3
961111	AF2-402 C O2	0.2750	Adder	0.61
961112	AF2-402 E O2	0.4497	Adder	1.0
WEC	WEC	0.2240	Confirmed LTF	0.2240
LGEE	LGEE	0.4262	Confirmed LTF	0.4262
CPL	CPL	2.7598	Confirmed LTF	2.7598
CBM-W2	CBM-W2	9.7133	Confirmed LTF	9.7133
NY	NY	0.4678	Confirmed LTF	0.4678
CBM-W1	CBM-W1	8.2441	Confirmed LTF	8.2441
TVA	TVA	2.0916	Confirmed LTF	2.0916
O-066	O-066	6.4512	Confirmed LTF	6.4512
CBM-S2	CBM-S2	18.4960	Confirmed LTF	18.4960
CBM-S1	CBM-S1	11.5446	Confirmed LTF	11.5446
G-007	G-007	1.0057	Confirmed LTF	1.0057
MADISON	MADISON	0.6471	Confirmed LTF	0.6471
MEC	MEC	1.4079	Confirmed LTF	1.4079
AA2-074	AA2-074	1.8806	LTF	1.8806

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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
97804419	314299	6HARROWG	DVP	314263	6TYLER1	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.42	144.38	DC	11.59

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.3501	50/50	0.3501
314539	3UNCAMP	0.6872	Adder	0.81
314541	3WATKINS	0.2020	Adder	0.24
900672	V4-068 E	0.0934	Adder	0.11
907092	X1-038 E	1.7181	Adder	2.02
917332	Z2-043 E	0.3606	Adder	0.42
917342	Z2-044 E	0.1895	Adder	0.22
917512	Z2-088 E OP1	1.1777	Adder	1.39
918492	AA1-063AE OP	1.4311	Adder	1.68
918512	AA1-065 E OP	1.1298	Adder	1.33
918532	AA1-067 E	0.2085	Adder	0.25
919692	AA2-053 E OP	1.3707	Adder	1.61
919702	AA2-057 E OP	1.1342	Adder	1.33
920042	AA2-088 E OP	3.3180	Adder	3.9
920592	AA2-165 E	0.1559	Adder	0.18
920672	AA2-174 E OP	0.1584	Adder	0.19
922922	AB1-081 C OP	2.8884	Adder	3.4
922923	AB1-081 E OP	1.2379	Adder	1.46
923262	AB1-132 C OP (Suspended)	6.0126	Adder	7.07
923263	AB1-132 E OP (Suspended)	2.5768	Adder	3.03
923572	AB1-173 C OP	1.0096	Adder	1.19
923573	AB1-173 E OP	0.4711	Adder	0.55
923582	AB1-173AC OP	1.0096	Adder	1.19
923583	AB1-173AE OP	0.4711	Adder	0.55
923801	AB2-015 C OP	2.4956	Adder	2.94
923802	AB2-015 E OP	2.0464	Adder	2.41
923852	AB2-025 E	0.9118	50/50	0.9118
923911	AB2-031 C O1	1.0021	Adder	1.18
923912	AB2-031 E O1	0.4936	Adder	0.58
923991	AB2-040 C O1	3.2905	Adder	3.87
923992	AB2-040 E O1	2.6922	Adder	3.17
924022	AB2-043 E O1	0.7888	Adder	0.93
924152	AB2-059 E OP	1.7537	Adder	2.06
924162	AB2-060 E OP	1.1840	Adder	1.39
924301	AB2-077 C O1 (Suspended)	0.5601	Adder	0.66
924302	AB2-077 E O1 (Suspended)	0.3734	Adder	0.44
924311	AB2-078 C O1 (Suspended)	0.5601	Adder	0.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924312	AB2-078 E O1 (Suspended)	0.3734	Adder	0.44
924321	AB2-079 C O1 (Suspended)	0.5601	Adder	0.66
924322	AB2-079 E O1 (Suspended)	0.3734	Adder	0.44
924501	AB2-099 C (Suspended)	0.1773	Adder	0.21
924502	AB2-099 E (Suspended)	0.0760	Adder	0.09
924511	AB2-100 C	1.3143	50/50	1.3143
924512	AB2-100 E	3.7528	50/50	3.7528
925061	AB2-161 C O1 (Suspended)	2.4158	50/50	2.4158
925062	AB2-161 E O1 (Suspended)	3.9416	50/50	3.9416
925122	AB2-169 E	1.5101	Adder	1.78
925172	AB2-174 E O1	2.9357	Adder	3.45
925591	AC1-034 C	2.2050	Adder	2.59
925592	AC1-034 E	1.6634	Adder	1.96
925781	AC1-054 C O1	2.3459	Adder	2.76
925782	AC1-054 E O1	1.0807	Adder	1.27
926071	AC1-086 C	8.8543	Adder	10.42
926072	AC1-086 E	4.0299	Adder	4.74
926201	AC1-098 C	2.0384	Adder	2.4
926202	AC1-098 E	1.2144	Adder	1.43
926211	AC1-099 C	0.6831	Adder	0.8
926212	AC1-099 E	0.4012	Adder	0.47
926271	AC1-105 C O1 (Suspended)	1.4685	Adder	1.73
926272	AC1-105 E O1 (Suspended)	0.7310	Adder	0.86
927021	AC1-189 C	2.5727	Adder	3.03
927022	AC1-189 E	1.2815	Adder	1.51
927141	AC1-208 C	3.1122	Adder	3.66
927142	AC1-208 E	1.3819	Adder	1.63
932581	AC2-078 C O1	4.5616	50/50	4.5616
932582	AC2-078 E O1	7.4426	50/50	7.4426
932591	AC2-079 C O1	2.5898	Adder	3.05
932592	AC2-079 E O1	4.2255	Adder	4.97
932631	AC2-084 C	2.9058	Adder	3.42
932632	AC2-084 E	1.4312	Adder	1.68
934331	AD1-057 C O1	3.7094	Adder	4.36
934332	AD1-057 E O1	1.9787	Adder	2.33
934571	AD1-082 C	5.5056	50/50	5.5056
934572	AD1-082 E	3.1406	50/50	3.1406
934611	AD1-087 C O1	2.2736	Adder	2.67
934612	AD1-087 E O1	1.0686	Adder	1.26
935171	AD1-152 C O1	2.2595	Adder	2.66
935172	AD1-152 E O1	1.5063	Adder	1.77
936361	AD2-046 C O1	2.6732	Adder	3.14
936362	AD2-046 E O1	1.2293	Adder	1.45
936401	AD2-051 C O1	2.5014	Adder	2.94
936402	AD2-051 E O1	1.0741	Adder	1.26
936481	AD2-063 C O1	3.9604	Adder	4.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936482	AD2-063 E O1	2.6183	Adder	3.08
936661	AD2-085 C	1.5789	Adder	1.86
936662	AD2-085 E	2.5762	Adder	3.03
936762	AD2-097 E	-2.9410	Adder	-3.46
937481	AD2-202 C O1	0.6025	Adder	0.71
937482	AD2-202 E O1	0.3389	Adder	0.4
938171	AE1-026 C O1	8.1805	Adder	9.62
938172	AE1-026 E O1	2.1582	Adder	2.54
938221	AE1-035 C	0.6308	Adder	0.74
938222	AE1-035 E	0.3107	Adder	0.37
938491	AE1-068 C O1	20.6407	Adder	24.28
938492	AE1-068 E O1	11.4001	Adder	13.41
938501	AE1-069 C O1	16.1400	Adder	18.99
938502	AE1-069 E O1	9.2274	Adder	10.86
938631	AE1-085 C O1	9.4765	50/50	9.4765
938632	AE1-085 E O1	4.7383	50/50	4.7383
938771	AE1-103 C O1	1.0308	Adder	1.21
938772	AE1-103 E O1	1.4235	Adder	1.67
939181	AE1-148 C O1	2.6282	Adder	3.09
939182	AE1-148 E O1	1.7522	Adder	2.06
939191	AE1-149 C O1	12.7956	50/50	12.7956
939192	AE1-149 E O1	8.5304	50/50	8.5304
939411	AE1-173 C	24.2638	Adder	28.55
939412	AE1-173 E	16.1758	Adder	19.03
940061	AE2-000BC O1	11.4435	50/50	11.4435
940062	AE2-000BE O1	7.6290	50/50	7.6290
940471	AE2-031 C	11.2374	Adder	13.22
940472	AE2-031 E	7.4916	Adder	8.81
940481	AE2-033 C	12.6994	50/50	12.6994
940482	AE2-033 E	8.5614	50/50	8.5614
940571	AE2-044 C	1.4442	Adder	1.7
940572	AE2-044 E	0.6189	Adder	0.73
940651	AE2-052	4.2652	50/50	4.2652
940661	AE2-053 O1	0.9734	Adder	1.15
941031	AE2-094 C	13.5348	Adder	15.92
941032	AE2-094 E	6.0619	Adder	7.13
941101	AE2-104 C O1	0.8265	Adder	0.97
941102	AE2-104 E O1	1.3139	Adder	1.55
941541	AE2-151 C	0.3249	Adder	0.38
941542	AE2-151 E	0.1749	Adder	0.21
942341	AE2-247 C	0.6889	Adder	0.81
942342	AE2-247 E	0.9513	Adder	1.12
942451	AE2-258	0.6581	Adder	0.77
942471	AE2-260 C O1	9.7098	50/50	9.7098
942472	AE2-260 E O1	13.7722	50/50	13.7722
942931	AE2-313 C	12.1674	Adder	14.31
942932	AE2-313 E	8.1116	Adder	9.54
943171	AE2-346 C	0.4256	Adder	0.5
943172	AE2-346 E	0.1824	Adder	0.21
943461	AF1-017 C	0.6233	Adder	0.73
943462	AF1-017 E	1.0169	Adder	1.2
943911	AF1-059	6.3283	Adder	7.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944011	AF1-069 C	4.4223	Adder	5.2
944012	AF1-069 E	1.7180	Adder	2.02
944141	AF1-082	0.9284	Adder	1.09
945811	AF1-246 C O1	2.2784	Adder	2.68
945812	AF1-246 E O1	3.1463	Adder	3.7
946011	AF1-266	10.6304	50/50	10.6304
946281	AF1-292 C	0.7457	Adder	0.88
946282	AF1-292 E	0.5027	Adder	0.59
957481	AF2-042 C O2	8.6253	Adder	19.15
957482	AF2-042 E O2	5.7502	Adder	12.76
957521	AF2-046 C	2.7695	Adder	6.15
957522	AF2-046 E	1.3931	Adder	3.09
957861	AF2-080 C	1.2384	Adder	2.75
957862	AF2-080 E	0.5490	Adder	1.22
958161	AF2-110 C	0.1806	Adder	0.4
958162	AF2-110 E	0.2824	Adder	0.63
959231	AF2-214 C	1.6538	Adder	3.67
959232	AF2-214 E	2.4794	Adder	5.5
959511	AF2-242	1.1275	Adder	2.5
959731	AF2-264 C	0.3655	Adder	0.81
959732	AF2-264 E	0.1800	Adder	0.4
959751	AF2-266 O2	1.4375	Adder	3.19
960061	AF2-297 C O2	1.1247	Adder	2.5
960062	AF2-297 E O2	0.7498	Adder	1.66
960081	AF2-299 C	0.6661	Adder	1.48
960082	AF2-299 E	0.4441	Adder	0.99
960121	AF2-303 C O2	3.1608	Adder	7.02
960122	AF2-303 E O2	2.0614	Adder	4.58
960331	AF2-324 C O2	1.3362	Adder	2.97
960332	AF2-324 E O2	0.7174	Adder	1.59
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4368	Adder	0.97
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1092	Adder	0.24
960361	AF2-327 C (Withdrawn : 07/22/2020)	2.3496	50/50	2.3496
960362	AF2-327 E (Withdrawn : 07/22/2020)	0.5874	50/50	0.5874
960811	AF2-372 C	0.1875	Adder	0.42
960812	AF2-372 E	0.3060	Adder	0.68
960821	AF2-373 C	0.1331	Adder	0.3
960822	AF2-373 E	0.1996	Adder	0.44
960831	AF2-374 C	0.2160	Adder	0.48
960832	AF2-374 E	0.3524	Adder	0.78
961091	AF2-400 C	0.0714	Adder	0.16
961092	AF2-400 E	0.1172	Adder	0.26
961111	AF2-402 C O2	0.7661	50/50	0.7661
961112	AF2-402 E O2	1.2526	50/50	1.2526
WEC	WEC	0.2693	Confirmed LTF	0.2693
LGEE	LGEE	0.5089	Confirmed LTF	0.5089
CPL	CPL	2.8524	Confirmed LTF	2.8524
CBM-W2	CBM-W2	10.9173	Confirmed LTF	10.9173
NY	NY	0.3971	Confirmed LTF	0.3971

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W1	CBM-W1	10.0455	Confirmed LTF	10.0455
TVA	TVA	2.3002	Confirmed LTF	2.3002
O-066	O-066	5.6112	Confirmed LTF	5.6112
CBM-S2	CBM-S2	19.3746	Confirmed LTF	19.3746
CBM-S1	CBM-S1	12.8056	Confirmed LTF	12.8056
G-007	G-007	0.8757	Confirmed LTF	0.8757
MADISON	MADISON	0.6492	Confirmed LTF	0.6492
MEC	MEC	1.6383	Confirmed LTF	1.6383
AA2-074	AA2-074	1.9440	LTF	1.9440

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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
97804474	314301	6HARR205	DVP	314346	6TYLER	DVP	1	DVP_P4-2: 562T563	breaker	541.0	128.45	129.46	DC	12.07

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314314	3LOCKS	0.4484	50/50	0.4484
314435	6SAPONY	0.3847	50/50	0.3847
314572	3EMPORIA	0.0441	50/50	0.0441
315073	1STONECA	-2.0407	Adder	-2.4
917342	Z2-044 E	0.1963	Adder	0.23
918492	AA1-063AE OP	1.4180	Adder	1.67
919692	AA2-053 E OP	1.4063	Adder	1.65
919702	AA2-057 E OP	1.1712	Adder	1.38
920592	AA2-165 E	0.1610	Adder	0.19
920672	AA2-174 E OP	0.1625	Adder	0.19
922922	AB1-081 C OP	3.0031	Adder	3.53
922923	AB1-081 E OP	1.2870	Adder	1.51
923262	AB1-132 C OP (Suspended)	6.3446	Adder	7.46
923263	AB1-132 E OP (Suspended)	2.7191	Adder	3.2
923572	AB1-173 C OP	1.0681	Adder	1.26
923573	AB1-173 E OP	0.4984	Adder	0.59
923582	AB1-173AC OP	1.0681	Adder	1.26
923583	AB1-173AE OP	0.4984	Adder	0.59
923852	AB2-025 E	1.0021	50/50	1.0021
923911	AB2-031 C O1	1.0602	Adder	1.25
923912	AB2-031 E O1	0.5222	Adder	0.61
923991	AB2-040 C O1	3.4812	Adder	4.1
923992	AB2-040 E O1	2.8482	Adder	3.35
924152	AB2-059 E OP	1.8233	Adder	2.15
924511	AB2-100 C	1.4223	50/50	1.4223
924512	AB2-100 E	4.0613	50/50	4.0613
925051	AB2-160 C O1 (Suspended)	7.9019	50/50	7.9019
925052	AB2-160 E O1 (Suspended)	12.8925	50/50	12.8925
925172	AB2-174 E O1	3.1192	Adder	3.67
925591	AC1-034 C	2.2925	Adder	2.7
925592	AC1-034 E	1.7295	Adder	2.03
925781	AC1-054 C O1	2.4514	Adder	2.88
925782	AC1-054 E O1	1.1293	Adder	1.33
926071	AC1-086 C	9.3432	Adder	10.99
926072	AC1-086 E	4.2524	Adder	5.0
926201	AC1-098 C	2.0796	Adder	2.45
926202	AC1-098 E	1.2389	Adder	1.46
926211	AC1-099 C	0.6969	Adder	0.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926212	AC1-099 E	0.4093	Adder	0.48
927141	AC1-208 C	3.2021	Adder	3.77
927142	AC1-208 E	1.4219	Adder	1.67
932631	AC2-084 C	2.9646	Adder	3.49
932632	AC2-084 E	1.4602	Adder	1.72
934331	AD1-057 C O1	3.8896	Adder	4.58
934332	AD1-057 E O1	2.0749	Adder	2.44
936762	AD2-097 E	-3.0883	Adder	-3.63
938491	AE1-068 C O1	22.0260	Adder	25.91
938492	AE1-068 E O1	12.1652	Adder	14.31
938501	AE1-069 C O1	17.2195	Adder	20.26
938502	AE1-069 E O1	9.8445	Adder	11.58
939411	AE1-173 C	25.0186	Adder	29.43
939412	AE1-173 E	16.6790	Adder	19.62
940431	AE2-027 C O1	11.7209	50/50	11.7209
940432	AE2-027 E O1	7.8139	50/50	7.8139
940471	AE2-031 C	11.9947	Adder	14.11
940472	AE2-031 E	7.9965	Adder	9.41
940481	AE2-033 C	13.9347	50/50	13.9347
940482	AE2-033 E	9.3942	50/50	9.3942
940541	AE2-040 O1	4.0809	50/50	4.0809
940571	AE2-044 C	1.5015	Adder	1.77
940572	AE2-044 E	0.6435	Adder	0.76
941031	AE2-094 C	14.4471	Adder	17.0
941032	AE2-094 E	6.4705	Adder	7.61
942001	AE2-212 C	7.6140	50/50	7.6140
942002	AE2-212 E	5.0760	50/50	5.0760
942371	AE2-250 C O1	14.0362	50/50	14.0362
942372	AE2-250 E O1	7.4080	50/50	7.4080
942471	AE2-260 C O1	10.5310	50/50	10.5310
942472	AE2-260 E O1	14.9370	50/50	14.9370
942931	AE2-313 C	12.9874	Adder	15.28
942932	AE2-313 E	8.6582	Adder	10.19
943911	AF1-059	6.7532	Adder	7.94
944011	AF1-069 C	4.7204	Adder	5.55
944012	AF1-069 E	1.8338	Adder	2.16
944141	AF1-082	0.9653	Adder	1.14
945811	AF1-246 C O1	2.4290	Adder	2.86
945812	AF1-246 E O1	3.3544	Adder	3.95
946011	AF1-266	11.6645	50/50	11.6645
946281	AF1-292 C	0.9413	50/50	0.9413
946282	AF1-292 E	0.6346	50/50	0.6346
957481	AF2-042 C O2	9.1956	Adder	20.41
957482	AF2-042 E O2	6.1304	Adder	13.61
958141	AF2-108	7.8655	50/50	7.8655
959231	AF2-214 C	1.7195	Adder	3.82
959232	AF2-214 E	2.5779	Adder	5.72
959671	AF2-258 C	1.9035	50/50	1.9035
959672	AF2-258 E	1.2690	50/50	1.2690
959681	AF2-259 C	6.7419	50/50	6.7419
959682	AF2-259 E	4.4946	50/50	4.4946
959751	AF2-266 O2	1.5326	Adder	3.4

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960081	AF2-299 C	1.5864	50/50	1.5864
960082	AF2-299 E	1.0576	50/50	1.0576
960121	AF2-303 C O2	3.2913	Adder	7.31
960122	AF2-303 E O2	2.1465	Adder	4.76
960331	AF2-324 C O2	1.3899	Adder	3.09
960332	AF2-324 E O2	0.7462	Adder	1.66
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4540	Adder	1.01
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1135	Adder	0.25
960831	AF2-374 C	0.2162	Adder	0.48
960832	AF2-374 E	0.3528	Adder	0.78
WEC	WEC	0.2867	Confirmed LTF	0.2867
LGEE	LGEE	0.5408	Confirmed LTF	0.5408
CPLE	CPLE	3.0006	Confirmed LTF	3.0006
CBM-W2	CBM-W2	11.5643	Confirmed LTF	11.5643
NY	NY	0.4120	Confirmed LTF	0.4120
CBM-W1	CBM-W1	10.6961	Confirmed LTF	10.6961
TVA	TVA	2.4332	Confirmed LTF	2.4332
O-066	O-066	5.8330	Confirmed LTF	5.8330
CBM-S2	CBM-S2	20.4265	Confirmed LTF	20.4265
CBM-S1	CBM-S1	13.5553	Confirmed LTF	13.5553
G-007	G-007	0.9110	Confirmed LTF	0.9110
MADISON	MADISON	0.6834	Confirmed LTF	0.6834
MEC	MEC	1.7400	Confirmed LTF	1.7400
AA2-074	AA2-074	2.0452	LTF	2.0452

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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
97804429	314316	6LOCKS	DVP	314301	6HARR205	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.64	144.65	DC	12.07

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314314	3LOCKS	0.4484	50/50	0.4484
314435	6SAPONY	0.3847	50/50	0.3847
314572	3EMPORIA	0.0441	50/50	0.0441
315073	1STONECA	-2.0407	Adder	-2.4
900672	V4-068 E	0.0874	Adder	0.1
917332	Z2-043 E	0.3603	Adder	0.42
917342	Z2-044 E	0.1963	Adder	0.23
917512	Z2-088 E OP1	1.2083	Adder	1.42
918492	AA1-063AE OP	1.4180	Adder	1.67
918512	AA1-065 E OP	1.1096	Adder	1.31
918532	AA1-067 E	0.2104	Adder	0.25
919692	AA2-053 E OP	1.4063	Adder	1.65
919702	AA2-057 E OP	1.1712	Adder	1.38
920042	AA2-088 E OP	2.9997	Adder	3.53
920592	AA2-165 E	0.1610	Adder	0.19
920672	AA2-174 E OP	0.1625	Adder	0.19
922922	AB1-081 C OP	3.0031	Adder	3.53
922923	AB1-081 E OP	1.2870	Adder	1.51
923262	AB1-132 C OP (Suspended)	6.3446	Adder	7.46
923263	AB1-132 E OP (Suspended)	2.7191	Adder	3.2
923572	AB1-173 C OP	1.0681	Adder	1.26
923573	AB1-173 E OP	0.4984	Adder	0.59
923582	AB1-173AC OP	1.0681	Adder	1.26
923583	AB1-173AE OP	0.4984	Adder	0.59
923852	AB2-025 E	1.0021	50/50	1.0021
923911	AB2-031 C O1	1.0602	Adder	1.25
923912	AB2-031 E O1	0.5222	Adder	0.61
923991	AB2-040 C O1	3.4812	Adder	4.1
923992	AB2-040 E O1	2.8482	Adder	3.35
924022	AB2-043 E O1	0.8350	Adder	0.98
924152	AB2-059 E OP	1.8233	Adder	2.15
924162	AB2-060 E OP	1.2536	Adder	1.47
924301	AB2-077 C O1 (Suspended)	0.5927	Adder	0.7
924302	AB2-077 E O1 (Suspended)	0.3951	Adder	0.46
924311	AB2-078 C O1 (Suspended)	0.5927	Adder	0.7
924312	AB2-078 E O1 (Suspended)	0.3951	Adder	0.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924321	AB2-079 C O1 (Suspended)	0.5927	Adder	0.7
924322	AB2-079 E O1 (Suspended)	0.3951	Adder	0.46
924501	AB2-099 C (Suspended)	0.1725	Adder	0.2
924502	AB2-099 E (Suspended)	0.0739	Adder	0.09
924511	AB2-100 C	1.4223	50/50	1.4223
924512	AB2-100 E	4.0613	50/50	4.0613
925051	AB2-160 C O1 (Suspended)	7.9019	50/50	7.9019
925052	AB2-160 E O1 (Suspended)	12.8925	50/50	12.8925
925172	AB2-174 E O1	3.1192	Adder	3.67
925591	AC1-034 C	2.2925	Adder	2.7
925592	AC1-034 E	1.7295	Adder	2.03
925781	AC1-054 C O1	2.4514	Adder	2.88
925782	AC1-054 E O1	1.1293	Adder	1.33
926071	AC1-086 C	9.3432	Adder	10.99
926072	AC1-086 E	4.2524	Adder	5.0
926201	AC1-098 C	2.0796	Adder	2.45
926202	AC1-098 E	1.2389	Adder	1.46
926211	AC1-099 C	0.6969	Adder	0.82
926212	AC1-099 E	0.4093	Adder	0.48
927021	AC1-189 C	2.6258	Adder	3.09
927022	AC1-189 E	1.3080	Adder	1.54
927141	AC1-208 C	3.2021	Adder	3.77
927142	AC1-208 E	1.4219	Adder	1.67
932581	AC2-078 C O1	1.1238	Adder	1.32
932582	AC2-078 E O1	1.8336	Adder	2.16
932631	AC2-084 C	2.9646	Adder	3.49
932632	AC2-084 E	1.4602	Adder	1.72
934331	AD1-057 C O1	3.8896	Adder	4.58
934332	AD1-057 E O1	2.0749	Adder	2.44
934611	AD1-087 C O1	2.4186	Adder	2.85
934612	AD1-087 E O1	1.1367	Adder	1.34
935171	AD1-152 C O1	2.4035	Adder	2.83
935172	AD1-152 E O1	1.6024	Adder	1.89
936361	AD2-046 C O1	2.8106	Adder	3.31
936362	AD2-046 E O1	1.2925	Adder	1.52
936401	AD2-051 C O1	2.4640	Adder	2.9
936402	AD2-051 E O1	1.0580	Adder	1.24
936481	AD2-063 C O1	4.1960	Adder	4.94
936482	AD2-063 E O1	2.7740	Adder	3.26
936762	AD2-097 E	-3.0883	Adder	-3.63
937481	AD2-202 C O1	0.6409	Adder	0.75
937482	AD2-202 E O1	0.3605	Adder	0.42
938221	AE1-035 C	0.6195	Adder	0.73
938222	AE1-035 E	0.3051	Adder	0.36
938491	AE1-068 C O1	22.0260	Adder	25.91
938492	AE1-068 E O1	12.1652	Adder	14.31
938501	AE1-069 C O1	17.2195	Adder	20.26
938502	AE1-069 E O1	9.8445	Adder	11.58
938631	AE1-085 C O1	2.3847	Adder	2.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938632	AE1-085 E O1	1.1923	Adder	1.4
939181	AE1-148 C O1	2.7641	Adder	3.25
939182	AE1-148 E O1	1.8427	Adder	2.17
939191	AE1-149 C O1	3.0779	Adder	3.62
939192	AE1-149 E O1	2.0519	Adder	2.41
939411	AE1-173 C	25.0186	Adder	29.43
939412	AE1-173 E	16.6790	Adder	19.62
940431	AE2-027 C O1	11.7209	50/50	11.7209
940432	AE2-027 E O1	7.8139	50/50	7.8139
940471	AE2-031 C	11.9947	Adder	14.11
940472	AE2-031 E	7.9965	Adder	9.41
940481	AE2-033 C	13.9347	50/50	13.9347
940482	AE2-033 E	9.3942	50/50	9.3942
940541	AE2-040 O1	4.0809	50/50	4.0809
940571	AE2-044 C	1.5015	Adder	1.77
940572	AE2-044 E	0.6435	Adder	0.76
940651	AE2-052	1.0260	Adder	1.21
940661	AE2-053 O1	1.0237	Adder	1.2
941031	AE2-094 C	14.4471	Adder	17.0
941032	AE2-094 E	6.4705	Adder	7.61
941541	AE2-151 C	0.3203	Adder	0.38
941542	AE2-151 E	0.1725	Adder	0.2
942371	AE2-250 C O1	14.0362	50/50	14.0362
942372	AE2-250 E O1	7.4080	50/50	7.4080
942451	AE2-258	0.6967	Adder	0.82
942471	AE2-260 C O1	10.5310	50/50	10.5310
942472	AE2-260 E O1	14.9370	50/50	14.9370
942931	AE2-313 C	12.9874	Adder	15.28
942932	AE2-313 E	8.6582	Adder	10.19
943171	AE2-346 C	0.4141	Adder	0.49
943172	AE2-346 E	0.1775	Adder	0.21
943911	AF1-059	6.7532	Adder	7.94
944011	AF1-069 C	4.7204	Adder	5.55
944012	AF1-069 E	1.8338	Adder	2.16
944141	AF1-082	0.9653	Adder	1.14
945811	AF1-246 C O1	2.4290	Adder	2.86
945812	AF1-246 E O1	3.3544	Adder	3.95
946011	AF1-266	11.6645	50/50	11.6645
946281	AF1-292 C	0.9413	50/50	0.9413
946282	AF1-292 E	0.6346	50/50	0.6346
957481	AF2-042 C O2	9.1956	Adder	20.41
957482	AF2-042 E O2	6.1304	Adder	13.61
957521	AF2-046 C	2.6117	Adder	5.8
957522	AF2-046 E	1.3137	Adder	2.92
957861	AF2-080 C	1.2640	Adder	2.81
957862	AF2-080 E	0.5603	Adder	1.24
958141	AF2-108	7.8655	50/50	7.8655
959231	AF2-214 C	1.7195	Adder	3.82
959232	AF2-214 E	2.5779	Adder	5.72
959681	AF2-259 C	6.7419	50/50	6.7419
959682	AF2-259 E	4.4946	50/50	4.4946
959731	AF2-264 C	0.3504	Adder	0.78

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959732	AF2-264 E	0.1726	Adder	0.38
959751	AF2-266 O2	1.5326	Adder	3.4
960061	AF2-297 C O2	1.1943	Adder	2.65
960062	AF2-297 E O2	0.7962	Adder	1.77
960081	AF2-299 C	1.5864	50/50	1.5864
960082	AF2-299 E	1.0576	50/50	1.0576
960121	AF2-303 C O2	3.2913	Adder	7.31
960122	AF2-303 E O2	2.1465	Adder	4.76
960331	AF2-324 C O2	1.3899	Adder	3.09
960332	AF2-324 E O2	0.7462	Adder	1.66
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4540	Adder	1.01
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1135	Adder	0.25
960811	AF2-372 C	0.1984	Adder	0.44
960812	AF2-372 E	0.3238	Adder	0.72
960821	AF2-373 C	0.1411	Adder	0.31
960822	AF2-373 E	0.2116	Adder	0.47
960831	AF2-374 C	0.2162	Adder	0.48
960832	AF2-374 E	0.3528	Adder	0.78
WEC	WEC	0.2867	Confirmed LTF	0.2867
LGEE	LGEE	0.5408	Confirmed LTF	0.5408
CPLE	CPLE	3.0006	Confirmed LTF	3.0006
CBM-W2	CBM-W2	11.5643	Confirmed LTF	11.5643
NY	NY	0.4120	Confirmed LTF	0.4120
CBM-W1	CBM-W1	10.6961	Confirmed LTF	10.6961
TVA	TVA	2.4332	Confirmed LTF	2.4332
O-066	O-066	5.8330	Confirmed LTF	5.8330
CBM-S2	CBM-S2	20.4265	Confirmed LTF	20.4265
CBM-S1	CBM-S1	13.5553	Confirmed LTF	13.5553
G-007	G-007	0.9110	Confirmed LTF	0.9110
MADISON	MADISON	0.6834	Confirmed LTF	0.6834
MEC	MEC	1.7400	Confirmed LTF	1.7400
AA2-074	AA2-074	2.0452	LTF	2.0452

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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
97804414	314331	6POE	DVP	314299	6HARROWG	DVP	1	DVP_P4-2: 562T563	breaker	541.0	143.43	144.4	DC	11.59

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	0.3501	50/50	0.3501
314539	3UNCAMP	0.6872	Adder	0.81
314541	3WATKINS	0.2020	Adder	0.24
900672	V4-068 E	0.0934	Adder	0.11
907092	X1-038 E	1.7181	Adder	2.02
917332	Z2-043 E	0.3606	Adder	0.42
917342	Z2-044 E	0.1895	Adder	0.22
917512	Z2-088 E OP1	1.1777	Adder	1.39
918492	AA1-063AE OP	1.4311	Adder	1.68
918512	AA1-065 E OP	1.1298	Adder	1.33
918532	AA1-067 E	0.2085	Adder	0.25
919692	AA2-053 E OP	1.3707	Adder	1.61
919702	AA2-057 E OP	1.1342	Adder	1.33
920042	AA2-088 E OP	3.3180	Adder	3.9
920592	AA2-165 E	0.1559	Adder	0.18
920672	AA2-174 E OP	0.1584	Adder	0.19
922922	AB1-081 C OP	2.8884	Adder	3.4
922923	AB1-081 E OP	1.2379	Adder	1.46
923262	AB1-132 C OP (Suspended)	6.0126	Adder	7.07
923263	AB1-132 E OP (Suspended)	2.5768	Adder	3.03
923572	AB1-173 C OP	1.0096	Adder	1.19
923573	AB1-173 E OP	0.4711	Adder	0.55
923582	AB1-173AC OP	1.0096	Adder	1.19
923583	AB1-173AE OP	0.4711	Adder	0.55
923801	AB2-015 C OP	2.4956	Adder	2.94
923802	AB2-015 E OP	2.0464	Adder	2.41
923852	AB2-025 E	0.9118	50/50	0.9118
923911	AB2-031 C O1	1.0021	Adder	1.18
923912	AB2-031 E O1	0.4936	Adder	0.58
923991	AB2-040 C O1	3.2905	Adder	3.87
923992	AB2-040 E O1	2.6922	Adder	3.17
924022	AB2-043 E O1	0.7888	Adder	0.93
924152	AB2-059 E OP	1.7537	Adder	2.06
924162	AB2-060 E OP	1.1840	Adder	1.39
924301	AB2-077 C O1 (Suspended)	0.5601	Adder	0.66
924302	AB2-077 E O1 (Suspended)	0.3734	Adder	0.44
924311	AB2-078 C O1 (Suspended)	0.5601	Adder	0.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924312	AB2-078 E O1 (Suspended)	0.3734	Adder	0.44
924321	AB2-079 C O1 (Suspended)	0.5601	Adder	0.66
924322	AB2-079 E O1 (Suspended)	0.3734	Adder	0.44
924501	AB2-099 C (Suspended)	0.1773	Adder	0.21
924502	AB2-099 E (Suspended)	0.0760	Adder	0.09
924511	AB2-100 C	1.3143	50/50	1.3143
924512	AB2-100 E	3.7528	50/50	3.7528
925061	AB2-161 C O1 (Suspended)	2.4158	50/50	2.4158
925062	AB2-161 E O1 (Suspended)	3.9416	50/50	3.9416
925122	AB2-169 E	1.5101	Adder	1.78
925172	AB2-174 E O1	2.9357	Adder	3.45
925591	AC1-034 C	2.2050	Adder	2.59
925592	AC1-034 E	1.6634	Adder	1.96
925781	AC1-054 C O1	2.3459	Adder	2.76
925782	AC1-054 E O1	1.0807	Adder	1.27
926071	AC1-086 C	8.8543	Adder	10.42
926072	AC1-086 E	4.0299	Adder	4.74
926201	AC1-098 C	2.0384	Adder	2.4
926202	AC1-098 E	1.2144	Adder	1.43
926211	AC1-099 C	0.6831	Adder	0.8
926212	AC1-099 E	0.4012	Adder	0.47
926271	AC1-105 C O1 (Suspended)	1.4685	Adder	1.73
926272	AC1-105 E O1 (Suspended)	0.7310	Adder	0.86
927021	AC1-189 C	2.5727	Adder	3.03
927022	AC1-189 E	1.2815	Adder	1.51
927141	AC1-208 C	3.1122	Adder	3.66
927142	AC1-208 E	1.3819	Adder	1.63
932581	AC2-078 C O1	4.5616	50/50	4.5616
932582	AC2-078 E O1	7.4426	50/50	7.4426
932591	AC2-079 C O1	2.5898	Adder	3.05
932592	AC2-079 E O1	4.2255	Adder	4.97
932631	AC2-084 C	2.9058	Adder	3.42
932632	AC2-084 E	1.4312	Adder	1.68
934331	AD1-057 C O1	3.7094	Adder	4.36
934332	AD1-057 E O1	1.9787	Adder	2.33
934571	AD1-082 C	5.5056	50/50	5.5056
934572	AD1-082 E	3.1406	50/50	3.1406
934611	AD1-087 C O1	2.2736	Adder	2.67
934612	AD1-087 E O1	1.0686	Adder	1.26
935171	AD1-152 C O1	2.2595	Adder	2.66
935172	AD1-152 E O1	1.5063	Adder	1.77
936361	AD2-046 C O1	2.6732	Adder	3.14
936362	AD2-046 E O1	1.2293	Adder	1.45
936401	AD2-051 C O1	2.5014	Adder	2.94
936402	AD2-051 E O1	1.0741	Adder	1.26
936481	AD2-063 C O1	3.9604	Adder	4.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936482	AD2-063 E O1	2.6183	Adder	3.08
936661	AD2-085 C	1.5789	Adder	1.86
936662	AD2-085 E	2.5762	Adder	3.03
936762	AD2-097 E	-2.9410	Adder	-3.46
937481	AD2-202 C O1	0.6025	Adder	0.71
937482	AD2-202 E O1	0.3389	Adder	0.4
938171	AE1-026 C O1	8.1805	Adder	9.62
938172	AE1-026 E O1	2.1582	Adder	2.54
938221	AE1-035 C	0.6308	Adder	0.74
938222	AE1-035 E	0.3107	Adder	0.37
938491	AE1-068 C O1	20.6407	Adder	24.28
938492	AE1-068 E O1	11.4001	Adder	13.41
938501	AE1-069 C O1	16.1400	Adder	18.99
938502	AE1-069 E O1	9.2274	Adder	10.86
938631	AE1-085 C O1	9.4765	50/50	9.4765
938632	AE1-085 E O1	4.7383	50/50	4.7383
938771	AE1-103 C O1	1.0308	Adder	1.21
938772	AE1-103 E O1	1.4235	Adder	1.67
939181	AE1-148 C O1	2.6282	Adder	3.09
939182	AE1-148 E O1	1.7522	Adder	2.06
939191	AE1-149 C O1	12.7956	50/50	12.7956
939192	AE1-149 E O1	8.5304	50/50	8.5304
939411	AE1-173 C	24.2638	Adder	28.55
939412	AE1-173 E	16.1758	Adder	19.03
940061	AE2-000BC O1	11.4435	50/50	11.4435
940062	AE2-000BE O1	7.6290	50/50	7.6290
940471	AE2-031 C	11.2374	Adder	13.22
940472	AE2-031 E	7.4916	Adder	8.81
940481	AE2-033 C	12.6994	50/50	12.6994
940482	AE2-033 E	8.5614	50/50	8.5614
940571	AE2-044 C	1.4442	Adder	1.7
940572	AE2-044 E	0.6189	Adder	0.73
940651	AE2-052	4.2652	50/50	4.2652
940661	AE2-053 O1	0.9734	Adder	1.15
941031	AE2-094 C	13.5348	Adder	15.92
941032	AE2-094 E	6.0619	Adder	7.13
941101	AE2-104 C O1	0.8265	Adder	0.97
941102	AE2-104 E O1	1.3139	Adder	1.55
941541	AE2-151 C	0.3249	Adder	0.38
941542	AE2-151 E	0.1749	Adder	0.21
942341	AE2-247 C	0.6889	Adder	0.81
942342	AE2-247 E	0.9513	Adder	1.12
942451	AE2-258	0.6581	Adder	0.77
942471	AE2-260 C O1	9.7098	50/50	9.7098
942472	AE2-260 E O1	13.7722	50/50	13.7722
942931	AE2-313 C	12.1674	Adder	14.31
942932	AE2-313 E	8.1116	Adder	9.54
943171	AE2-346 C	0.4256	Adder	0.5
943172	AE2-346 E	0.1824	Adder	0.21
943461	AF1-017 C	0.6233	Adder	0.73
943462	AF1-017 E	1.0169	Adder	1.2
943911	AF1-059	6.3283	Adder	7.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944011	AF1-069 C	4.4223	Adder	5.2
944012	AF1-069 E	1.7180	Adder	2.02
944141	AF1-082	0.9284	Adder	1.09
945811	AF1-246 C O1	2.2784	Adder	2.68
945812	AF1-246 E O1	3.1463	Adder	3.7
946011	AF1-266	10.6304	50/50	10.6304
946281	AF1-292 C	0.7457	Adder	0.88
946282	AF1-292 E	0.5027	Adder	0.59
957481	AF2-042 C O2	8.6253	Adder	19.15
957482	AF2-042 E O2	5.7502	Adder	12.76
957521	AF2-046 C	2.7695	Adder	6.15
957522	AF2-046 E	1.3931	Adder	3.09
957861	AF2-080 C	1.2384	Adder	2.75
957862	AF2-080 E	0.5490	Adder	1.22
958161	AF2-110 C	0.1806	Adder	0.4
958162	AF2-110 E	0.2824	Adder	0.63
959231	AF2-214 C	1.6538	Adder	3.67
959232	AF2-214 E	2.4794	Adder	5.5
959511	AF2-242	1.1275	Adder	2.5
959731	AF2-264 C	0.3655	Adder	0.81
959732	AF2-264 E	0.1800	Adder	0.4
959751	AF2-266 O2	1.4375	Adder	3.19
960061	AF2-297 C O2	1.1247	Adder	2.5
960062	AF2-297 E O2	0.7498	Adder	1.66
960081	AF2-299 C	0.6661	Adder	1.48
960082	AF2-299 E	0.4441	Adder	0.99
960121	AF2-303 C O2	3.1608	Adder	7.02
960122	AF2-303 E O2	2.0614	Adder	4.58
960331	AF2-324 C O2	1.3362	Adder	2.97
960332	AF2-324 E O2	0.7174	Adder	1.59
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4368	Adder	0.97
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1092	Adder	0.24
960361	AF2-327 C (Withdrawn : 07/22/2020)	2.3496	50/50	2.3496
960362	AF2-327 E (Withdrawn : 07/22/2020)	0.5874	50/50	0.5874
960811	AF2-372 C	0.1875	Adder	0.42
960812	AF2-372 E	0.3060	Adder	0.68
960821	AF2-373 C	0.1331	Adder	0.3
960822	AF2-373 E	0.1996	Adder	0.44
960831	AF2-374 C	0.2160	Adder	0.48
960832	AF2-374 E	0.3524	Adder	0.78
961091	AF2-400 C	0.0714	Adder	0.16
961092	AF2-400 E	0.1172	Adder	0.26
961111	AF2-402 C O2	0.7661	50/50	0.7661
961112	AF2-402 E O2	1.2526	50/50	1.2526
WEC	WEC	0.2693	Confirmed LTF	0.2693
LGEE	LGEE	0.5089	Confirmed LTF	0.5089
CPL	CPL	2.8524	Confirmed LTF	2.8524
CBM-W2	CBM-W2	10.9173	Confirmed LTF	10.9173
NY	NY	0.3971	Confirmed LTF	0.3971

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W1	CBM-W1	10.0455	Confirmed LTF	10.0455
TVA	TVA	2.3002	Confirmed LTF	2.3002
O-066	O-066	5.6112	Confirmed LTF	5.6112
CBM-S2	CBM-S2	19.3746	Confirmed LTF	19.3746
CBM-S1	CBM-S1	12.8056	Confirmed LTF	12.8056
G-007	G-007	0.8757	Confirmed LTF	0.8757
MADISON	MADISON	0.6492	Confirmed LTF	0.6492
MEC	MEC	1.6383	Confirmed LTF	1.6383
AA2-074	AA2-074	1.9440	LTF	1.9440

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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
98090323	314435	6SAPONY	DVP	314282	6CARSON	DVP	1	DVP_P1-2: LN 246	single	678.68	128.3	131.33	DC	20.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314435	6SAPONY	1.7767	80/20	1.7767
314572	3EMPORIA	0.1786	80/20	0.1786
314574	6EVERETS	0.2977	80/20	0.2977
314582	3KELFORD	0.5909	80/20	0.5909
314589	3MURPHYS	0.1033	80/20	0.1033
314623	3WITAKRS	0.2747	80/20	0.2747
314704	3LAWRENC	0.6597	80/20	0.6597
315126	1ROARAP2	2.4063	80/20	2.4063
315128	1ROARAP4	2.2963	80/20	2.2963
315136	1ROSEMG1	4.3501	80/20	4.3501
315137	1ROSEMS1	2.6975	80/20	2.6975
315138	1ROSEMG2	2.0388	80/20	2.0388
315139	1GASTONA	6.6383	80/20	6.6383
315141	1GASTONB	6.6383	80/20	6.6383
315158	1KERR 1	0.4002	80/20	0.4002
315159	1KERR 2	1.1205	80/20	1.1205
315160	1KERR 3	1.1205	80/20	1.1205
315161	1KERR 4	1.1205	80/20	1.1205
315162	1KERR 5	1.1205	80/20	1.1205
315163	1KERR 6	1.1205	80/20	1.1205
315164	1KERR 7	1.1205	80/20	1.1205
315294	1DOMTR10	7.7321	Adder	9.1
315601	1CONETOE2SOL	1.6673	80/20	1.6673
315602	1HOLLOMANSOL	1.9043	80/20	1.9043
315606	3AA2-053SOLA	2.3991	80/20	2.3991
315607	3AA1-063SOLA	2.0770	80/20	2.0770
315608	3AA2-088SOLA	1.0872	80/20	1.0872
315612	3AA2-057SOLA	1.5527	80/20	1.5527
920591	AA2-165 C	0.1841	80/20	0.1841
920671	AA2-174 C OP	0.1099	80/20	0.1099
922922	AB1-081 C OP	9.9876	80/20	9.9876
923262	AB1-132 C OP (Suspended)	29.3882	80/20	29.3882
923572	AB1-173 C OP	4.9272	80/20	4.9272
923582	AB1-173AC OP	4.9272	80/20	4.9272
923801	AB2-015 C OP	4.4378	Adder	5.22
923911	AB2-031 C O1	4.8907	80/20	4.8907
923991	AB2-040 C O1	16.0591	80/20	16.0591
924021	AB2-043 C O1	0.4589	80/20	0.4589
924151	AB2-059 C OP	2.0304	80/20	2.0304
924301	AB2-077 C O1 (Suspended)	1.4183	Adder	1.67

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924311	AB2-078 C O1 (Suspended)	1.4183	Adder	1.67
924321	AB2-079 C O1 (Suspended)	1.4183	Adder	1.67
924501	AB2-099 C (Suspended)	0.7157	80/20	0.7157
924511	AB2-100 C	6.1819	80/20	6.1819
925121	AB2-169 C	0.9958	80/20	0.9958
925171	AB2-174 C O1	2.7810	80/20	2.7810
925591	AC1-034 C	7.6245	80/20	7.6245
925611	AC1-036 C	0.5293	Adder	0.62
925781	AC1-054 C O1	8.2530	80/20	8.2530
926071	AC1-086 C	43.2777	80/20	43.2777
926201	AC1-098 C	8.1359	80/20	8.1359
926211	AC1-099 C	2.7264	80/20	2.7264
927021	AC1-189 C	9.0732	80/20	9.0732
927141	AC1-208 C	12.4257	80/20	12.4257
932631	AC2-084 C	11.5980	80/20	11.5980
933991	AD1-023 C	11.8384	80/20	11.8384
934331	AD1-057 C O1	15.6382	80/20	15.6382
934521	AD1-076 C	36.3614	Adder	42.78
936261	AD2-033 C	7.6172	Adder	8.96
936361	AD2-046 C O1	8.3565	80/20	8.3565
936401	AD2-051 C O1	10.9951	80/20	10.9951
936481	AD2-063 C O1	9.8387	Adder	11.57
938171	AE1-026 C O1	31.0088	80/20	31.0088
938221	AE1-035 C	2.7600	80/20	2.7600
939181	AE1-148 C O1	8.2015	80/20	8.2015
940241	AE2-006	0.2693	Adder	0.32
940481	AE2-033 C	63.9572	80/20	63.9572
940491	AE2-034 C	3.6978	Adder	4.35
940571	AE2-044 C	4.9938	80/20	4.9938
940661	AE2-053 O1	3.0376	80/20	3.0376
941541	AE2-151 C	1.3698	80/20	1.3698
942451	AE2-258	1.9846	80/20	1.9846
942471	AE2-260 C O1	46.1499	80/20	46.1499
943171	AE2-346 C	1.7176	80/20	1.7176
943911	AF1-059	27.1850	80/20	27.1850
944141	AF1-082	3.2103	80/20	3.2103
945711	AF1-236 C O1	40.4822	Adder	47.63
946011	AF1-266	53.5372	80/20	53.5372
946281	AF1-292 C	3.8601	80/20	3.8601
957521	AF2-046 C	18.8652	80/20	18.8652
957531	AF2-047 C	4.6569	Adder	10.34
957861	AF2-080 C	8.2406	80/20	8.2406
959231	AF2-214 C	10.7902	80/20	10.7902
959311	AF2-222 C	4.7483	Adder	10.54
959511	AF2-242	7.3930	80/20	7.3930
959731	AF2-264 C	2.6430	80/20	2.6430
960081	AF2-299 C	6.5058	80/20	6.5058
960121	AF2-303 C O2	20.8138	80/20	20.8138
960331	AF2-324 C O2	8.8030	80/20	8.8030
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.8438	80/20	2.8438

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960811	AF2-372 C	0.4748	Adder	1.05
960831	AF2-374 C	1.7399	80/20	1.7399
961091	AF2-400 C	0.1270	Adder	0.28
WEC	WEC	0.3178	Confirmed LTF	0.3178
LGEE	LGEE	0.5973	Confirmed LTF	0.5973
CPL	CPL	3.6396	Confirmed LTF	3.6396
CBM-W2	CBM-W2	12.5225	Confirmed LTF	12.5225
NY	NY	0.3783	Confirmed LTF	0.3783
CBM-W1	CBM-W1	11.9095	Confirmed LTF	11.9095
TVA	TVA	2.6124	Confirmed LTF	2.6124
CBM-S2	CBM-S2	22.6171	Confirmed LTF	22.6171
CBM-S1	CBM-S1	14.6033	Confirmed LTF	14.6033
MADISON	MADISON	0.7096	Confirmed LTF	0.7096
MEC	MEC	1.9068	Confirmed LTF	1.9068
AA2-074	AA2-074	2.4804	LTF	2.4804

13.5.21 Index 21

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
96976512	314554	3BTLEBRO	DVP	304223	3ROCKYMT115T	CPL	1	DVP_P7-1: LN 2058-2181	tower	93.0	497.49	540.76	DC	40.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314541	3WATKINS	0.2106	Adder	0.25
314582	3KELFORD	0.3883	50/50	0.3883
314623	3WITAKRS	0.5537	50/50	0.5537
315126	1ROARAP2	0.9224	50/50	0.9224
315136	1ROSEMG1	1.5941	50/50	1.5941
315137	1ROSEMS1	0.9885	50/50	0.9885
315138	1ROSEMG2	0.7471	50/50	0.7471
315139	1GASTONA	2.0488	50/50	2.0488
315141	1GASTONB	2.0488	50/50	2.0488
315601	1CONETOE2SOL	1.3283	50/50	1.3283
315612	3AA2-057SOLA	2.5571	50/50	2.5571
900672	V4-068 E	0.1239	Adder	0.15
917332	Z2-043 E	0.9788	50/50	0.9788
917342	Z2-044 E	1.3758	50/50	1.3758
917512	Z2-088 E OP1	3.3002	50/50	3.3002
918492	AA1-063AE OP	1.9451	Adder	2.29
918512	AA1-065 E OP	1.4319	Adder	1.68
918532	AA1-067 E	0.2468	Adder	0.29
919692	AA2-053 E OP	1.9800	Adder	2.33
919702	AA2-057 E OP	6.9976	50/50	6.9976
920042	AA2-088 E OP	4.0200	Adder	4.73
920591	AA2-165 C	0.3032	50/50	0.3032
920592	AA2-165 E	0.9618	50/50	0.9618
920672	AA2-174 E OP	0.2288	Adder	0.27
922922	AB1-081 C OP	22.9723	50/50	22.9723
922923	AB1-081 E OP	9.8453	50/50	9.8453
923262	AB1-132 C OP (Suspended)	9.0703	50/50	9.0703
923263	AB1-132 E OP (Suspended)	3.8873	50/50	3.8873
923572	AB1-173 C OP	1.0085	Adder	1.19
923573	AB1-173 E OP	0.4707	Adder	0.55
923582	AB1-173AC OP	1.0085	Adder	1.19
923583	AB1-173AE OP	0.4707	Adder	0.55
923911	AB2-031 C O1	1.0011	Adder	1.18
923912	AB2-031 E O1	0.4931	Adder	0.58
923991	AB2-040 C O1	3.2871	Adder	3.87
923992	AB2-040 E O1	2.6894	Adder	3.16
924151	AB2-059 C OP	4.6702	50/50	4.6702
924152	AB2-059 E OP	13.9475	50/50	13.9475
924501	AB2-099 C (Suspended)	0.2638	Adder	0.31

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924502	AB2-099 E (Suspended)	0.1131	Adder	0.13
924512	AB2-100 E	2.0948	Adder	2.46
925172	AB2-174 E O1	2.7106	Adder	3.19
925591	AC1-034 C	17.5369	50/50	17.5369
925592	AC1-034 E	13.2296	50/50	13.2296
926071	AC1-086 C	13.3571	50/50	13.3571
926072	AC1-086 E	6.0793	50/50	6.0793
926201	AC1-098 C	8.4859	50/50	8.4859
926202	AC1-098 E	5.0555	50/50	5.0555
926211	AC1-099 C	2.8437	50/50	2.8437
926212	AC1-099 E	1.6701	50/50	1.6701
927021	AC1-189 C	6.0732	50/50	6.0732
927022	AC1-189 E	3.0252	50/50	3.0252
927141	AC1-208 C	13.5254	50/50	13.5254
927142	AC1-208 E	6.0058	50/50	6.0058
932631	AC2-084 C	12.0970	50/50	12.0970
932632	AC2-084 E	5.9582	50/50	5.9582
934331	AD1-057 C O1	10.1862	50/50	10.1862
934332	AD1-057 E O1	5.4338	50/50	5.4338
936401	AD2-051 C O1	3.1726	Adder	3.73
936402	AD2-051 E O1	1.3623	Adder	1.6
938171	AE1-026 C O1	9.9093	Adder	11.66
938172	AE1-026 E O1	2.6143	Adder	3.08
938221	AE1-035 C	0.7995	Adder	0.94
938222	AE1-035 E	0.3938	Adder	0.46
940571	AE2-044 C	11.4862	50/50	11.4862
940572	AE2-044 E	4.9226	50/50	4.9226
941541	AE2-151 C	0.5014	Adder	0.59
941542	AE2-151 E	0.2700	Adder	0.32
942471	AE2-260 C O1	4.9565	Adder	5.83
942472	AE2-260 E O1	7.0302	Adder	8.27
943171	AE2-346 C	0.6332	Adder	0.74
943172	AE2-346 E	0.2714	Adder	0.32
944141	AF1-082	7.3840	50/50	7.3840
946281	AF1-292 C	0.5556	Adder	0.65
946282	AF1-292 E	0.3746	Adder	0.44
957521	AF2-046 C	3.7559	Adder	8.34
957522	AF2-046 E	1.8893	Adder	4.19
957861	AF2-080 C	5.5159	50/50	5.5159
957862	AF2-080 E	2.4452	50/50	2.4452
959231	AF2-214 C	24.8183	50/50	24.8183
959232	AF2-214 E	37.2070	50/50	37.2070
959511	AF2-242	1.3281	Adder	2.95
959731	AF2-264 C	0.5208	Adder	1.16
959732	AF2-264 E	0.2565	Adder	0.57
960081	AF2-299 C	0.4963	Adder	1.1
960082	AF2-299 E	0.3309	Adder	0.73
960121	AF2-303 C O2	24.3443	50/50	24.3443
960122	AF2-303 E O2	15.8767	50/50	15.8767
960331	AF2-324 C O2	10.0723	50/50	10.0723
960332	AF2-324 E O2	5.4077	50/50	5.4077
960351	AF2-326 C (Withdrawn : 07/22/2020)	6.9299	50/50	6.9299

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960352	AF2-326 E (Withdrawn : 07/22/2020)	1.7325	50/50	1.7325
960831	AF2-374 C	0.3253	Adder	0.72
960832	AF2-374 E	0.5307	Adder	1.18
NEWTON	NEWTON	0.8596	Confirmed LTF	0.8596
FARMERCITY	FARMERCITY	0.0493	Confirmed LTF	0.0493
G-007A	G-007A	0.5131	Confirmed LTF	0.5131
VFT	VFT	1.3610	Confirmed LTF	1.3610
CALDERWOOD	CALDERWOOD	0.6834	Confirmed LTF	0.6834
PRAIRIE	PRAIRIE	2.3221	Confirmed LTF	2.3221
CHEOAH	CHEOAH	0.7007	Confirmed LTF	0.7007
EDWARDS	EDWARDS	0.2597	Confirmed LTF	0.2597
TILTON	TILTON	0.4593	Confirmed LTF	0.4593
GIBSON	GIBSON	0.4155	Confirmed LTF	0.4155
BLUEG	BLUEG	1.2812	Confirmed LTF	1.2812
TRIMBLE	TRIMBLE	0.4068	Confirmed LTF	0.4068
CATAWBA	CATAWBA	0.7382	Confirmed LTF	0.7382

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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
97804452	314561	6CAROLNA	DVP	314583	6LAKEVEW	DVP	1	DVP_P4-2: 218T2160	breaker	459.0	131.23	132.5	DC	11.0

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	1.6526	Adder	1.94
314541	3WATKINS	0.6292	50/50	0.6292
314574	6EVERETS	0.4446	50/50	0.4446
314582	3KELFORD	0.5554	50/50	0.5554
314589	3MURPHYS	0.1199	50/50	0.1199
315115	1S HAMPT1	1.4656	50/50	1.4656
315126	1ROARAP2	2.4015	50/50	2.4015
315128	1ROARAP4	2.2917	50/50	2.2917
315292	1DOMTR78	1.7816	50/50	1.7816
315294	1DOMTR10	13.3857	50/50	13.3857
315602	1HOLLOMANSOL	2.3992	50/50	2.3992
315606	3AA2-053SOLA	2.4453	50/50	2.4453
315607	3AA1-063SOLA	2.1746	50/50	2.1746
315608	3AA2-088SOLA	1.2899	50/50	1.2899
315611	6Z1-036WIND	3.8974	Adder	4.59
315614	AA2-178 C	1.6067	50/50	1.6067
900672	V4-068 E	0.3808	50/50	0.3808
901082	W1-029 E	13.9650	Adder	16.43
907092	X1-038 E	4.1314	Adder	4.86
913392	Y1-086 E	0.7902	Adder	0.93
916042	Z1-036 E (Suspended)	26.1129	Adder	30.72
917122	Z2-027 E	0.4178	Adder	0.49
917332	Z2-043 E	1.3999	50/50	1.3999
918492	AA1-063AE OP	5.9443	50/50	5.9443
918512	AA1-065 E OP	6.2280	50/50	6.2280
918532	AA1-067 E	1.1047	50/50	1.1047
919692	AA2-053 E OP	6.0871	50/50	6.0871
920042	AA2-088 E OP	12.2010	50/50	12.2010
920671	AA2-174 C OP	0.1120	50/50	0.1120
920672	AA2-174 E OP	0.7034	50/50	0.7034
920692	AA2-178 E	3.9919	50/50	3.9919
922922	AB1-081 C OP	-4.5063	Adder	-5.3
923572	AB1-173 C OP	1.1431	Adder	1.34
923573	AB1-173 E OP	0.5335	Adder	0.63
923582	AB1-173AC OP	1.1431	Adder	1.34
923583	AB1-173AE OP	0.5335	Adder	0.63
923801	AB2-015 C OP	7.4805	50/50	7.4805
923802	AB2-015 E OP	6.1340	50/50	6.1340
923831	AB2-022 C	0.8284	Adder	0.97
923832	AB2-022 E	0.4461	Adder	0.52
923911	AB2-031 C O1	1.1347	Adder	1.33

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923912	AB2-031 E O1	0.5589	Adder	0.66
923991	AB2-040 C O1	3.7258	Adder	4.38
923992	AB2-040 E O1	3.0484	Adder	3.59
924501	AB2-099 C (Suspended)	0.8232	50/50	0.8232
924502	AB2-099 E (Suspended)	0.3528	50/50	0.3528
925121	AB2-169 C	1.4733	50/50	1.4733
925122	AB2-169 E	7.6650	50/50	7.6650
925781	AC1-054 C O1	5.0508	Adder	5.94
925782	AC1-054 E O1	2.3268	Adder	2.74
926201	AC1-098 C	4.0516	Adder	4.77
926202	AC1-098 E	2.4137	Adder	2.84
926211	AC1-099 C	1.3577	Adder	1.6
926212	AC1-099 E	0.7974	Adder	0.94
927141	AC1-208 C	5.4747	Adder	6.44
927142	AC1-208 E	2.4310	Adder	2.86
932631	AC2-084 C	5.7756	Adder	6.79
932632	AC2-084 E	2.8447	Adder	3.35
933991	AD1-023 C	16.4747	50/50	16.4747
933992	AD1-023 E	8.9689	50/50	8.9689
934521	AD1-076 C	62.6103	50/50	62.6103
934522	AD1-076 E	31.8811	50/50	31.8811
936361	AD2-046 C O1	3.6575	Adder	4.3
936362	AD2-046 E O1	1.6819	Adder	1.98
936401	AD2-051 C O1	14.0736	50/50	14.0736
936402	AD2-051 E O1	6.0430	50/50	6.0430
938171	AE1-026 C O1	42.1008	50/50	42.1008
938172	AE1-026 E O1	11.1072	50/50	11.1072
938221	AE1-035 C	3.4773	50/50	3.4773
938222	AE1-035 E	1.7127	50/50	1.7127
938771	AE1-103 C O1	2.4788	Adder	2.92
938772	AE1-103 E O1	3.4231	Adder	4.03
939181	AE1-148 C O1	3.5159	Adder	4.14
939182	AE1-148 E O1	2.3440	Adder	2.76
940491	AE2-034 C	6.9859	50/50	6.9859
940492	AE2-034 E	2.9939	50/50	2.9939
940661	AE2-053 O1	1.3022	Adder	1.53
941501	AE2-147 C	6.9439	Adder	8.17
941502	AE2-147 E	4.6293	Adder	5.45
941541	AE2-151 C	1.5718	50/50	1.5718
941542	AE2-151 E	0.8464	50/50	0.8464
942851	AE2-304 C	0.3189	Adder	0.38
942852	AE2-304 E	0.1240	Adder	0.15
943171	AE2-346 C	1.9758	50/50	1.9758
943172	AE2-346 E	0.8468	50/50	0.8468
944142	AF1-082 BAT	1.7041	Merchant Transmission	1.7041
944871	AF1-152 C	2.3146	Adder	2.72
944872	AF1-152 E	1.5431	Adder	1.82
945711	AF1-236 C O1	76.4785	50/50	76.4785
945712	AF1-236 E O1	124.7808	50/50	124.7808
946012	AF1-266 BAT	8.0020	Merchant Transmission	8.0020
957521	AF2-046 C	21.8452	50/50	21.8452
957522	AF2-046 E	10.9883	50/50	10.9883

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957531	AF2-047 C	16.5997	50/50	16.5997
957532	AF2-047 E	8.3498	50/50	8.3498
957791	AF2-073 C (Withdrawn : 07/02/2020)	2.9263	Adder	6.5
957792	AF2-073 E (Withdrawn : 07/02/2020)	1.8709	Adder	4.15
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.3006	Adder	2.89
957802	AF2-074 E (Withdrawn : 07/02/2020)	0.8315	Adder	1.85
959233	AF2-214 BAT	7.5865	Merchant Transmission	7.5865
959511	AF2-242	10.9790	50/50	10.9790
959731	AF2-264 C	3.0494	50/50	3.0494
959732	AF2-264 E	1.5020	50/50	1.5020
960123	AF2-303 BAT	5.8275	Merchant Transmission	5.8275
960353	AF2-326 BAT (Withdrawn : 07/22/2020)	0.4490	Merchant Transmission	0.4490
960831	AF2-374 C	1.9105	50/50	1.9105
960832	AF2-374 E	3.1171	50/50	3.1171
961091	AF2-400 C	0.4039	50/50	0.4039
961092	AF2-400 E	0.6628	50/50	0.6628
NEWTON	NEWTON	0.5931	Confirmed LTF	0.5931
FARMERCITY	FARMERCITY	0.0346	Confirmed LTF	0.0346
G-007A	G-007A	0.4915	Confirmed LTF	0.4915
VFT	VFT	1.3094	Confirmed LTF	1.3094
CALDERWOOD	CALDERWOOD	0.4980	Confirmed LTF	0.4980
PRAIRIE	PRAIRIE	1.6273	Confirmed LTF	1.6273
CHEOAH	CHEOAH	0.5115	Confirmed LTF	0.5115
EDWARDS	EDWARDS	0.1771	Confirmed LTF	0.1771
TILTON	TILTON	0.3118	Confirmed LTF	0.3118
GIBSON	GIBSON	0.2839	Confirmed LTF	0.2839
BLUEG	BLUEG	0.8697	Confirmed LTF	0.8697
TRIMBLE	TRIMBLE	0.2755	Confirmed LTF	0.2755
CATAWBA	CATAWBA	0.5495	Confirmed LTF	0.5495

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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
97804612	314561	6CAROLNA	DVP	314599	6ROA VAL	DVP	1	DVP_P4-2: 238T2002	breaker	671.0	101.72	103.03	DC	19.38

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1077	50/50	0.1077
314704	3LAWRENC	0.3940	50/50	0.3940
315126	1ROARAP2	1.7251	50/50	1.7251
315136	1ROSEMG1	4.2161	50/50	4.2161
315137	1ROSEMS1	2.6144	50/50	2.6144
315138	1ROSEMG2	1.9760	50/50	1.9760
315139	1GASTONA	6.6275	50/50	6.6275
315141	1GASTONB	6.6275	50/50	6.6275
315294	1DOMTR10	-5.1296	Adder	-6.03
315611	6Z1-036WIND	-2.2091	Adder	-2.6
917342	Z2-044 E	0.2911	Adder	0.34
918492	AA1-063AE OP	2.9372	Adder	3.46
919692	AA2-053 E OP	2.8284	Adder	3.33
919702	AA2-057 E OP	1.7334	Adder	2.04
920592	AA2-165 E	0.2382	Adder	0.28
920672	AA2-174 E OP	0.3268	Adder	0.38
922922	AB1-081 C OP	4.5320	Adder	5.33
922923	AB1-081 E OP	1.9423	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3404	50/50	29.3404
923263	AB1-132 E OP (Suspended)	12.5744	50/50	12.5744
923572	AB1-173 C OP	3.1248	50/50	3.1248
923573	AB1-173 E OP	1.4583	50/50	1.4583
923582	AB1-173AC OP	3.1248	50/50	3.1248
923583	AB1-173AE OP	1.4583	50/50	1.4583
923911	AB2-031 C O1	3.1017	50/50	3.1017
923912	AB2-031 E O1	1.5277	50/50	1.5277
923991	AB2-040 C O1	10.1847	50/50	10.1847
923992	AB2-040 E O1	8.3329	50/50	8.3329
924022	AB2-043 E O1	1.2769	Adder	1.5
924152	AB2-059 E OP	2.7516	Adder	3.24
924162	AB2-060 E OP	1.9081	Adder	2.24
924301	AB2-077 C O1 (Suspended)	0.8971	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5981	Adder	0.7
924311	AB2-078 C O1 (Suspended)	0.8971	Adder	1.06
924312	AB2-078 E O1 (Suspended)	0.5981	Adder	0.7

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924321	AB2-079 C O1 (Suspended)	0.8971	Adder	1.06
924322	AB2-079 E O1 (Suspended)	0.5981	Adder	0.7
924511	AB2-100 C	3.6931	50/50	3.6931
924512	AB2-100 E	10.5452	50/50	10.5452
925171	AB2-174 C O1	1.7279	50/50	1.7279
925172	AB2-174 E O1	9.0630	50/50	9.0630
925591	AC1-034 C	3.4597	Adder	4.07
925592	AC1-034 E	2.6099	Adder	3.07
925611	AC1-036 C	0.3376	Adder	0.4
925612	AC1-036 E	0.5508	Adder	0.65
925781	AC1-054 C O1	4.7648	Adder	5.61
925782	AC1-054 E O1	2.1950	Adder	2.58
926071	AC1-086 C	43.2072	50/50	43.2072
926072	AC1-086 E	19.6650	50/50	19.6650
926201	AC1-098 C	1.9358	Adder	2.28
926202	AC1-098 E	1.1533	Adder	1.36
926211	AC1-099 C	0.6487	Adder	0.76
926212	AC1-099 E	0.3810	Adder	0.45
927141	AC1-208 C	5.1597	Adder	6.07
927142	AC1-208 E	2.2911	Adder	2.7
932631	AC2-084 C	2.7596	Adder	3.25
932632	AC2-084 E	1.3592	Adder	1.6
934331	AD1-057 C O1	12.9067	50/50	12.9067
934332	AD1-057 E O1	6.8850	50/50	6.8850
936261	AD2-033 C	4.8479	Adder	5.7
936262	AD2-033 E	3.2319	Adder	3.8
936361	AD2-046 C O1	4.6384	Adder	5.46
936362	AD2-046 E O1	2.1330	Adder	2.51
936481	AD2-063 C O1	6.2340	Adder	7.33
936482	AD2-063 E O1	4.1214	Adder	4.85
938173	AE1-026 BAT	15.6372	Merchant Transmission	15.6372
939181	AE1-148 C O1	4.5450	Adder	5.35
939182	AE1-148 E O1	3.0300	Adder	3.56
940241	AE2-006	0.1718	Adder	0.2
940481	AE2-033 C	28.1080	50/50	28.1080
940482	AE2-033 E	18.9492	50/50	18.9492
940571	AE2-044 C	2.2660	Adder	2.67
940572	AE2-044 E	0.9711	Adder	1.14
940661	AE2-053 O1	1.6833	Adder	1.98
942451	AE2-258	1.0653	Adder	1.25
942471	AE2-260 C O1	26.1191	50/50	26.1191
942472	AE2-260 E O1	37.0469	50/50	37.0469
943911	AF1-059	13.9527	Adder	16.41
944141	AF1-082	1.4567	Adder	1.71
946011	AF1-266	23.5286	50/50	23.5286
946281	AF1-292 C	2.2878	50/50	2.2878
946282	AF1-292 E	1.5424	50/50	1.5424
959231	AF2-214 C	2.5950	Adder	5.76
959232	AF2-214 E	3.8903	Adder	8.64
959311	AF2-222 C	3.0332	Adder	6.73
959312	AF2-222 E	2.0323	Adder	4.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960081	AF2-299 C	3.8559	50/50	3.8559
960082	AF2-299 E	2.5706	50/50	2.5706
960121	AF2-303 C O2	5.2854	Adder	11.73
960122	AF2-303 E O2	3.4470	Adder	7.65
960331	AF2-324 C O2	2.1246	Adder	4.72
960332	AF2-324 E O2	1.1407	Adder	2.53
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6749	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1687	Adder	0.37
960811	AF2-372 C	0.3003	Adder	0.67
960812	AF2-372 E	0.4901	Adder	1.09
WEC	WEC	0.1188	Confirmed LTF	0.1188
LGEE	LGEE	0.2248	Confirmed LTF	0.2248
CPLE	CPLE	1.1808	Confirmed LTF	1.1808
CBM-W2	CBM-W2	4.6355	Confirmed LTF	4.6355
NY	NY	0.1615	Confirmed LTF	0.1615
CBM-W1	CBM-W1	4.4411	Confirmed LTF	4.4411
TVA	TVA	0.9674	Confirmed LTF	0.9674
O-066	O-066	2.3117	Confirmed LTF	2.3117
CBM-S2	CBM-S2	7.9880	Confirmed LTF	7.9880
CBM-S1	CBM-S1	5.4102	Confirmed LTF	5.4102
G-007	G-007	0.3609	Confirmed LTF	0.3609
MADISON	MADISON	0.2540	Confirmed LTF	0.2540
MEC	MEC	0.7103	Confirmed LTF	0.7103

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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
98090113	314569	6EARLEYS	DVP	314575	6NUCO TP	DVP	1	DVP_P1-2: LN 2092	single	571.52	167.42	170.3	DC	17.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0506	80/20	0.0506
314574	6EVERETS	0.4657	80/20	0.4657
314582	3KELFORD	0.7842	80/20	0.7842
314589	3MURPHYS	0.1032	80/20	0.1032
314623	3WITAKRS	0.2359	80/20	0.2359
314704	3LAWRENC	0.1825	80/20	0.1825
315126	1ROARAP2	1.4097	80/20	1.4097
315128	1ROARAP4	1.3452	80/20	1.3452
315136	1ROSEMG1	2.3511	80/20	2.3511
315137	1ROSEMS1	1.4579	80/20	1.4579
315138	1ROSEMG2	1.1019	80/20	1.1019
315139	1GASTONA	3.4385	80/20	3.4385
315141	1GASTONB	3.4385	80/20	3.4385
315159	1KERR 2	0.5966	80/20	0.5966
315160	1KERR 3	0.5966	80/20	0.5966
315161	1KERR 4	0.5966	80/20	0.5966
315162	1KERR 5	0.5966	80/20	0.5966
315163	1KERR 6	0.5966	80/20	0.5966
315164	1KERR 7	0.5966	80/20	0.5966
315292	1DOMTR78	2.8729	80/20	2.8729
315294	1DOMTR10	21.5849	80/20	21.5849
315601	1CONETOE2SOL	1.9914	80/20	1.9914
315602	1HOLLOMANSOL	3.5568	80/20	3.5568
315606	3AA2-053SOLA	1.7258	80/20	1.7258
315607	3AA1-063SOLA	1.2920	80/20	1.2920
315608	3AA2-088SOLA	0.7480	80/20	0.7480
315611	6Z1-036WIND	13.8532	80/20	13.8532
315612	3AA2-057SOLA	1.3289	80/20	1.3289
315614	AA2-178 C	3.4314	80/20	3.4314
920591	AA2-165 C	0.1576	80/20	0.1576
920671	AA2-174 C OP	0.0790	80/20	0.0790
922922	AB1-081 C OP	8.5938	80/20	8.5938
923262	AB1-132 C OP (Suspended)	15.2225	80/20	15.2225
923572	AB1-173 C OP	1.8023	80/20	1.8023
923582	AB1-173AC OP	1.8023	80/20	1.8023
923831	AB2-022 C	-0.8983	Adder	-1.06
923911	AB2-031 C O1	1.7889	80/20	1.7889
923991	AB2-040 C O1	5.8740	80/20	5.8740
924151	AB2-059 C OP	1.7471	80/20	1.7471
924501	AB2-099 C (Suspended)	1.0074	80/20	1.0074
924511	AB2-100 C	1.2658	80/20	1.2658

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.0776	80/20	2.0776
925171	AB2-174 C O1	0.9219	80/20	0.9219
925591	AC1-034 C	6.5604	80/20	6.5604
925781	AC1-054 C O1	4.5595	80/20	4.5595
926071	AC1-086 C	22.4169	80/20	22.4169
926201	AC1-098 C	8.0374	80/20	8.0374
926211	AC1-099 C	2.6934	80/20	2.6934
927021	AC1-189 C	11.8954	80/20	11.8954
927141	AC1-208 C	10.1471	80/20	10.1471
932631	AC2-084 C	11.4575	80/20	11.4575
933991	AD1-023 C	28.2004	80/20	28.2004
934331	AD1-057 C O1	10.1856	80/20	10.1856
934521	AD1-076 C	113.9255	80/20	113.9255
935111	AD1-144 C	-0.7751	Adder	-0.91
936401	AD2-051 C O1	19.8648	80/20	19.8648
937541	AD2-215 C	-0.7831	Adder	-0.92
938171	AE1-026 C O1	69.7636	80/20	69.7636
938221	AE1-035 C	5.1550	80/20	5.1550
940491	AE2-034 C	14.9197	80/20	14.9197
940571	AE2-044 C	4.2969	80/20	4.2969
941541	AE2-151 C	2.0903	80/20	2.0903
942131	AE2-225 C	-1.0773	Adder	-1.27
942171	AE2-229 C	-1.0773	Adder	-1.27
942471	AE2-260 C O1	8.3171	80/20	8.3171
943171	AE2-346 C	2.4178	80/20	2.4178
943911	AF1-059	8.3370	80/20	8.3370
944141	AF1-082	2.7623	80/20	2.7623
945711	AF1-236 C O1	163.3348	80/20	163.3348
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4520	80/20	35.4520
957861	AF2-080 C	10.8039	80/20	10.8039
959231	AF2-214 C	9.2843	80/20	9.2843
959511	AF2-242	13.9123	80/20	13.9123
959731	AF2-264 C	3.3334	80/20	3.3334
960081	AF2-299 C	1.6616	80/20	1.6616
960121	AF2-303 C O2	17.7537	80/20	17.7537
960331	AF2-324 C O2	7.7138	80/20	7.7138
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.4520	80/20	2.4520
960831	AF2-374 C	2.1136	80/20	2.1136
WEC	WEC	0.3333	Confirmed LTF	0.3333
LGEE	LGEE	0.6224	Confirmed LTF	0.6224
CPLE	CPLE	3.7739	Confirmed LTF	3.7739
CBM-W2	CBM-W2	12.8665	Confirmed LTF	12.8665
NY	NY	0.2909	Confirmed LTF	0.2909
CBM-W1	CBM-W1	12.5600	Confirmed LTF	12.5600
TVA	TVA	2.6600	Confirmed LTF	2.6600
CBM-S2	CBM-S2	22.9639	Confirmed LTF	22.9639
CBM-S1	CBM-S1	14.9015	Confirmed LTF	14.9015
MADISON	MADISON	0.7056	Confirmed LTF	0.7056
MEC	MEC	1.9799	Confirmed LTF	1.9799
AA2-074	AA2-074	2.5717	LTF	2.5717

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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
96976517	314574	6EVERETS	DVP	304451	6GREENVILE T	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	188.61	195.2	DC	31.44

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	0.9820	Adder	1.16
314541	3WATKINS	0.2993	Adder	0.35
314574	6EVERETS	0.6442	50/50	0.6442
314582	3KELFORD	0.3890	50/50	0.3890
314589	3MURPHYS	0.0666	50/50	0.0666
315136	1ROSEMG1	1.7016	50/50	1.7016
315137	1ROSEMS1	1.0552	50/50	1.0552
315138	1ROSEMG2	0.7975	50/50	0.7975
315139	1GASTONA	2.3466	50/50	2.3466
315141	1GASTONB	2.3466	50/50	2.3466
315292	1DOMTR78	1.8394	50/50	1.8394
315294	1DOMTR10	13.8199	50/50	13.8199
315601	1CONETOE2SOL	2.5245	50/50	2.5245
315602	1HOLLOMANSOL	1.6852	50/50	1.6852
315606	3AA2-053SOLA	0.9952	50/50	0.9952
315607	3AA1-063SOLA	0.8808	50/50	0.8808
315611	6Z1-036WIND	4.1925	50/50	4.1925
315614	AA2-178 C	1.4283	50/50	1.4283
900672	V4-068 E	0.2115	50/50	0.2115
901082	W1-029 E	13.0911	Adder	15.4
907092	X1-038 E	2.4550	Adder	2.89
913392	Y1-086 E	0.7706	Adder	0.91
916042	Z1-036 E (Suspended)	28.0897	50/50	28.0897
917122	Z2-027 E	0.4007	Adder	0.47
917332	Z2-043 E	0.9806	50/50	0.9806
917342	Z2-044 E	0.2246	Adder	0.26
917512	Z2-088 E OP1	6.2724	50/50	6.2724
918492	AA1-063AE OP	2.4077	50/50	2.4077
918512	AA1-065 E OP	4.3745	50/50	4.3745
918532	AA1-067 E	1.6006	50/50	1.6006
919152	AA1-139 E	1.8100	Adder	2.13
919692	AA2-053 E OP	2.4775	50/50	2.4775
919702	AA2-057 E OP	1.4646	Adder	1.72
920042	AA2-088 E OP	5.2584	Adder	6.19
920592	AA2-165 E	0.2013	Adder	0.24
920671	AA2-174 C OP	0.0456	50/50	0.0456
920672	AA2-174 E OP	0.2863	50/50	0.2863
920692	AA2-178 E	3.5486	50/50	3.5486
922922	AB1-081 C OP	3.5909	Adder	4.22
922923	AB1-081 E OP	1.5390	Adder	1.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923262	AB1-132 C OP (Suspended)	10.3883	50/50	10.3883
923263	AB1-132 E OP (Suspended)	4.4521	50/50	4.4521
923572	AB1-173 C OP	1.0108	Adder	1.19
923573	AB1-173 E OP	0.4717	Adder	0.55
923582	AB1-173AC OP	1.0108	Adder	1.19
923583	AB1-173AE OP	0.4717	Adder	0.55
923801	AB2-015 C OP	3.6431	Adder	4.29
923802	AB2-015 E OP	2.9873	Adder	3.51
923831	AB2-022 C	0.8079	Adder	0.95
923832	AB2-022 E	0.4350	Adder	0.51
923852	AB2-025 E	0.2989	Adder	0.35
923911	AB2-031 C O1	1.0033	Adder	1.18
923912	AB2-031 E O1	0.4942	Adder	0.58
923991	AB2-040 C O1	3.2946	Adder	3.88
923992	AB2-040 E O1	2.6956	Adder	3.17
924152	AB2-059 E OP	2.1802	Adder	2.56
924501	AB2-099 C (Suspended)	0.5225	50/50	0.5225
924502	AB2-099 E (Suspended)	0.2239	50/50	0.2239
924512	AB2-100 E	2.4516	Adder	2.88
925121	AB2-169 C	1.7406	50/50	1.7406
925122	AB2-169 E	9.0559	50/50	9.0559
925172	AB2-174 E O1	2.7662	Adder	3.25
925591	AC1-034 C	2.7413	Adder	3.23
925592	AC1-034 E	2.0680	Adder	2.43
926071	AC1-086 C	15.2980	50/50	15.2980
926072	AC1-086 E	6.9626	50/50	6.9626
926201	AC1-098 C	4.0179	50/50	4.0179
926202	AC1-098 E	2.3937	50/50	2.3937
926211	AC1-099 C	1.3464	50/50	1.3464
926212	AC1-099 E	0.7908	50/50	0.7908
927021	AC1-189 C	15.5976	50/50	15.5976
927022	AC1-189 E	7.7696	50/50	7.7696
927141	AC1-208 C	4.4227	Adder	5.2
927142	AC1-208 E	1.9639	Adder	2.31
932631	AC2-084 C	5.7277	50/50	5.7277
932632	AC2-084 E	2.8211	50/50	2.8211
933991	AD1-023 C	13.5602	50/50	13.5602
933992	AD1-023 E	7.3822	50/50	7.3822
934331	AD1-057 C O1	9.0197	50/50	9.0197
934332	AD1-057 E O1	4.8115	50/50	4.8115
934521	AD1-076 C	55.0866	50/50	55.0866
934522	AD1-076 E	28.0500	50/50	28.0500
936401	AD2-051 C O1	9.4650	50/50	9.4650
936402	AD2-051 E O1	4.0642	50/50	4.0642
937221	AD2-160 C O1	1.5780	Adder	1.86
937222	AD2-160 E O1	0.8275	Adder	0.97
938171	AE1-026 C O1	33.4414	50/50	33.4414
938172	AE1-026 E O1	8.8226	50/50	8.8226
938221	AE1-035 C	2.4424	50/50	2.4424
938222	AE1-035 E	1.2030	50/50	1.2030
938531	AE1-072 C O1	5.1803	Adder	6.09

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938532	AE1-072 E O1	2.7005	Adder	3.18
938771	AE1-103 C O1	1.4730	Adder	1.73
938772	AE1-103 E O1	2.0341	Adder	2.39
940481	AE2-033 C	4.5821	Adder	5.39
940482	AE2-033 E	3.0891	Adder	3.63
940491	AE2-034 C	6.2101	50/50	6.2101
940492	AE2-034 E	2.6615	50/50	2.6615
940571	AE2-044 C	1.7955	Adder	2.11
940572	AE2-044 E	0.7695	Adder	0.91
941101	AE2-104 C O1	0.9879	Adder	1.16
941102	AE2-104 E O1	1.5706	Adder	1.85
941501	AE2-147 C	6.5094	Adder	7.66
941502	AE2-147 E	4.3396	Adder	5.11
941541	AE2-151 C	1.0340	50/50	1.0340
941542	AE2-151 E	0.5567	50/50	0.5567
942131	AE2-225 C	0.6120	Adder	0.72
942132	AE2-225 E	0.4080	Adder	0.48
942171	AE2-229 C	0.6120	Adder	0.72
942172	AE2-229 E	0.4080	Adder	0.48
942401	AE2-253 C	1.6598	Adder	1.95
942402	AE2-253 E	0.7457	Adder	0.88
942471	AE2-260 C O1	5.8246	Adder	6.85
942472	AE2-260 E O1	8.2616	Adder	9.72
942851	AE2-304 C	0.2951	Adder	0.35
942852	AE2-304 E	0.1148	Adder	0.14
943171	AE2-346 C	1.2540	50/50	1.2540
943172	AE2-346 E	0.5374	50/50	0.5374
943611	AF1-032 C	0.4998	Adder	0.59
943612	AF1-032 E	0.2652	Adder	0.31
944141	AF1-082	1.1542	Adder	1.36
944871	AF1-152 C	2.1698	Adder	2.55
944872	AF1-152 E	1.4465	Adder	1.7
945711	AF1-236 C O1	67.9860	50/50	67.9860
945712	AF1-236 E O1	110.9246	50/50	110.9246
946011	AF1-266	3.8356	Adder	4.51
946281	AF1-292 C	0.5991	Adder	0.7
946282	AF1-292 E	0.4039	Adder	0.48
957491	AF2-043 C	0.3244	Adder	0.72
957492	AF2-043 E	0.2162	Adder	0.48
957521	AF2-046 C	12.4840	50/50	12.4840
957522	AF2-046 E	6.2795	50/50	6.2795
957531	AF2-047 C	14.7564	50/50	14.7564
957532	AF2-047 E	7.4226	50/50	7.4226
957791	AF2-073 C (Withdrawn : 07/02/2020)	2.3407	Adder	5.2
957792	AF2-073 E (Withdrawn : 07/02/2020)	1.4965	Adder	3.32
957801	AF2-074 C (Withdrawn : 07/02/2020)	1.0403	Adder	2.31
957802	AF2-074 E (Withdrawn : 07/02/2020)	0.6651	Adder	1.48
957821	AF2-076 C O2	0.8547	Adder	1.9
957822	AF2-076 E O2	0.5698	Adder	1.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957861	AF2-080 C	14.1664	50/50	14.1664
957862	AF2-080 E	6.2799	50/50	6.2799
957871	AF2-081 C O2	1.4869	Adder	3.3
957872	AF2-081 E O2	0.6373	Adder	1.41
958161	AF2-110 C	0.2159	Adder	0.48
958162	AF2-110 E	0.3376	Adder	0.75
959231	AF2-214 C	2.0561	Adder	4.56
959232	AF2-214 E	3.0825	Adder	6.84
959511	AF2-242	14.1288	50/50	14.1288
959731	AF2-264 C	1.8484	50/50	1.8484
959732	AF2-264 E	0.9104	50/50	0.9104
960081	AF2-299 C	0.5351	Adder	1.19
960082	AF2-299 E	0.3568	Adder	0.79
960121	AF2-303 C O2	19.0314	50/50	19.0314
960122	AF2-303 E O2	12.4118	50/50	12.4118
960331	AF2-324 C O2	8.4092	50/50	8.4092
960332	AF2-324 E O2	4.5148	50/50	4.5148
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.4689	Adder	1.04
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1172	Adder	0.26
960831	AF2-374 C	1.0851	50/50	1.0851
960832	AF2-374 E	1.7703	50/50	1.7703
961091	AF2-400 C	0.1043	Adder	0.23
961092	AF2-400 E	0.1711	Adder	0.38
NEWTON	NEWTON	1.6397	Confirmed LTF	1.6397
FARMERCITY	FARMERCITY	0.0953	Confirmed LTF	0.0953
G-007A	G-007A	1.1724	Confirmed LTF	1.1724
VFT	VFT	3.1218	Confirmed LTF	3.1218
CALDERWOOD	CALDERWOOD	1.3494	Confirmed LTF	1.3494
PRAIRIE	PRAIRIE	4.4867	Confirmed LTF	4.4867
AC1-131	AC1-131	5.7225	LTF	5.7225
CHEOAH	CHEOAH	1.3844	Confirmed LTF	1.3844
EDWARDS	EDWARDS	0.4918	Confirmed LTF	0.4918
TILTON	TILTON	0.8662	Confirmed LTF	0.8662
GIBSON	GIBSON	0.7862	Confirmed LTF	0.7862
BLUEG	BLUEG	2.4113	Confirmed LTF	2.4113
TRIMBLE	TRIMBLE	0.7646	Confirmed LTF	0.7646
CATAWBA	CATAWBA	1.4574	Confirmed LTF	1.4574

13.5.26 Index 26

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97804375	314583	6LAKEVEW	DVP	314561	6CAROLNA	DVP	1	DVP_P4-2: 23872	breaker	459.0	158.65	165.05	DC	29.38

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	-0.9070	Adder	-1.07
314541	3WATKINS	-0.2911	Adder	-0.34
314572	3EMPORIA	0.0797	50/50	0.0797
314704	3LAWRENC	0.3224	50/50	0.3224
315136	1ROSEMG1	6.5873	50/50	6.5873
315137	1ROSEMS1	4.0848	50/50	4.0848
315138	1ROSEMG2	3.0873	50/50	3.0873
315139	1GASTONA	10.3679	50/50	10.3679
315141	1GASTONB	10.3679	50/50	10.3679
907092	X1-038 E	-2.2675	Adder	-2.67
917342	Z2-044 E	0.2211	Adder	0.26
917512	Z2-088 E OP1	1.4488	Adder	1.7
922922	AB1-081 C OP	6.6724	50/50	6.6724
922923	AB1-081 E OP	2.8596	50/50	2.8596
923262	AB1-132 C OP (Suspended)	45.8993	50/50	45.8993
923263	AB1-132 E OP (Suspended)	19.6711	50/50	19.6711
923801	AB2-015 C OP	-3.4718	Adder	-4.08
924151	AB2-059 C OP	1.3565	50/50	1.3565
924152	AB2-059 E OP	4.0511	50/50	4.0511
924511	AB2-100 C	5.1474	50/50	5.1474
924512	AB2-100 E	14.6979	50/50	14.6979
925171	AB2-174 C O1	0.7979	50/50	0.7979
925172	AB2-174 E O1	4.1853	50/50	4.1853
925591	AC1-034 C	5.0937	50/50	5.0937
925592	AC1-034 E	3.8426	50/50	3.8426
926071	AC1-086 C	67.5921	50/50	67.5921
926072	AC1-086 E	30.7634	50/50	30.7634
934331	AD1-057 C O1	20.0206	50/50	20.0206
934332	AD1-057 E O1	10.6798	50/50	10.6798
938173	AE1-026 BAT	11.6712	Merchant Transmission	11.6712
940481	AE2-033 C	38.5147	50/50	38.5147
940482	AE2-033 E	25.9650	50/50	25.9650
940571	AE2-044 C	3.3362	50/50	3.3362
940572	AE2-044 E	1.4298	50/50	1.4298
942471	AE2-260 C O1	35.7893	50/50	35.7893
942472	AE2-260 E O1	50.7627	50/50	50.7627
943911	AF1-059	11.4250	50/50	11.4250
944141	AF1-082	2.1447	50/50	2.1447
946011	AF1-266	32.2399	50/50	32.2399
946281	AF1-292 C	2.0749	50/50	2.0749

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946282	AF1-292 E	1.3988	50/50	1.3988
959231	AF2-214 C	7.2086	50/50	7.2086
959232	AF2-214 E	10.8069	50/50	10.8069
960081	AF2-299 C	3.4970	50/50	3.4970
960082	AF2-299 E	2.3313	50/50	2.3313
960121	AF2-303 C O2	17.7848	50/50	17.7848
960122	AF2-303 E O2	11.5988	50/50	11.5988
960331	AF2-324 C O2	7.2561	50/50	7.2561
960332	AF2-324 E O2	3.8957	50/50	3.8957
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.7741	50/50	1.7741
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.4435	50/50	0.4435
WEC	WEC	0.1468	Confirmed LTF	0.1468
LGEE	LGEE	0.2750	Confirmed LTF	0.2750
CPLE	CPLE	1.6299	Confirmed LTF	1.6299
CBM-W2	CBM-W2	5.7985	Confirmed LTF	5.7985
NY	NY	0.1631	Confirmed LTF	0.1631
CBM-W1	CBM-W1	5.5044	Confirmed LTF	5.5044
TVA	TVA	1.2096	Confirmed LTF	1.2096
O-066	O-066	2.3587	Confirmed LTF	2.3587
CBM-S2	CBM-S2	10.4156	Confirmed LTF	10.4156
CBM-S1	CBM-S1	6.7564	Confirmed LTF	6.7564
G-007	G-007	0.3682	Confirmed LTF	0.3682
MADISON	MADISON	0.3306	Confirmed LTF	0.3306
MEC	MEC	0.8819	Confirmed LTF	0.8819

13.5.27 Index 27

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98090285	314583	6LAKEVEW	DVP	924510	AB2-100 TAP	DVP	1	DVP_P1-2: LN 246	single	375.06	141.22	146.46	DC	20.18

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2845	80/20	0.2845
314582	3KELFORD	0.4976	80/20	0.4976
314589	3MURPHYS	0.0771	80/20	0.0771
314623	3WITAKRS	0.2391	80/20	0.2391
315115	1S HAMPT1	0.7350	80/20	0.7350
315126	1ROARAP2	1.4379	80/20	1.4379
315128	1ROARAP4	1.3722	80/20	1.3722
315136	1ROSEMG1	4.5383	80/20	4.5383
315137	1ROSEMS1	2.8142	80/20	2.8142
315138	1ROSEMG2	2.1269	80/20	2.1269
315139	1GASTONA	6.9609	80/20	6.9609
315141	1GASTONB	6.9609	80/20	6.9609
315159	1KERR 2	0.3967	80/20	0.3967
315160	1KERR 3	0.3967	80/20	0.3967
315161	1KERR 4	0.3967	80/20	0.3967
315162	1KERR 5	0.3967	80/20	0.3967
315163	1KERR 6	0.3967	80/20	0.3967
315164	1KERR 7	0.3967	80/20	0.3967
315292	1DOMTR78	1.1664	80/20	1.1664
315294	1DOMTR10	8.7636	80/20	8.7636
315601	1CONETOE2SOL	1.6052	80/20	1.6052
315602	1HOLLOMANSOL	1.8182	80/20	1.8182
315606	3AA2-053SOLA	1.5271	80/20	1.5271
315607	3AA1-063SOLA	1.2895	80/20	1.2895
315608	3AA2-088SOLA	0.7371	80/20	0.7371
315612	3AA2-057SOLA	1.2816	80/20	1.2816
315614	AA2-178 C	0.9769	80/20	0.9769
920591	AA2-165 C	0.1520	80/20	0.1520
920671	AA2-174 C OP	0.0699	80/20	0.0699
922922	AB1-081 C OP	9.2949	80/20	9.2949
923262	AB1-132 C OP (Suspended)	30.8162	80/20	30.8162
923801	AB2-015 C OP	3.5565	80/20	3.5565
924151	AB2-059 C OP	1.8896	80/20	1.8896
924501	AB2-099 C (Suspended)	0.6038	80/20	0.6038
925121	AB2-169 C	0.9567	80/20	0.9567
925591	AC1-034 C	7.0956	80/20	7.0956
925781	AC1-054 C O1	3.6761	80/20	3.6761
926071	AC1-086 C	45.3806	80/20	45.3806
926201	AC1-098 C	6.4364	80/20	6.4364
926211	AC1-099 C	2.1569	80/20	2.1569
927021	AC1-189 C	8.7154	80/20	8.7154

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927141	AC1-208 C	9.2895	80/20	9.2895
932631	AC2-084 C	9.1752	80/20	9.1752
933991	AD1-023 C	11.3908	80/20	11.3908
934331	AD1-057 C O1	15.9055	80/20	15.9055
934521	AD1-076 C	41.3318	80/20	41.3318
936401	AD2-051 C O1	10.5361	80/20	10.5361
938171	AE1-026 C O1	29.7744	80/20	29.7744
938221	AE1-035 C	2.6351	80/20	2.6351
938771	AE1-103 C O1	1.2961	80/20	1.2961
940491	AE2-034 C	4.2475	80/20	4.2475
940571	AE2-044 C	4.6474	80/20	4.6474
941541	AE2-151 C	1.1943	80/20	1.1943
943171	AE2-346 C	1.4492	80/20	1.4492
944141	AF1-082	2.9876	80/20	2.9876
945711	AF1-236 C O1	46.4996	80/20	46.4996
957521	AF2-046 C	14.4520	80/20	14.4520
957531	AF2-047 C	10.0928	80/20	10.0928
957861	AF2-080 C	7.9157	80/20	7.9157
959231	AF2-214 C	10.0418	80/20	10.0418
959511	AF2-242	7.0877	80/20	7.0877
959731	AF2-264 C	2.1377	80/20	2.1377
960121	AF2-303 C O2	20.1779	80/20	20.1779
960331	AF2-324 C O2	8.5302	80/20	8.5302
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.6203	80/20	2.6203
960831	AF2-374 C	1.3590	80/20	1.3590
961091	AF2-400 C	0.1921	80/20	0.1921
WEC	WEC	0.2703	Confirmed LTF	0.2703
LGEE	LGEE	0.5055	Confirmed LTF	0.5055
CPLE	CPLE	3.1706	Confirmed LTF	3.1706
CBM-W2	CBM-W2	10.6470	Confirmed LTF	10.6470
NY	NY	0.2754	Confirmed LTF	0.2754
CBM-W1	CBM-W1	10.1581	Confirmed LTF	10.1581
TVA	TVA	2.2176	Confirmed LTF	2.2176
CBM-S2	CBM-S2	19.4208	Confirmed LTF	19.4208
CBM-S1	CBM-S1	12.3881	Confirmed LTF	12.3881
MADISON	MADISON	0.6088	Confirmed LTF	0.6088
MEC	MEC	1.6208	Confirmed LTF	1.6208
AA2-074	AA2-074	2.1604	LTF	2.1604

13.5.28 Index 28

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
97457931	314596	3POPLR C	DVP	314573	3EVERETS	DVP	1	DVP_P4-2: 246T2034	breaker	349.0	211.08	211.69	DC	4.04

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.1516	50/50	0.1516
314639	6TANGLEW	0.3233	50/50	0.3233
315292	1DOMTR78	3.5406	50/50	3.5406
315294	1DOMTR10	26.6017	50/50	26.6017
315605	6W1-029WIND	0.7789	50/50	0.7789
315611	6Z1-036WIND	7.8780	50/50	7.8780
315614	AA2-178 C	2.6663	50/50	2.6663
901082	W1-029 E	30.2723	50/50	30.2723
913392	Y1-086 E	1.4343	50/50	1.4343
916042	21-036 E (Suspended)	52.7826	50/50	52.7826
917122	Z2-027 E	0.8032	50/50	0.8032
919152	AA1-139 E	2.1120	Adder	2.48
920692	AA2-178 E	6.6245	50/50	6.6245
923831	AB2-022 C	1.5037	50/50	1.5037
923832	AB2-022 E	0.8097	50/50	0.8097
925121	AB2-169 C	1.0532	50/50	1.0532
925122	AB2-169 E	5.4793	50/50	5.4793
933991	AD1-023 C	24.8547	50/50	24.8547
933992	AD1-023 E	13.5309	50/50	13.5309
934521	AD1-076 C	102.5855	50/50	102.5855
934522	AD1-076 E	52.2364	50/50	52.2364
937221	AD2-160 C O1	1.6870	Adder	1.98
937222	AD2-160 E O1	0.8847	Adder	1.04
938531	AE1-072 C O1	6.5296	Adder	7.68
938532	AE1-072 E O1	3.4039	Adder	4.0
940491	AE2-034 C	11.5928	50/50	11.5928
940492	AE2-034 E	4.9684	50/50	4.9684
941501	AE2-147 C	15.0525	50/50	15.0525
941502	AE2-147 E	10.0350	50/50	10.0350
942401	AE2-253 C	1.7745	Adder	2.09
942402	AE2-253 E	0.7972	Adder	0.94
942851	AE2-304 C	0.6542	50/50	0.6542
942852	AE2-304 E	0.2544	50/50	0.2544
944871	AF1-152 C	5.0175	50/50	5.0175
944872	AF1-152 E	3.3450	50/50	3.3450
945711	AF1-236 C O1	126.9140	50/50	126.9140
945712	AF1-236 E O1	207.0702	50/50	207.0702
957531	AF2-047 C	27.5468	50/50	27.5468
957532	AF2-047 E	13.8562	50/50	13.8562
957821	AF2-076 C O2	5.0175	50/50	5.0175
957822	AF2-076 E O2	3.3450	50/50	3.3450

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957871	AF2-081 C O2	1.7233	Adder	3.83
957872	AF2-081 E O2	0.7386	Adder	1.64
960123	AF2-303 BAT	2.1425	Merchant Transmission	2.1425
NEWTON	NEWTON	0.4900	Confirmed LTF	0.4900
FARMERCITY	FARMERCITY	0.0284	Confirmed LTF	0.0284
G-007A	G-007A	0.4244	Confirmed LTF	0.4244
VFT	VFT	1.1352	Confirmed LTF	1.1352
CALDERWOOD	CALDERWOOD	0.4031	Confirmed LTF	0.4031
PRAIRIE	PRAIRIE	1.3380	Confirmed LTF	1.3380
CHEOAH	CHEOAH	0.4134	Confirmed LTF	0.4134
EDWARDS	EDWARDS	0.1470	Confirmed LTF	0.1470
TILTON	TILTON	0.2589	Confirmed LTF	0.2589
GIBSON	GIBSON	0.2353	Confirmed LTF	0.2353
BLUEG	BLUEG	0.7239	Confirmed LTF	0.7239
TRIMBLE	TRIMBLE	0.2298	Confirmed LTF	0.2298
CATAWBA	CATAWBA	0.4368	Confirmed LTF	0.4368

13.5.29 Index 29

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
97804613	314599	6ROA VAL	DVP	314266	6NORTHAMPTON	DVP	1	DVP_P4-2: 23872	breaker	671.0	101.97	103.29	DC	19.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1078	50/50	0.1078
314704	3LAWRENC	0.3942	50/50	0.3942
315126	1ROARAP2	1.7261	50/50	1.7261
315136	1ROSEMG1	4.2176	50/50	4.2176
315137	1ROSEMS1	2.6153	50/50	2.6153
315138	1ROSEMG2	1.9767	50/50	1.9767
315139	1GASTONA	6.6298	50/50	6.6298
315141	1GASTONB	6.6298	50/50	6.6298
315294	1DOMTR10	-5.1241	Adder	-6.03
315611	6Z1-036WIND	-2.2061	Adder	-2.6
917342	Z2-044 E	0.2915	Adder	0.34
918492	AA1-063AE OP	2.9394	Adder	3.46
919692	AA2-053 E OP	2.8305	Adder	3.33
919702	AA2-057 E OP	1.7356	Adder	2.04
920592	AA2-165 E	0.2385	Adder	0.28
920672	AA2-174 E OP	0.3271	Adder	0.38
922922	AB1-081 C OP	4.5382	Adder	5.34
922923	AB1-081 E OP	1.9449	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3504	50/50	29.3504
923263	AB1-132 E OP (Suspended)	12.5788	50/50	12.5788
923572	AB1-173 C OP	3.1263	50/50	3.1263
923573	AB1-173 E OP	1.4590	50/50	1.4590
923582	AB1-173AC OP	3.1263	50/50	3.1263
923583	AB1-173AE OP	1.4590	50/50	1.4590
923911	AB2-031 C O1	3.1032	50/50	3.1032
923912	AB2-031 E O1	1.5284	50/50	1.5284
923991	AB2-040 C O1	10.1895	50/50	10.1895
923992	AB2-040 E O1	8.3369	50/50	8.3369
924022	AB2-043 E O1	1.2788	Adder	1.5
924152	AB2-059 E OP	2.7553	Adder	3.24
924162	AB2-060 E OP	1.9107	Adder	2.25
924301	AB2-077 C O1 (Suspended)	0.8984	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5989	Adder	0.7
924311	AB2-078 C O1 (Suspended)	0.8984	Adder	1.06
924312	AB2-078 E O1 (Suspended)	0.5989	Adder	0.7
924321	AB2-079 C O1 (Suspended)	0.8984	Adder	1.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924322	AB2-079 E O1 (Suspended)	0.5989	Adder	0.7
924511	AB2-100 C	3.6943	50/50	3.6943
924512	AB2-100 E	10.5488	50/50	10.5488
925171	AB2-174 C O1	1.7287	50/50	1.7287
925172	AB2-174 E O1	9.0676	50/50	9.0676
925591	AC1-034 C	3.4644	Adder	4.08
925592	AC1-034 E	2.6135	Adder	3.07
925611	AC1-036 C	0.3381	Adder	0.4
925612	AC1-036 E	0.5516	Adder	0.65
925781	AC1-054 C O1	4.7694	Adder	5.61
925782	AC1-054 E O1	2.1971	Adder	2.58
926071	AC1-086 C	43.2220	50/50	43.2220
926072	AC1-086 E	19.6718	50/50	19.6718
926201	AC1-098 C	1.9397	Adder	2.28
926202	AC1-098 E	1.1555	Adder	1.36
926211	AC1-099 C	0.6500	Adder	0.76
926212	AC1-099 E	0.3817	Adder	0.45
927141	AC1-208 C	5.1653	Adder	6.08
927142	AC1-208 E	2.2936	Adder	2.7
932631	AC2-084 C	2.7650	Adder	3.25
932632	AC2-084 E	1.3619	Adder	1.6
934331	AD1-057 C O1	12.9141	50/50	12.9141
934332	AD1-057 E O1	6.8889	50/50	6.8889
936261	AD2-033 C	4.8551	Adder	5.71
936262	AD2-033 E	3.2368	Adder	3.81
936361	AD2-046 C O1	4.6440	Adder	5.46
936362	AD2-046 E O1	2.1356	Adder	2.51
936481	AD2-063 C O1	6.2432	Adder	7.34
936482	AD2-063 E O1	4.1274	Adder	4.86
938173	AE1-026 BAT	15.6252	Merchant Transmission	15.6252
939181	AE1-148 C O1	4.5505	Adder	5.35
939182	AE1-148 E O1	3.0337	Adder	3.57
940241	AE2-006	0.1720	Adder	0.2
940481	AE2-033 C	28.1178	50/50	28.1178
940482	AE2-033 E	18.9558	50/50	18.9558
940571	AE2-044 C	2.2691	Adder	2.67
940572	AE2-044 E	0.9725	Adder	1.14
940661	AE2-053 O1	1.6854	Adder	1.98
942451	AE2-258	1.0669	Adder	1.26
942471	AE2-260 C O1	26.1282	50/50	26.1282
942472	AE2-260 E O1	37.0598	50/50	37.0598
943911	AF1-059	13.9629	Adder	16.43
944141	AF1-082	1.4587	Adder	1.72
946011	AF1-266	23.5368	50/50	23.5368
946281	AF1-292 C	2.2889	50/50	2.2889
946282	AF1-292 E	1.5431	50/50	1.5431
959231	AF2-214 C	2.5985	Adder	5.77
959232	AF2-214 E	3.8956	Adder	8.65
959311	AF2-222 C	3.0382	Adder	6.74
959312	AF2-222 E	2.0356	Adder	4.52
960081	AF2-299 C	3.8577	50/50	3.8577
960082	AF2-299 E	2.5718	50/50	2.5718

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960121	AF2-303 C O2	5.2921	Adder	11.75
960122	AF2-303 E O2	3.4514	Adder	7.66
960331	AF2-324 C O2	2.1274	Adder	4.72
960332	AF2-324 E O2	1.1422	Adder	2.54
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6757	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1689	Adder	0.37
960811	AF2-372 C	0.3008	Adder	0.67
960812	AF2-372 E	0.4908	Adder	1.09
WEC	WEC	0.1197	Confirmed LTF	0.1197
LGEE	LGEE	0.2271	Confirmed LTF	0.2271
CPLE	CPLE	1.1894	Confirmed LTF	1.1894
CBM-W2	CBM-W2	4.6765	Confirmed LTF	4.6765
NY	NY	0.1626	Confirmed LTF	0.1626
CBM-W1	CBM-W1	4.4786	Confirmed LTF	4.4786
TVA	TVA	0.9744	Confirmed LTF	0.9744
O-066	O-066	2.3184	Confirmed LTF	2.3184
CBM-S2	CBM-S2	8.0515	Confirmed LTF	8.0515
CBM-S1	CBM-S1	5.4613	Confirmed LTF	5.4613
G-007	G-007	0.3619	Confirmed LTF	0.3619
MADISON	MADISON	0.2560	Confirmed LTF	0.2560
MEC	MEC	0.7166	Confirmed LTF	0.7166

13.5.30 Index 30

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
97457926	314614	3TRWBRDG2	DVP	314596	3POPLR C	DVP	1	DVP_P4-2: 246T2034	breaker	350.0	212.1	212.71	DC	4.04

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.1516	50/50	0.1516
314639	6TANGLEW	0.3233	50/50	0.3233
315292	1DOMTR78	3.5406	50/50	3.5406
315294	1DOMTR10	26.6017	50/50	26.6017
315605	6W1-029WIND	0.7789	50/50	0.7789
315611	6Z1-036WIND	7.8780	50/50	7.8780
315614	AA2-178 C	2.6663	50/50	2.6663
901082	W1-029 E	30.2723	50/50	30.2723
913392	Y1-086 E	1.4343	50/50	1.4343
916042	Z1-036 E (Suspended)	52.7826	50/50	52.7826
917122	Z2-027 E	0.8032	50/50	0.8032
919152	AA1-139 E	2.1120	Adder	2.48
920692	AA2-178 E	6.6245	50/50	6.6245
923831	AB2-022 C	1.5037	50/50	1.5037
923832	AB2-022 E	0.8097	50/50	0.8097
925121	AB2-169 C	1.0532	50/50	1.0532
925122	AB2-169 E	5.4793	50/50	5.4793
933991	AD1-023 C	24.8547	50/50	24.8547
933992	AD1-023 E	13.5309	50/50	13.5309
934521	AD1-076 C	102.5855	50/50	102.5855
934522	AD1-076 E	52.2364	50/50	52.2364
937221	AD2-160 C O1	1.6870	Adder	1.98
937222	AD2-160 E O1	0.8847	Adder	1.04
938531	AE1-072 C O1	6.5296	Adder	7.68
938532	AE1-072 E O1	3.4039	Adder	4.0
940491	AE2-034 C	11.5928	50/50	11.5928
940492	AE2-034 E	4.9684	50/50	4.9684
941501	AE2-147 C	15.0525	50/50	15.0525
941502	AE2-147 E	10.0350	50/50	10.0350
942401	AE2-253 C	1.7745	Adder	2.09
942402	AE2-253 E	0.7972	Adder	0.94
942851	AE2-304 C	0.6542	50/50	0.6542
942852	AE2-304 E	0.2544	50/50	0.2544
944871	AF1-152 C	5.0175	50/50	5.0175
944872	AF1-152 E	3.3450	50/50	3.3450
945711	AF1-236 C O1	126.9140	50/50	126.9140
945712	AF1-236 E O1	207.0702	50/50	207.0702
957531	AF2-047 C	27.5468	50/50	27.5468
957532	AF2-047 E	13.8562	50/50	13.8562
957821	AF2-076 C O2	5.0175	50/50	5.0175
957822	AF2-076 E O2	3.3450	50/50	3.3450

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957871	AF2-081 C O2	1.7233	Adder	3.83
957872	AF2-081 E O2	0.7386	Adder	1.64
960123	AF2-303 BAT	2.1425	Merchant Transmission	2.1425
NEWTON	NEWTON	0.4900	Confirmed LTF	0.4900
FARMERCITY	FARMERCITY	0.0284	Confirmed LTF	0.0284
G-007A	G-007A	0.4244	Confirmed LTF	0.4244
VFT	VFT	1.1352	Confirmed LTF	1.1352
CALDERWOOD	CALDERWOOD	0.4031	Confirmed LTF	0.4031
PRAIRIE	PRAIRIE	1.3380	Confirmed LTF	1.3380
CHEOAH	CHEOAH	0.4134	Confirmed LTF	0.4134
EDWARDS	EDWARDS	0.1470	Confirmed LTF	0.1470
TILTON	TILTON	0.2589	Confirmed LTF	0.2589
GIBSON	GIBSON	0.2353	Confirmed LTF	0.2353
BLUEG	BLUEG	0.7239	Confirmed LTF	0.7239
TRIMBLE	TRIMBLE	0.2298	Confirmed LTF	0.2298
CATAWBA	CATAWBA	0.4368	Confirmed LTF	0.4368

13.5.31 Index 31

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
98090237	314637	6EDENTON	DVP	313885	6WALBMRL	DVP	1	DVP_P1-2: LN 246	single	733.2	130.24	131.84	DC	12.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0325	80/20	0.0325
314574	6EVERETS	0.3446	80/20	0.3446
314582	3KELFORD	0.4969	80/20	0.4969
314589	3MURPHYS	0.0660	80/20	0.0660
314623	3WITAKRS	0.1596	80/20	0.1596
314704	3LAWRENC	0.1176	80/20	0.1176
315126	1ROARAP2	0.9082	80/20	0.9082
315128	1ROARAP4	0.8667	80/20	0.8667
315136	1ROSEMG1	1.5269	80/20	1.5269
315137	1ROSEMS1	0.9468	80/20	0.9468
315138	1ROSEMG2	0.7156	80/20	0.7156
315139	1GASTONA	2.2149	80/20	2.2149
315141	1GASTONB	2.2149	80/20	2.2149
315159	1KERR 2	0.3901	80/20	0.3901
315160	1KERR 3	0.3901	80/20	0.3901
315161	1KERR 4	0.3901	80/20	0.3901
315162	1KERR 5	0.3901	80/20	0.3901
315163	1KERR 6	0.3901	80/20	0.3901
315164	1KERR 7	0.3901	80/20	0.3901
315292	1DOMTR78	3.3298	80/20	3.3298
315294	1DOMTR10	25.0180	80/20	25.0180
315601	1CONETOE2SOL	1.4398	80/20	1.4398
315602	1HOLLOMANSOL	2.2223	80/20	2.2223
315606	3AA2-053SOLA	1.1036	80/20	1.1036
315607	3AA1-063SOLA	0.8357	80/20	0.8357
315608	3AA2-088SOLA	0.4899	80/20	0.4899
315611	6Z1-036WIND	-9.4219	Adder	-11.08
315612	3AA2-057SOLA	0.8869	80/20	0.8869
315614	AA2-178 C	5.2604	80/20	5.2604
920591	AA2-165 C	0.1052	80/20	0.1052
920671	AA2-174 C OP	0.0505	80/20	0.0505
922922	AB1-081 C OP	5.9136	80/20	5.9136
923262	AB1-132 C OP (Suspended)	9.8053	80/20	9.8053
923572	AB1-173 C OP	1.1594	80/20	1.1594
923582	AB1-173AC OP	1.1594	80/20	1.1594
923831	AB2-022 C	-1.6400	Adder	-1.93
923911	AB2-031 C O1	1.1508	80/20	1.1508
923991	AB2-040 C O1	3.7787	80/20	3.7787
924151	AB2-059 C OP	1.2022	80/20	1.2022
924501	AB2-099 C (Suspended)	0.6347	80/20	0.6347
924511	AB2-100 C	0.8106	80/20	0.8106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.1767	80/20	2.1767
925171	AB2-174 C O1	0.5928	80/20	0.5928
925591	AC1-034 C	4.5144	80/20	4.5144
925781	AC1-054 C O1	2.9637	80/20	2.9637
926071	AC1-086 C	14.4395	80/20	14.4395
926201	AC1-098 C	5.2053	80/20	5.2053
926211	AC1-099 C	1.7443	80/20	1.7443
927021	AC1-189 C	8.6764	80/20	8.6764
927141	AC1-208 C	6.6480	80/20	6.6480
932631	AC2-084 C	7.4204	80/20	7.4204
933991	AD1-023 C	30.3123	80/20	30.3123
934331	AD1-057 C O1	6.8258	80/20	6.8258
934521	AD1-076 C	142.1118	80/20	142.1118
936401	AD2-051 C O1	12.4167	80/20	12.4167
938171	AE1-026 C O1	68.2899	80/20	68.2899
938221	AE1-035 C	3.2208	80/20	3.2208
940491	AE2-034 C	22.8724	80/20	22.8724
940571	AE2-044 C	2.9568	80/20	2.9568
941541	AE2-151 C	1.3133	80/20	1.3133
942471	AE2-260 C O1	5.3193	80/20	5.3193
942851	AE2-304 C	-0.7263	Adder	-0.85
943171	AE2-346 C	1.5233	80/20	1.5233
943911	AF1-059	5.3880	80/20	5.3880
944141	AF1-082	1.9008	80/20	1.9008
945711	AF1-236 C O1	250.3979	80/20	250.3979
946281	AF1-292 C	0.6331	80/20	0.6331
957521	AF2-046 C	12.9920	80/20	12.9920
957531	AF2-047 C	54.3491	80/20	54.3491
957861	AF2-080 C	7.8803	80/20	7.8803
959231	AF2-214 C	6.3888	80/20	6.3888
959511	AF2-242	13.1813	80/20	13.1813
959731	AF2-264 C	2.1088	80/20	2.1088
960081	AF2-299 C	1.0671	80/20	1.0671
960121	AF2-303 C O2	12.3223	80/20	12.3223
960331	AF2-324 C O2	5.3743	80/20	5.3743
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.6838	80/20	1.6838
960831	AF2-374 C	1.3333	80/20	1.3333
WEC	WEC	0.2337	Confirmed LTF	0.2337
LGEE	LGEE	0.4364	Confirmed LTF	0.4364
CPLE	CPLE	2.6804	Confirmed LTF	2.6804
CBM-W2	CBM-W2	9.0499	Confirmed LTF	9.0499
NY	NY	0.2068	Confirmed LTF	0.2068
CBM-W1	CBM-W1	8.8070	Confirmed LTF	8.8070
TVA	TVA	1.8732	Confirmed LTF	1.8732
CBM-S2	CBM-S2	16.2476	Confirmed LTF	16.2476
CBM-S1	CBM-S1	10.4966	Confirmed LTF	10.4966
MADISON	MADISON	0.5000	Confirmed LTF	0.5000
MEC	MEC	1.3920	Confirmed LTF	1.3920
AA2-074	AA2-074	1.8270	LTF	1.8270

13.5.32 Index 32

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
149216333	314638	6ELIZ CT	DVP	314647	6SHAWBRO	DVP	1	DVP_P1-2: LN 247-B	single	571.52	125.4	126.61	DC	6.9

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2007	80/20	0.2007
314582	3KELFORD	0.2610	80/20	0.2610
314589	3MURPHYS	0.0366	80/20	0.0366
314623	3WITAKRS	0.0880	80/20	0.0880
314638	6ELIZ CT	1.0063	80/20	1.0063
314639	6TANGLEW	1.7580	80/20	1.7580
315126	1ROARAP2	0.4897	80/20	0.4897
315128	1ROARAP4	0.4673	80/20	0.4673
315136	1ROSEMG1	0.8171	80/20	0.8171
315137	1ROSEMS1	0.5067	80/20	0.5067
315138	1ROSEMG2	0.3829	80/20	0.3829
315139	1GASTONA	1.1783	80/20	1.1783
315141	1GASTONB	1.1783	80/20	1.1783
315292	1DOMTR78	2.3717	80/20	2.3717
315294	1DOMTR10	17.8194	80/20	17.8194
315601	1CONETOE2SOL	0.8269	80/20	0.8269
315602	1HOLLOMANSOL	1.1468	80/20	1.1468
315605	6W1-029WIND	3.0518	80/20	3.0518
315606	3AA2-053SOLA	0.5892	80/20	0.5892
315607	3AA1-063SOLA	0.4660	80/20	0.4660
315611	6Z1-036WIND	22.6028	80/20	22.6028
315612	3AA2-057SOLA	0.4850	80/20	0.4850
315614	AA2-178 C	4.0411	80/20	4.0411
920591	AA2-165 C	0.0575	80/20	0.0575
920671	AA2-174 C OP	0.0270	80/20	0.0270
922922	AB1-081 C OP	3.2934	80/20	3.2934
923262	AB1-132 C OP (Suspended)	5.2164	80/20	5.2164
923831	AB2-022 C	9.9787	80/20	9.9787
924151	AB2-059 C OP	0.6695	80/20	0.6695
924501	AB2-099 C (Suspended)	0.3345	80/20	0.3345
925121	AB2-169 C	1.4974	80/20	1.4974
925591	AC1-034 C	2.5141	80/20	2.5141
926071	AC1-086 C	7.6818	80/20	7.6818
926201	AC1-098 C	2.7858	80/20	2.7858
926211	AC1-099 C	0.9335	80/20	0.9335
927021	AC1-189 C	5.0100	80/20	5.0100
927141	AC1-208 C	3.5966	80/20	3.5966
932631	AC2-084 C	3.9712	80/20	3.9712
933991	AD1-023 C	21.0458	80/20	21.0458
934331	AD1-057 C O1	3.7332	80/20	3.7332
934521	AD1-076 C	103.5284	80/20	103.5284

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936401	AD2-051 C O1	6.4106	80/20	6.4106
938171	AE1-026 C O1	45.7564	80/20	45.7564
938221	AE1-035 C	1.6621	80/20	1.6621
940491	AE2-034 C	17.5707	80/20	17.5707
940571	AE2-044 C	1.6467	80/20	1.6467
941501	AE2-147 C	58.9734	80/20	58.9734
941541	AE2-151 C	0.6849	80/20	0.6849
942851	AE2-304 C	2.2454	80/20	2.2454
943171	AE2-346 C	0.8027	80/20	0.8027
944141	AF1-082	1.0586	80/20	1.0586
944871	AF1-152 C	19.6578	80/20	19.6578
945711	AF1-236 C O1	192.3573	80/20	192.3573
957521	AF2-046 C	7.1217	80/20	7.1217
957531	AF2-047 C	41.7513	80/20	41.7513
957821	AF2-076 C O2	19.6578	80/20	19.6578
957861	AF2-080 C	4.5503	80/20	4.5503
959231	AF2-214 C	3.5580	80/20	3.5580
959511	AF2-242	8.7134	80/20	8.7134
959731	AF2-264 C	1.1285	80/20	1.1285
960121	AF2-303 C O2	6.8965	80/20	6.8965
960331	AF2-324 C O2	3.0154	80/20	3.0154
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.9366	80/20	0.9366
960831	AF2-374 C	0.6991	80/20	0.6991
WEC	WEC	0.1266	Confirmed LTF	0.1266
LGEE	LGEE	0.2368	Confirmed LTF	0.2368
CPLE	CPLE	1.5129	Confirmed LTF	1.5129
CBM-W2	CBM-W2	4.9795	Confirmed LTF	4.9795
NY	NY	0.1272	Confirmed LTF	0.1272
CBM-W1	CBM-W1	4.7663	Confirmed LTF	4.7663
TVA	TVA	1.0360	Confirmed LTF	1.0360
CBM-S2	CBM-S2	9.1208	Confirmed LTF	9.1208
CBM-S1	CBM-S1	5.7936	Confirmed LTF	5.7936
MADISON	MADISON	0.2843	Confirmed LTF	0.2843
MEC	MEC	0.7595	Confirmed LTF	0.7595

13.5.33 Index 33

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
148844307	314639	6TANGLEW	DVP	313851	6ECITYDP2	DVP	1	DVP_P4-2: 24662	breaker	1204.0	148.49	149.14	DC	17.34

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2965	50/50	0.2965
314582	3KELFORD	0.3850	50/50	0.3850
314639	6TANGLEW	1.7882	50/50	1.7882
315292	1DOMTR78	2.8458	50/50	2.8458
315294	1DOMTR10	21.3814	50/50	21.3814
315601	1CONETOE2SOL	1.2342	50/50	1.2342
315602	1HOLLOMANSOL	1.9263	50/50	1.9263
315605	6W1-029WIND	3.1460	50/50	3.1460
315611	6Z1-036WIND	23.7062	50/50	23.7062
315614	AA2-178 C	4.4799	50/50	4.4799
900672	V4-068 E	0.1418	Adder	0.17
901082	W1-029 E	122.2655	50/50	122.2655
916042	Z1-036 E (Suspended)	158.8312	50/50	158.8312
917122	Z2-027 E	4.4429	50/50	4.4429
917332	Z2-043 E	0.9705	50/50	0.9705
917342	Z2-044 E	0.2817	Adder	0.33
917512	Z2-088 E OP1	3.0665	50/50	3.0665
918512	AA1-065 E OP	5.0004	50/50	5.0004
918532	AA1-067 E	0.7366	50/50	0.7366
919692	AA2-053 E OP	1.8939	Adder	2.23
919702	AA2-057 E OP	1.7076	Adder	2.01
920592	AA2-165 E	0.2347	Adder	0.28
920672	AA2-174 E OP	0.2189	Adder	0.26
920692	AA2-178 E	11.1307	50/50	11.1307
923262	AB1-132 C OP (Suspended)	7.1179	Adder	8.37
923263	AB1-132 E OP (Suspended)	3.0505	Adder	3.59
923831	AB2-022 C	-2.4765	Adder	-2.91
924501	AB2-099 C (Suspended)	0.4884	50/50	0.4884
924502	AB2-099 E (Suspended)	0.2093	50/50	0.2093
925121	AB2-169 C	1.8626	50/50	1.8626
925122	AB2-169 E	9.6908	50/50	9.6908
926071	AC1-086 C	10.4819	Adder	12.33
926072	AC1-086 E	4.7707	Adder	5.61
926201	AC1-098 C	4.1717	50/50	4.1717
926202	AC1-098 E	2.4853	50/50	2.4853
926211	AC1-099 C	1.3980	50/50	1.3980
926212	AC1-099 E	0.8210	50/50	0.8210
927021	AC1-189 C	7.4477	50/50	7.4477
927022	AC1-189 E	3.7099	50/50	3.7099
927141	AC1-208 C	4.6261	Adder	5.44

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927142	AC1-208 E	2.0542	Adder	2.42
932631	AC2-084 C	5.9469	50/50	5.9469
932632	AC2-084 E	2.9291	50/50	2.9291
933991	AD1-023 C	25.9479	50/50	25.9479
933992	AD1-023 E	14.1261	50/50	14.1261
934331	AD1-057 C O1	4.9484	Adder	5.82
934332	AD1-057 E O1	2.6397	Adder	3.11
934521	AD1-076 C	121.3529	50/50	121.3529
934522	AD1-076 E	61.7927	50/50	61.7927
936401	AD2-051 C O1	10.7603	50/50	10.7603
936402	AD2-051 E O1	4.6204	50/50	4.6204
938171	AE1-026 C O1	58.5576	50/50	58.5576
938172	AE1-026 E O1	15.4488	50/50	15.4488
938221	AE1-035 C	2.7919	50/50	2.7919
938222	AE1-035 E	1.3751	50/50	1.3751
940491	AE2-034 C	19.4788	50/50	19.4788
940492	AE2-034 E	8.3480	50/50	8.3480
941501	AE2-147 C	60.7950	50/50	60.7950
941502	AE2-147 E	40.5300	50/50	40.5300
941541	AE2-151 C	1.0040	50/50	1.0040
941542	AE2-151 E	0.5406	50/50	0.5406
942851	AE2-304 C	2.3303	50/50	2.3303
942852	AE2-304 E	0.9062	50/50	0.9062
943171	AE2-346 C	1.1722	50/50	1.1722
943172	AE2-346 E	0.5024	50/50	0.5024
944871	AF1-152 C	20.2650	50/50	20.2650
944872	AF1-152 E	13.5100	50/50	13.5100
945711	AF1-236 C O1	213.2460	50/50	213.2460
945712	AF1-236 E O1	347.9278	50/50	347.9278
957521	AF2-046 C	10.2515	50/50	10.2515
957522	AF2-046 E	5.1565	50/50	5.1565
957531	AF2-047 C	46.2852	50/50	46.2852
957532	AF2-047 E	23.2818	50/50	23.2818
957821	AF2-076 C O2	20.2647	50/50	20.2647
957822	AF2-076 E O2	13.5098	50/50	13.5098
957861	AF2-080 C	6.7643	50/50	6.7643
957862	AF2-080 E	2.9986	50/50	2.9986
959511	AF2-242	11.2944	50/50	11.2944
959731	AF2-264 C	1.6387	50/50	1.6387
959732	AF2-264 E	0.8071	50/50	0.8071
960121	AF2-303 C O2	4.7285	Adder	10.5
960122	AF2-303 E O2	3.0838	Adder	6.85
960331	AF2-324 C O2	2.0637	Adder	4.58
960332	AF2-324 E O2	1.1080	Adder	2.46
960831	AF2-374 C	1.0337	50/50	1.0337
960832	AF2-374 E	1.6865	50/50	1.6865
WEC	WEC	0.1953	Confirmed LTF	0.1953
LGEE	LGEE	0.3645	Confirmed LTF	0.3645
CPL	CPL	2.2809	Confirmed LTF	2.2809
CBM-W2	CBM-W2	7.6167	Confirmed LTF	7.6167
NY	NY	0.1841	Confirmed LTF	0.1841
CBM-W1	CBM-W1	7.3559	Confirmed LTF	7.3559

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
TVA	TVA	1.5792	Confirmed LTF	1.5792
O-066	O-066	2.7082	Confirmed LTF	2.7082
CBM-S2	CBM-S2	13.7911	Confirmed LTF	13.7911
CBM-S1	CBM-S1	8.8438	Confirmed LTF	8.8438
G-007	G-007	0.4233	Confirmed LTF	0.4233
MADISON	MADISON	0.4254	Confirmed LTF	0.4254
MEC	MEC	1.1663	Confirmed LTF	1.1663
AA2-074	AA2-074	1.5543	LTF	1.5543

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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
148844287	314651	6WINFALL	DVP	314639	6TANGLEW	DVP	1	DVP_P4-2: 24662	breaker	1163.0	158.22	158.89	DC	17.35

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2966	50/50	0.2966
314582	3KELFORD	0.3852	50/50	0.3852
315292	1DOMTR78	2.8464	50/50	2.8464
315294	1DOMTR10	21.3859	50/50	21.3859
315601	1CONETOESOL	1.2349	50/50	1.2349
315602	1HOLLOMANSOL	1.9270	50/50	1.9270
315605	6W1-029WIND	3.1463	50/50	3.1463
315611	6Z1-036WIND	23.7089	50/50	23.7089
315614	AA2-178 C	4.4806	50/50	4.4806
900672	V4-068 E	0.1419	Adder	0.17
901082	W1-029 E	122.2782	50/50	122.2782
916042	Z1-036 E (Suspended)	158.8495	50/50	158.8495
917332	Z2-043 E	0.9710	50/50	0.9710
917342	Z2-044 E	0.2819	Adder	0.33
917512	Z2-088 E OP1	3.0682	50/50	3.0682
918512	AA1-065 E OP	5.0021	50/50	5.0021
918532	AA1-067 E	0.7369	50/50	0.7369
919692	AA2-053 E OP	1.8955	Adder	2.23
919702	AA2-057 E OP	1.7088	Adder	2.01
920592	AA2-165 E	0.2349	Adder	0.28
920672	AA2-174 E OP	0.2190	Adder	0.26
920692	AA2-178 E	11.1324	50/50	11.1324
922922	AB1-081 C OP	4.2559	Adder	5.01
922923	AB1-081 E OP	1.8240	Adder	2.15
923262	AB1-132 C OP (Suspended)	7.1229	Adder	8.38
923263	AB1-132 E OP (Suspended)	3.0527	Adder	3.59
923831	AB2-022 C	-2.4758	Adder	-2.91
924152	AB2-059 E OP	2.5839	Adder	3.04
924501	AB2-099 C (Suspended)	0.4887	50/50	0.4887
924502	AB2-099 E (Suspended)	0.2094	50/50	0.2094
925121	AB2-169 C	1.8631	50/50	1.8631
925122	AB2-169 E	9.6933	50/50	9.6933
925591	AC1-034 C	3.2489	Adder	3.82
925592	AC1-034 E	2.4510	Adder	2.88
926071	AC1-086 C	10.4893	Adder	12.34
926072	AC1-086 E	4.7740	Adder	5.62
926201	AC1-098 C	4.1744	50/50	4.1744
926202	AC1-098 E	2.4868	50/50	2.4868
926211	AC1-099 C	1.3989	50/50	1.3989
926212	AC1-099 E	0.8215	50/50	0.8215

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927021	AC1-189 C	7.4520	50/50	7.4520
927022	AC1-189 E	3.7120	50/50	3.7120
927141	AC1-208 C	4.6299	Adder	5.45
927142	AC1-208 E	2.0559	Adder	2.42
932631	AC2-084 C	5.9507	50/50	5.9507
932632	AC2-084 E	2.9309	50/50	2.9309
933991	AD1-023 C	25.9534	50/50	25.9534
933992	AD1-023 E	14.1290	50/50	14.1290
934331	AD1-057 C O1	4.9521	Adder	5.83
934332	AD1-057 E O1	2.6416	Adder	3.11
934521	AD1-076 C	121.3785	50/50	121.3785
934522	AD1-076 E	61.8058	50/50	61.8058
936401	AD2-051 C O1	10.7645	50/50	10.7645
936402	AD2-051 E O1	4.6222	50/50	4.6222
938171	AE1-026 C O1	58.5728	50/50	58.5728
938172	AE1-026 E O1	15.4528	50/50	15.4528
938221	AE1-035 C	2.7928	50/50	2.7928
938222	AE1-035 E	1.3756	50/50	1.3756
940491	AE2-034 C	19.4817	50/50	19.4817
940492	AE2-034 E	8.3493	50/50	8.3493
940571	AE2-044 C	2.1280	Adder	2.5
940572	AE2-044 E	0.9120	Adder	1.07
941501	AE2-147 C	60.8013	50/50	60.8013
941502	AE2-147 E	40.5342	50/50	40.5342
941541	AE2-151 C	1.0044	50/50	1.0044
941542	AE2-151 E	0.5409	50/50	0.5409
942851	AE2-304 C	2.3305	50/50	2.3305
942852	AE2-304 E	0.9063	50/50	0.9063
943171	AE2-346 C	1.1728	50/50	1.1728
943172	AE2-346 E	0.5026	50/50	0.5026
944141	AF1-082	1.3680	Adder	1.61
944871	AF1-152 C	20.2671	50/50	20.2671
944872	AF1-152 E	13.5114	50/50	13.5114
945711	AF1-236 C O1	213.2782	50/50	213.2782
945712	AF1-236 E O1	347.9803	50/50	347.9803
957521	AF2-046 C	10.2594	50/50	10.2594
957522	AF2-046 E	5.1606	50/50	5.1606
957531	AF2-047 C	46.2922	50/50	46.2922
957532	AF2-047 E	23.2853	50/50	23.2853
957821	AF2-076 C O2	20.2668	50/50	20.2668
957822	AF2-076 E O2	13.5112	50/50	13.5112
957861	AF2-080 C	6.7682	50/50	6.7682
957862	AF2-080 E	3.0003	50/50	3.0003
959231	AF2-214 C	2.4369	Adder	5.41
959232	AF2-214 E	3.6533	Adder	8.11
959511	AF2-242	11.2978	50/50	11.2978
959731	AF2-264 C	1.6398	50/50	1.6398
959732	AF2-264 E	0.8076	50/50	0.8076
960121	AF2-303 C O2	4.7321	Adder	10.5
960122	AF2-303 E O2	3.0862	Adder	6.85
960331	AF2-324 C O2	2.0652	Adder	4.58
960332	AF2-324 E O2	1.1088	Adder	2.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6412	Adder	1.42
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1603	Adder	0.36
960831	AF2-374 C	1.0342	50/50	1.0342
960832	AF2-374 E	1.6874	50/50	1.6874
WEC	WEC	0.1978	Confirmed LTF	0.1978
LGEE	LGEE	0.3691	Confirmed LTF	0.3691
CPL	CPL	2.2861	Confirmed LTF	2.2861
CBM-W2	CBM-W2	7.6822	Confirmed LTF	7.6822
NY	NY	0.1797	Confirmed LTF	0.1797
CBM-W1	CBM-W1	7.4560	Confirmed LTF	7.4560
TVA	TVA	1.5904	Confirmed LTF	1.5904
O-066	O-066	2.6544	Confirmed LTF	2.6544
CBM-S2	CBM-S2	13.8373	Confirmed LTF	13.8373
CBM-S1	CBM-S1	8.9119	Confirmed LTF	8.9119
G-007	G-007	0.4150	Confirmed LTF	0.4150
MADISON	MADISON	0.4254	Confirmed LTF	0.4254
MEC	MEC	1.1790	Confirmed LTF	1.1790
AA2-074	AA2-074	1.5579	LTF	1.5579

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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
98090150	314662	6S HERTFORD	DVP	314651	6WINFALL	DVP	1	DVP_P1-2: LN 246	single	733.2	133.51	135.11	DC	12.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0325	80/20	0.0325
314574	6EVERETS	0.3446	80/20	0.3446
314582	3KELFORD	0.4969	80/20	0.4969
314589	3MURPHYS	0.0660	80/20	0.0660
314623	3WITAKRS	0.1596	80/20	0.1596
314704	3LAWRENC	0.1176	80/20	0.1176
315126	1ROARAP2	0.9082	80/20	0.9082
315128	1ROARAP4	0.8667	80/20	0.8667
315136	1ROSEMG1	1.5269	80/20	1.5269
315137	1ROSEMS1	0.9468	80/20	0.9468
315138	1ROSEMG2	0.7156	80/20	0.7156
315139	1GASTONA	2.2149	80/20	2.2149
315141	1GASTONB	2.2149	80/20	2.2149
315159	1KERR 2	0.3901	80/20	0.3901
315160	1KERR 3	0.3901	80/20	0.3901
315161	1KERR 4	0.3901	80/20	0.3901
315162	1KERR 5	0.3901	80/20	0.3901
315163	1KERR 6	0.3901	80/20	0.3901
315164	1KERR 7	0.3901	80/20	0.3901
315292	1DOMTR78	3.3298	80/20	3.3298
315294	1DOMTR10	25.0180	80/20	25.0180
315601	1CONETOE2SOL	1.4398	80/20	1.4398
315602	1HOLLOMANSOL	2.2223	80/20	2.2223
315606	3AA2-053SOLA	1.1036	80/20	1.1036
315607	3AA1-063SOLA	0.8357	80/20	0.8357
315608	3AA2-088SOLA	0.4899	80/20	0.4899
315611	6Z1-036WIND	27.9154	80/20	27.9154
315612	3AA2-057SOLA	0.8869	80/20	0.8869
315614	AA2-178 C	5.2604	80/20	5.2604
920591	AA2-165 C	0.1052	80/20	0.1052
920671	AA2-174 C OP	0.0505	80/20	0.0505
922922	AB1-081 C OP	5.9136	80/20	5.9136
923262	AB1-132 C OP (Suspended)	9.8053	80/20	9.8053
923572	AB1-173 C OP	1.1594	80/20	1.1594
923582	AB1-173AC OP	1.1594	80/20	1.1594
923831	AB2-022 C	-1.6400	Adder	-1.93
923911	AB2-031 C O1	1.1508	80/20	1.1508
923991	AB2-040 C O1	3.7787	80/20	3.7787
924151	AB2-059 C OP	1.2022	80/20	1.2022
924501	AB2-099 C (Suspended)	0.6347	80/20	0.6347
924511	AB2-100 C	0.8106	80/20	0.8106

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	2.1767	80/20	2.1767
925171	AB2-174 C O1	0.5928	80/20	0.5928
925591	AC1-034 C	4.5144	80/20	4.5144
925781	AC1-054 C O1	2.9637	80/20	2.9637
926071	AC1-086 C	14.4395	80/20	14.4395
926201	AC1-098 C	5.2053	80/20	5.2053
926211	AC1-099 C	1.7443	80/20	1.7443
927021	AC1-189 C	8.6764	80/20	8.6764
927141	AC1-208 C	6.6480	80/20	6.6480
932631	AC2-084 C	7.4204	80/20	7.4204
933991	AD1-023 C	30.3123	80/20	30.3123
934331	AD1-057 C O1	6.8258	80/20	6.8258
934521	AD1-076 C	142.1118	80/20	142.1118
936401	AD2-051 C O1	12.4167	80/20	12.4167
938171	AE1-026 C O1	68.2899	80/20	68.2899
938221	AE1-035 C	3.2208	80/20	3.2208
940491	AE2-034 C	22.8724	80/20	22.8724
940571	AE2-044 C	2.9568	80/20	2.9568
941541	AE2-151 C	1.3133	80/20	1.3133
942471	AE2-260 C O1	5.3193	80/20	5.3193
942851	AE2-304 C	2.7456	80/20	2.7456
943171	AE2-346 C	1.5233	80/20	1.5233
943911	AF1-059	5.3880	80/20	5.3880
944141	AF1-082	1.9008	80/20	1.9008
945711	AF1-236 C O1	250.3979	80/20	250.3979
946281	AF1-292 C	0.6331	80/20	0.6331
957521	AF2-046 C	12.9920	80/20	12.9920
957531	AF2-047 C	54.3491	80/20	54.3491
957861	AF2-080 C	7.8803	80/20	7.8803
959231	AF2-214 C	6.3888	80/20	6.3888
959511	AF2-242	13.1813	80/20	13.1813
959731	AF2-264 C	2.1088	80/20	2.1088
960081	AF2-299 C	1.0671	80/20	1.0671
960121	AF2-303 C O2	12.3223	80/20	12.3223
960331	AF2-324 C O2	5.3743	80/20	5.3743
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.6838	80/20	1.6838
960831	AF2-374 C	1.3333	80/20	1.3333
WEC	WEC	0.2337	Confirmed LTF	0.2337
LGEE	LGEE	0.4364	Confirmed LTF	0.4364
CPLE	CPLE	2.6804	Confirmed LTF	2.6804
CBM-W2	CBM-W2	9.0499	Confirmed LTF	9.0499
NY	NY	0.2068	Confirmed LTF	0.2068
CBM-W1	CBM-W1	8.8070	Confirmed LTF	8.8070
TVA	TVA	1.8732	Confirmed LTF	1.8732
CBM-S2	CBM-S2	16.2476	Confirmed LTF	16.2476
CBM-S1	CBM-S1	10.4966	Confirmed LTF	10.4966
MADISON	MADISON	0.5000	Confirmed LTF	0.5000
MEC	MEC	1.3920	Confirmed LTF	1.3920
AA2-074	AA2-074	1.8270	LTF	1.8270

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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
98090179	924510	AB2-100 TAP	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 246	single	375.06	157.59	162.81	DC	20.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2838	80/20	0.2838
314582	3KELFORD	0.4966	80/20	0.4966
314589	3MURPHYS	0.0769	80/20	0.0769
314623	3WITAKRS	0.2386	80/20	0.2386
315115	1S HAMPT1	0.7317	80/20	0.7317
315126	1ROARAP2	1.4350	80/20	1.4350
315128	1ROARAP4	1.3694	80/20	1.3694
315136	1ROSEMG1	4.5338	80/20	4.5338
315137	1ROSEMS1	2.8114	80/20	2.8114
315138	1ROSEMG2	2.1248	80/20	2.1248
315139	1GASTONA	6.9543	80/20	6.9543
315141	1GASTONB	6.9543	80/20	6.9543
315159	1KERR 2	0.3942	80/20	0.3942
315160	1KERR 3	0.3942	80/20	0.3942
315161	1KERR 4	0.3942	80/20	0.3942
315162	1KERR 5	0.3942	80/20	0.3942
315163	1KERR 6	0.3942	80/20	0.3942
315164	1KERR 7	0.3942	80/20	0.3942
315292	1DOMTR78	1.1634	80/20	1.1634
315294	1DOMTR10	8.7409	80/20	8.7409
315601	1CONETOE2SOL	1.6020	80/20	1.6020
315602	1HOLLOMANSOL	1.8149	80/20	1.8149
315606	3AA2-053SOLA	1.5240	80/20	1.5240
315607	3AA1-063SOLA	1.2864	80/20	1.2864
315608	3AA2-088SOLA	0.7348	80/20	0.7348
315612	3AA2-057SOLA	1.2789	80/20	1.2789
315614	AA2-178 C	0.9735	80/20	0.9735
920591	AA2-165 C	0.1516	80/20	0.1516
920671	AA2-174 C OP	0.0698	80/20	0.0698
922922	AB1-081 C OP	9.2753	80/20	9.2753
923262	AB1-132 C OP (Suspended)	30.7868	80/20	30.7868
923801	AB2-015 C OP	3.5395	80/20	3.5395
924151	AB2-059 C OP	1.8856	80/20	1.8856
924501	AB2-099 C (Suspended)	0.6026	80/20	0.6026
924511	AB2-100 C	7.3542	80/20	7.3542
925121	AB2-169 C	0.9543	80/20	0.9543
925591	AC1-034 C	7.0807	80/20	7.0807
925781	AC1-054 C O1	3.6606	80/20	3.6606
926071	AC1-086 C	45.3373	80/20	45.3373
926201	AC1-098 C	6.4236	80/20	6.4236
926211	AC1-099 C	2.1526	80/20	2.1526

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
927021	AC1-189 C	8.6967	80/20	8.6967
927141	AC1-208 C	9.2701	80/20	9.2701
932631	AC2-084 C	9.1570	80/20	9.1570
933991	AD1-023 C	11.3636	80/20	11.3636
934331	AD1-057 C O1	15.8841	80/20	15.8841
934521	AD1-076 C	41.2196	80/20	41.2196
936401	AD2-051 C O1	10.5183	80/20	10.5183
938171	AE1-026 C O1	29.7099	80/20	29.7099
938221	AE1-035 C	2.6304	80/20	2.6304
938771	AE1-103 C O1	1.2888	80/20	1.2888
940491	AE2-034 C	4.2328	80/20	4.2328
940571	AE2-044 C	4.6376	80/20	4.6376
941541	AE2-151 C	1.1920	80/20	1.1920
943171	AE2-346 C	1.4462	80/20	1.4462
944141	AF1-082	2.9813	80/20	2.9813
945711	AF1-236 C O1	46.3386	80/20	46.3386
957521	AF2-046 C	14.4171	80/20	14.4171
957531	AF2-047 C	10.0578	80/20	10.0578
957861	AF2-080 C	7.8987	80/20	7.8987
959231	AF2-214 C	10.0206	80/20	10.0206
959511	AF2-242	7.0709	80/20	7.0709
959731	AF2-264 C	2.1330	80/20	2.1330
960121	AF2-303 C O2	20.1376	80/20	20.1376
960331	AF2-324 C O2	8.5132	80/20	8.5132
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.6147	80/20	2.6147
960831	AF2-374 C	1.3564	80/20	1.3564
961091	AF2-400 C	0.1911	80/20	0.1911
WEC	WEC	0.2592	Confirmed LTF	0.2592
LGEE	LGEE	0.4855	Confirmed LTF	0.4855
CPLE	CPLE	3.1474	Confirmed LTF	3.1474
CBM-W2	CBM-W2	10.3603	Confirmed LTF	10.3603
NY	NY	0.2947	Confirmed LTF	0.2947
CBM-W1	CBM-W1	9.7203	Confirmed LTF	9.7203
TVA	TVA	2.1686	Confirmed LTF	2.1686
CBM-S2	CBM-S2	19.2185	Confirmed LTF	19.2185
CBM-S1	CBM-S1	12.0899	Confirmed LTF	12.0899
MADISON	MADISON	0.6088	Confirmed LTF	0.6088
MEC	MEC	1.5652	Confirmed LTF	1.5652
AA2-074	AA2-074	2.1447	LTF	2.1447

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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
97804604	936400	AD2-051 TAP	DVP	314569	6EARLEYS	DVP	1	DVP_P4-2: 238T2002	breaker	699.0	105.24	106.5	DC	19.38

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.1077	50/50	0.1077
314704	3LAWRENC	0.3940	50/50	0.3940
315126	1ROARAP2	1.7251	50/50	1.7251
315136	1ROSEMG1	4.2161	50/50	4.2161
315137	1ROSEMS1	2.6144	50/50	2.6144
315138	1ROSEMG2	1.9760	50/50	1.9760
315139	1GASTONA	6.6275	50/50	6.6275
315141	1GASTONB	6.6275	50/50	6.6275
315294	1DOMTR10	-5.1296	Adder	-6.03
917342	Z2-044 E	0.2911	Adder	0.34
918492	AA1-063AE OP	2.9372	Adder	3.46
919692	AA2-053 E OP	2.8284	Adder	3.33
919702	AA2-057 E OP	1.7334	Adder	2.04
920592	AA2-165 E	0.2382	Adder	0.28
920672	AA2-174 E OP	0.3268	Adder	0.38
922922	AB1-081 C OP	4.5320	Adder	5.33
922923	AB1-081 E OP	1.9423	Adder	2.29
923262	AB1-132 C OP (Suspended)	29.3404	50/50	29.3404
923263	AB1-132 E OP (Suspended)	12.5744	50/50	12.5744
923572	AB1-173 C OP	3.1248	50/50	3.1248
923573	AB1-173 E OP	1.4583	50/50	1.4583
923582	AB1-173AC OP	3.1248	50/50	3.1248
923583	AB1-173AE OP	1.4583	50/50	1.4583
923911	AB2-031 C O1	3.1017	50/50	3.1017
923912	AB2-031 E O1	1.5277	50/50	1.5277
923991	AB2-040 C O1	10.1847	50/50	10.1847
923992	AB2-040 E O1	8.3329	50/50	8.3329
924022	AB2-043 E O1	1.2769	Adder	1.5
924152	AB2-059 E OP	2.7516	Adder	3.24
924162	AB2-060 E OP	1.9081	Adder	2.24
924301	AB2-077 C O1 (Suspended)	0.8971	Adder	1.06
924302	AB2-077 E O1 (Suspended)	0.5981	Adder	0.7
924311	AB2-078 C O1 (Suspended)	0.8971	Adder	1.06
924312	AB2-078 E O1 (Suspended)	0.5981	Adder	0.7
924321	AB2-079 C O1 (Suspended)	0.8971	Adder	1.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924322	AB2-079 E O1 (Suspended)	0.5981	Adder	0.7
924511	AB2-100 C	3.6931	50/50	3.6931
924512	AB2-100 E	10.5452	50/50	10.5452
925171	AB2-174 C O1	1.7279	50/50	1.7279
925172	AB2-174 E O1	9.0630	50/50	9.0630
925591	AC1-034 C	3.4597	Adder	4.07
925592	AC1-034 E	2.6099	Adder	3.07
925611	AC1-036 C	0.3376	Adder	0.4
925612	AC1-036 E	0.5508	Adder	0.65
925781	AC1-054 C O1	4.7648	Adder	5.61
925782	AC1-054 E O1	2.1950	Adder	2.58
926071	AC1-086 C	43.2072	50/50	43.2072
926072	AC1-086 E	19.6650	50/50	19.6650
927141	AC1-208 C	5.1597	Adder	6.07
927142	AC1-208 E	2.2911	Adder	2.7
934331	AD1-057 C O1	12.9067	50/50	12.9067
934332	AD1-057 E O1	6.8850	50/50	6.8850
936261	AD2-033 C	4.8479	Adder	5.7
936262	AD2-033 E	3.2319	Adder	3.8
936361	AD2-046 C O1	4.6384	Adder	5.46
936362	AD2-046 E O1	2.1330	Adder	2.51
936401	AD2-051 C O1	43.0707	50/50	43.0707
936402	AD2-051 E O1	18.4941	50/50	18.4941
936481	AD2-063 C O1	6.2340	Adder	7.33
936482	AD2-063 E O1	4.1214	Adder	4.85
938173	AE1-026 BAT	15.6372	Merchant Transmission	15.6372
939181	AE1-148 C O1	4.5450	Adder	5.35
939182	AE1-148 E O1	3.0300	Adder	3.56
940241	AE2-006	0.1718	Adder	0.2
940481	AE2-033 C	28.1080	50/50	28.1080
940482	AE2-033 E	18.9492	50/50	18.9492
940571	AE2-044 C	2.2660	Adder	2.67
940572	AE2-044 E	0.9711	Adder	1.14
940661	AE2-053 O1	1.6833	Adder	1.98
942451	AE2-258	1.0653	Adder	1.25
942471	AE2-260 C O1	26.1191	50/50	26.1191
942472	AE2-260 E O1	37.0469	50/50	37.0469
943911	AF1-059	13.9527	Adder	16.41
944141	AF1-082	1.4567	Adder	1.71
946011	AF1-266	23.5286	50/50	23.5286
946281	AF1-292 C	2.2878	50/50	2.2878
946282	AF1-292 E	1.5424	50/50	1.5424
959231	AF2-214 C	2.5950	Adder	5.76
959232	AF2-214 E	3.8903	Adder	8.64
959311	AF2-222 C	3.0332	Adder	6.73
959312	AF2-222 E	2.0323	Adder	4.51
960081	AF2-299 C	3.8559	50/50	3.8559
960082	AF2-299 E	2.5706	50/50	2.5706
960121	AF2-303 C O2	5.2854	Adder	11.73
960122	AF2-303 E O2	3.4470	Adder	7.65
960331	AF2-324 C O2	2.1246	Adder	4.72
960332	AF2-324 E O2	1.1407	Adder	2.53

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960351	AF2-326 C (Withdrawn : 07/22/2020)	0.6749	Adder	1.5
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.1687	Adder	0.37
960811	AF2-372 C	0.3003	Adder	0.67
960812	AF2-372 E	0.4901	Adder	1.09
WEC	WEC	0.1188	Confirmed LTF	0.1188
LGEE	LGEE	0.2248	Confirmed LTF	0.2248
CPL	CPL	1.1808	Confirmed LTF	1.1808
CBM-W2	CBM-W2	4.6355	Confirmed LTF	4.6355
NY	NY	0.1615	Confirmed LTF	0.1615
CBM-W1	CBM-W1	4.4411	Confirmed LTF	4.4411
TVA	TVA	0.9674	Confirmed LTF	0.9674
O-066	O-066	2.3117	Confirmed LTF	2.3117
CBM-S2	CBM-S2	7.9880	Confirmed LTF	7.9880
CBM-S1	CBM-S1	5.4102	Confirmed LTF	5.4102
G-007	G-007	0.3609	Confirmed LTF	0.3609
MADISON	MADISON	0.2540	Confirmed LTF	0.2540
MEC	MEC	0.7103	Confirmed LTF	0.7103

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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
98578871	940480	AE2-033 TAP	DVP	314435	6SAPONY	DVP	1	DVP_P7-1: LN 2058-2181	tower	830.0	130.38	132.8	DC	44.3

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	1.1800	Adder	1.39
314541	3WATKINS	0.4059	Adder	0.48
314572	3EMPORIA	0.1781	50/50	0.1781
314704	3LAWRENC	0.6562	50/50	0.6562
315126	1ROARAP2	2.3517	50/50	2.3517
315136	1ROSEMG1	4.4470	50/50	4.4470
315137	1ROSEMS1	2.7576	50/50	2.7576
315138	1ROSEMG2	2.0842	50/50	2.0842
315139	1GASTONA	6.6590	50/50	6.6590
315141	1GASTONB	6.6590	50/50	6.6590
315294	1DOMTR10	6.4730	Adder	7.62
900672	V4-068 E	0.2567	Adder	0.3
907092	X1-038 E	2.9500	Adder	3.47
917332	Z2-043 E	1.0904	Adder	1.28
917342	Z2-044 E	0.5705	Adder	0.67
917512	Z2-088 E OP1	3.8340	Adder	4.51
918492	AA1-063AE OP	4.7118	Adder	5.54
918512	AA1-065 E OP	3.1865	Adder	3.75
918532	AA1-067 E	0.5486	Adder	0.65
919692	AA2-053 E OP	4.8480	Adder	5.7
919702	AA2-057 E OP	3.5108	Adder	4.13
920042	AA2-088 E OP	8.5732	Adder	10.09
920592	AA2-165 E	0.4825	Adder	0.57
920672	AA2-174 E OP	0.5602	Adder	0.66
922922	AB1-081 C OP	8.7046	Adder	10.24
922923	AB1-081 E OP	3.7305	Adder	4.39
923262	AB1-132 C OP (Suspended)	29.4798	50/50	29.4798
923263	AB1-132 E OP (Suspended)	12.6342	50/50	12.6342
923572	AB1-173 C OP	4.8865	50/50	4.8865
923573	AB1-173 E OP	2.2803	50/50	2.2803
923582	AB1-173AC OP	4.8865	50/50	4.8865
923583	AB1-173AE OP	2.2803	50/50	2.2803
923801	AB2-015 C OP	4.7154	Adder	5.55
923802	AB2-015 E OP	3.8666	Adder	4.55
923911	AB2-031 C O1	4.8503	50/50	4.8503
923912	AB2-031 E O1	2.3889	50/50	2.3889
923991	AB2-040 C O1	15.9262	50/50	15.9262
923992	AB2-040 E O1	13.0306	50/50	13.0306
924022	AB2-043 E O1	1.9475	Adder	2.29

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924152	AB2-059 E OP	5.2849	Adder	6.22
924162	AB2-060 E OP	2.9089	Adder	3.42
924301	AB2-077 C O1 (Suspended)	1.3639	Adder	1.6
924302	AB2-077 E O1 (Suspended)	0.9093	Adder	1.07
924311	AB2-078 C O1 (Suspended)	1.3639	Adder	1.6
924312	AB2-078 E O1 (Suspended)	0.9093	Adder	1.07
924321	AB2-079 C O1 (Suspended)	1.3639	Adder	1.6
924322	AB2-079 E O1 (Suspended)	0.9093	Adder	1.07
924501	AB2-099 C (Suspended)	0.5127	Adder	0.6
924502	AB2-099 E (Suspended)	0.2197	Adder	0.26
924511	AB2-100 C	6.2132	50/50	6.2132
924512	AB2-100 E	17.7411	50/50	17.7411
925122	AB2-169 E	3.7423	Adder	4.4
925171	AB2-174 C O1	2.7644	50/50	2.7644
925172	AB2-174 E O1	14.4997	50/50	14.4997
925591	AC1-034 C	6.6450	Adder	7.82
925592	AC1-034 E	5.0129	Adder	5.9
925611	AC1-036 C	0.5114	Adder	0.6
925612	AC1-036 E	0.8344	Adder	0.98
925781	AC1-054 C O1	6.7381	Adder	7.93
925782	AC1-054 E O1	3.1041	Adder	3.65
926071	AC1-086 C	43.4125	50/50	43.4125
926072	AC1-086 E	19.7585	50/50	19.7585
926201	AC1-098 C	6.4358	Adder	7.57
926202	AC1-098 E	3.8341	Adder	4.51
926211	AC1-099 C	2.1567	Adder	2.54
926212	AC1-099 E	1.2666	Adder	1.49
927021	AC1-189 C	7.8724	Adder	9.26
927022	AC1-189 E	3.9215	Adder	4.61
927141	AC1-208 C	10.1488	Adder	11.94
927142	AC1-208 E	4.5065	Adder	5.3
932631	AC2-084 C	9.1744	Adder	10.79
932632	AC2-084 E	4.5187	Adder	5.32
933991	AD1-023 C	8.0608	Adder	9.48
933992	AD1-023 E	4.3883	Adder	5.16
934331	AD1-057 C O1	17.4625	50/50	17.4625
934332	AD1-057 E O1	9.3152	50/50	9.3152
934521	AD1-076 C	29.9773	Adder	35.27
934522	AD1-076 E	15.2644	Adder	17.96
936261	AD2-033 C	7.3540	Adder	8.65
936262	AD2-033 E	4.9027	Adder	5.77
936361	AD2-046 C O1	6.7643	Adder	7.96
936362	AD2-046 E O1	3.1106	Adder	3.66
936401	AD2-051 C O1	7.1905	Adder	8.46
936402	AD2-051 E O1	3.0875	Adder	3.63
936481	AD2-063 C O1	9.4860	Adder	11.16
936482	AD2-063 E O1	6.2713	Adder	7.38

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938171	AE1-026 C O1	20.8241	Adder	24.5
938172	AE1-026 E O1	5.4939	Adder	6.46
938221	AE1-035 C	1.7791	Adder	2.09
938222	AE1-035 E	0.8763	Adder	1.03
938771	AE1-103 C O1	1.7700	Adder	2.08
938772	AE1-103 E O1	2.4443	Adder	2.88
939181	AE1-148 C O1	6.6422	Adder	7.81
939182	AE1-148 E O1	4.4281	Adder	5.21
940241	AE2-006	0.2602	Adder	0.31
940481	AE2-033 C	64.4066	50/50	64.4066
940482	AE2-033 E	43.4202	50/50	43.4202
940571	AE2-044 C	4.3523	Adder	5.12
940572	AE2-044 E	1.8653	Adder	2.19
940661	AE2-053 O1	2.4601	Adder	2.89
941541	AE2-151 C	0.9553	Adder	1.12
941542	AE2-151 E	0.5144	Adder	0.61
942451	AE2-258	1.6248	Adder	1.91
942471	AE2-260 C O1	46.3897	50/50	46.3897
942472	AE2-260 E O1	65.7983	50/50	65.7983
943171	AE2-346 C	1.2305	Adder	1.45
943172	AE2-346 E	0.5274	Adder	0.62
943911	AF1-059	22.8480	Adder	26.88
944141	AF1-082	2.7979	Adder	3.29
946011	AF1-266	53.9134	50/50	53.9134
946281	AF1-292 C	3.8562	50/50	3.8562
946282	AF1-292 E	2.5997	50/50	2.5997
957521	AF2-046 C	7.6850	Adder	17.06
957522	AF2-046 E	3.8656	Adder	8.58
957861	AF2-080 C	3.7895	Adder	8.41
957862	AF2-080 E	1.6799	Adder	3.73
959231	AF2-214 C	4.9842	Adder	11.06
959232	AF2-214 E	7.4721	Adder	16.59
959311	AF2-222 C	4.5897	Adder	10.19
959312	AF2-222 E	3.0751	Adder	6.83
959511	AF2-242	2.8602	Adder	6.35
959731	AF2-264 C	1.0364	Adder	2.3
959732	AF2-264 E	0.5105	Adder	1.13
960081	AF2-299 C	6.4992	50/50	6.4992
960082	AF2-299 E	4.3328	50/50	4.3328
960121	AF2-303 C O2	12.0800	Adder	26.81
960122	AF2-303 E O2	7.8782	Adder	17.49
960331	AF2-324 C O2	5.0553	Adder	11.22
960332	AF2-324 E O2	2.7141	Adder	6.02
960351	AF2-326 C (Withdrawn : 07/22/2020)	1.2763	Adder	2.83
960352	AF2-326 E (Withdrawn : 07/22/2020)	0.3191	Adder	0.71
960811	AF2-372 C	0.4566	Adder	1.01
960812	AF2-372 E	0.7452	Adder	1.65
960831	AF2-374 C	0.6838	Adder	1.52
960832	AF2-374 E	1.1157	Adder	2.48
961091	AF2-400 C	0.1350	Adder	0.3
961092	AF2-400 E	0.2214	Adder	0.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
WEC	WEC	0.2000	Confirmed LTF	0.2000
LGEE	LGEE	0.3782	Confirmed LTF	0.3782
CPL	CPL	2.4542	Confirmed LTF	2.4542
CBM-W2	CBM-W2	8.0999	Confirmed LTF	8.0999
NY	NY	0.2992	Confirmed LTF	0.2992
CBM-W1	CBM-W1	7.4560	Confirmed LTF	7.4560
TVA	TVA	1.7052	Confirmed LTF	1.7052
O-066	O-066	4.2202	Confirmed LTF	4.2202
CBM-S2	CBM-S2	15.0916	Confirmed LTF	15.0916
CBM-S1	CBM-S1	9.4998	Confirmed LTF	9.4998
G-007	G-007	0.6594	Confirmed LTF	0.6594
MADISON	MADISON	0.4818	Confirmed LTF	0.4818
MEC	MEC	1.2156	Confirmed LTF	1.2156
AA2-074	AA2-074	1.6722	LTF	1.6722

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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
149216272	957790	AF2-073 TAP	DVP	314537	6SUFFOLK	DVP	1	DVP_P1-2: LN 2092	single	571.52	171.44	174.39	DC	17.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0506	80/20	0.0506
314574	6EVERETS	0.4657	80/20	0.4657
314582	3KELFORD	0.7842	80/20	0.7842
314589	3MURPHYS	0.1032	80/20	0.1032
314623	3WITAKRS	0.2359	80/20	0.2359
314704	3LAWRENC	0.1825	80/20	0.1825
315126	1ROARAP2	1.4097	80/20	1.4097
315128	1ROARAP4	1.3452	80/20	1.3452
315136	1ROSEMG1	2.3511	80/20	2.3511
315137	1ROSEMS1	1.4579	80/20	1.4579
315138	1ROSEMG2	1.1019	80/20	1.1019
315139	1GASTONA	3.4385	80/20	3.4385
315141	1GASTONB	3.4385	80/20	3.4385
315159	1KERR 2	0.5966	80/20	0.5966
315160	1KERR 3	0.5966	80/20	0.5966
315161	1KERR 4	0.5966	80/20	0.5966
315162	1KERR 5	0.5966	80/20	0.5966
315163	1KERR 6	0.5966	80/20	0.5966
315164	1KERR 7	0.5966	80/20	0.5966
315292	1DOMTR78	2.8729	80/20	2.8729
315294	1DOMTR10	21.5849	80/20	21.5849
315601	1CONETOE2SOL	1.9914	80/20	1.9914
315602	1HOLLOMANSOL	3.5568	80/20	3.5568
315606	3AA2-053SOLA	1.7258	80/20	1.7258
315607	3AA1-063SOLA	1.2920	80/20	1.2920
315608	3AA2-088SOLA	0.7480	80/20	0.7480
315611	6Z1-036WIND	13.8532	80/20	13.8532
315612	3AA2-057SOLA	1.3289	80/20	1.3289
315614	AA2-178 C	3.4314	80/20	3.4314
920591	AA2-165 C	0.1576	80/20	0.1576
920671	AA2-174 C OP	0.0790	80/20	0.0790
922922	AB1-081 C OP	8.5938	80/20	8.5938
923262	AB1-132 C OP (Suspended)	15.2225	80/20	15.2225
923572	AB1-173 C OP	1.8023	80/20	1.8023
923582	AB1-173AC OP	1.8023	80/20	1.8023
923911	AB2-031 C O1	1.7889	80/20	1.7889
923991	AB2-040 C O1	5.8740	80/20	5.8740
924151	AB2-059 C OP	1.7471	80/20	1.7471
924501	AB2-099 C (Suspended)	1.0074	80/20	1.0074
924511	AB2-100 C	1.2658	80/20	1.2658
925121	AB2-169 C	2.0776	80/20	2.0776

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925171	AB2-174 C O1	0.9219	80/20	0.9219
925591	AC1-034 C	6.5604	80/20	6.5604
925781	AC1-054 C O1	4.5595	80/20	4.5595
926071	AC1-086 C	22.4169	80/20	22.4169
926201	AC1-098 C	8.0374	80/20	8.0374
926211	AC1-099 C	2.6934	80/20	2.6934
927021	AC1-189 C	11.8954	80/20	11.8954
927141	AC1-208 C	10.1471	80/20	10.1471
932631	AC2-084 C	11.4575	80/20	11.4575
933991	AD1-023 C	28.2004	80/20	28.2004
934331	AD1-057 C O1	10.1856	80/20	10.1856
934521	AD1-076 C	113.9255	80/20	113.9255
935111	AD1-144 C	-0.7751	Adder	-0.91
936401	AD2-051 C O1	19.8648	80/20	19.8648
937541	AD2-215 C	-0.7831	Adder	-0.92
938171	AE1-026 C O1	69.7636	80/20	69.7636
938221	AE1-035 C	5.1550	80/20	5.1550
940491	AE2-034 C	14.9197	80/20	14.9197
940571	AE2-044 C	4.2969	80/20	4.2969
941541	AE2-151 C	2.0903	80/20	2.0903
942131	AE2-225 C	-1.0773	Adder	-1.27
942171	AE2-229 C	-1.0773	Adder	-1.27
942471	AE2-260 C O1	8.3171	80/20	8.3171
943171	AE2-346 C	2.4178	80/20	2.4178
943911	AF1-059	8.3370	80/20	8.3370
944141	AF1-082	2.7623	80/20	2.7623
945711	AF1-236 C O1	163.3348	80/20	163.3348
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4520	80/20	35.4520
957791	AF2-073 C (Withdrawn : 07/02/2020)	41.1750	80/20	41.1750
957801	AF2-074 C (Withdrawn : 07/02/2020)	18.3000	80/20	18.3000
957861	AF2-080 C	10.8039	80/20	10.8039
959231	AF2-214 C	9.2843	80/20	9.2843
959511	AF2-242	13.9123	80/20	13.9123
959731	AF2-264 C	3.3334	80/20	3.3334
960081	AF2-299 C	1.6616	80/20	1.6616
960121	AF2-303 C O2	17.7537	80/20	17.7537
960331	AF2-324 C O2	7.7138	80/20	7.7138
960351	AF2-326 C (Withdrawn : 07/22/2020)	2.4520	80/20	2.4520
960831	AF2-374 C	2.1136	80/20	2.1136
WEC	WEC	0.3333	Confirmed LTF	0.3333
LGEE	LGEE	0.6224	Confirmed LTF	0.6224
CPL	CPL	3.7739	Confirmed LTF	3.7739
CBM-W2	CBM-W2	12.8665	Confirmed LTF	12.8665
NY	NY	0.2909	Confirmed LTF	0.2909
CBM-W1	CBM-W1	12.5600	Confirmed LTF	12.5600
TVA	TVA	2.6600	Confirmed LTF	2.6600
CBM-S2	CBM-S2	22.9639	Confirmed LTF	22.9639
CBM-S1	CBM-S1	14.9015	Confirmed LTF	14.9015

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MADISON	MADISON	0.7056	Confirmed LTF	0.7056
MEC	MEC	1.9799	Confirmed LTF	1.9799
AA2-074	AA2-074	2.5717	LTF	2.5717

13.6 Contingency Descriptions - Secondary POI

Contingency Name	Contingency Definition
DVP_P1-2: LN 563	CONTINGENCY 'DVP_P1-2: LN 563' OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 END
DVP_P1-2: LN 249	CONTINGENCY 'DVP_P1-2: LN 249' OPEN BRANCH FROM BUS 314282 TO BUS 314285 CKT 1 /* 6CARSON 230.00 - 6CHRL249 230.00 OPEN BRANCH FROM BUS 314285 TO BUS 314316 CKT 1 /* 6CHRL249 230.00 - 6LOCKS 230.00 OPEN BRANCH FROM BUS 314314 TO BUS 314316 CKT 2 /* 3LOCKS 115.00 - 6LOCKS 230.00 OPEN BUS 314285 /* ISLAND: 6CHRL249 230.00 END
DVP_P1-2: LN 246	CONTINGENCY 'DVP_P1-2: LN 246' OPEN BRANCH FROM BUS 957790 TO BUS 314575 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 END
DVP_P4-2: 562T563	CONTINGENCY 'DVP_P4-2: 562T563' /* CARSON 500 KV OPEN BRANCH FROM BUS 314902 TO BUS 940640 CKT 1 /* 8CARSON 500.00 - AE2- 051 TAP 500.00 OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 END
DVP_P1-2: LN 2131	CONTINGENCY 'DVP_P1-2: LN 2131' OPEN BRANCH FROM BUS 313714 TO BUS 313885 CKT 1 /* 6PERQUIMANS 230.00 - 6WALBMRL 230.00 OPEN BRANCH FROM BUS 313885 TO BUS 314637 CKT 1 /* 6WALBMRL 230.00 - 6EDENTON 230.00 OPEN BRANCH FROM BUS 314203 TO BUS 314637 CKT 1 /* 6MACKEYS 230.00 - 6EDENTON 230.00 OPEN BUS 313885 /* ISLAND: 6WALBMRL 230.00 OPEN BUS 314637 /* ISLAND: 6EDENTON 230.00 END

Contingency Name	Contingency Definition
DVP_P7-1: LN 56-2012-B	CONTINGENCY 'DVP_P7-1: LN 56-2012-B' /* . OPEN BRANCH FROM BUS 313723 TO BUS 314604 CKT 1 /* 3PECAN 115.00 - 3SEABORD 115.00 OPEN BRANCH FROM BUS 314558 TO BUS 314587 CKT 1 /* 3BOYKINS 115.00 - 3MARGTSV 115.00 OPEN BRANCH FROM BUS 314587 TO BUS 314604 CKT 1 /* 3MARGTSV 115.00 - 3SEABORD 115.00 OPEN BUS 314587 /* ISLAND: 3MARGTSV 115.00 OPEN BUS 314604 /* ISLAND: 3SEABORD 115.00 OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP - 6EARLEYS 230.00 END
DVP_P7-1: LN 2058-2181	CONTINGENCY 'DVP_P7-1: LN 2058-2181' /* . OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END
DVP_P4-2: 2012T2014	CONTINGENCY 'DVP_P4-2: 2012T2014' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 313857 TO BUS 314569 CKT 1 /* 6WINDSORDP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 313857 TO BUS 314574 CKT 1 /* 6WINDSORDP 230.00 - 6EVERETS 230.00 OPEN BUS 313857 /* ISLAND: 6WINDSORDP 230.00 OPEN BUS 314552 /* ISLAND: 3WINDSORDP 115.00 END
DVP_P4-2: 246T2034	CONTINGENCY 'DVP_P4-2: 246T2034' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314620 CKT 1 /* 6EARLEYS 230.00 - 6CASHIE 230.00 OPEN BRANCH FROM BUS 933990 TO BUS 314620 CKT 1 /* AD1-023 TAP 230.00 - 6CASHIE 230.00 OPEN BUS 314620 /* ISLAND: 6CASHIE 230.00 END

Contingency Name	Contingency Definition
DVP_P4-2: 218T2160	CONTINGENCY 'DVP_P4-2: 218T2160' /* EVERETTS 230 KV OPEN BRANCH FROM BUS 304451 TO BUS 314574 CKT 1 /* 6GREENVILE T230.00 - 6EVERETS 230.00 OPEN BRANCH FROM BUS 927020 TO BUS 314574 CKT 1 /* AC1-189 TAP 230.00 - 6EVERETS 230.00 END
DVP_P1-2: LN 2181	CONTINGENCY 'DVP_P1-2: LN 2181' OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END
DVP_P1-2: LN 68	CONTINGENCY 'DVP_P1-2: LN 68' OPEN BRANCH FROM BUS 314527 TO BUS 314536 CKT 1 /* 3HOLLAND 115.00 - 3SUFFOLK 115.00 OPEN BRANCH FROM BUS 314527 TO BUS 314539 CKT 1 /* 3HOLLAND 115.00 - 3UNCAMP 115.00 OPEN BUS 314527 /* ISLAND: 3HOLLAND 115.00 END
DVP_P2-2: BREMO B1	CONTINGENCY 'DVP_P2-2: BREMO B1' /* BREMO 230 KV OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 1 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315191 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G118.000 OPEN BUS 315191 /* ISLAND: 1BEARGRDN G118.000 OPEN BRANCH FROM BUS 314326 TO BUS 314747 CKT 2 /* 6BEARGRDN 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314326 TO BUS 315192 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN G218.000 OPEN BRANCH FROM BUS 314326 TO BUS 315193 CKT 1 /* 6BEARGRDN 230.00 - 1BEARGRDN S122.000 OPEN BUS 315192 /* ISLAND: 1BEARGRDN G218.000 OPEN BUS 315193 /* ISLAND: 1BEARGRDN S122.000 OPEN BRANCH FROM BUS 314677 TO BUS 314747 CKT 1 /* 6BUCKING 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313868 TO BUS 314747 CKT 1 /* 6CARTERV 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 313867 TO BUS 314747 CKT 1 /* 6BREMODIST 230.00 - 6BREMO 230.00 OPEN BRANCH FROM BUS 314744 TO BUS 314747 CKT 1 /* 3BREMO 115.00 - 6BREMO 230.00 OPEN BUS 314747 /* 6BREMO 230.00 KV OPEN BUS 314326 /* ISLAND: 6BEARGRDN 230.00 END

Contingency Name	Contingency Definition
314572 3EMPORIA 115 925170 AB2-174 TAP 115 1	CONTINGENCY '314572 3EMPORIA 115 925170 AB2-174 TAP 115 1' OPEN BRANCH FROM BUS 314572 TO BUS 925170 CKT 1 END
DVP_P1-2: LN 238-A	CONTINGENCY 'DVP_P1-2: LN 238-A' OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2- 033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 END
DVP_P4-2: 24642	CONTINGENCY 'DVP_P4-2: 24642' /* SUFFOLK 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 OPEN BRANCH FROM BUS 314536 TO BUS 314537 CKT 3 /* 3SUFFOLK 115.00 - 6SUFFOLK 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 314928 CKT 2 /* 6SUFFOLK 230.00 - 8SUFFOLK 500.00 END
DVP_P1-2: LN 247-A	CONTINGENCY 'DVP_P1-2: LN 247-A' OPEN BRANCH FROM BUS 313713 TO BUS 314648 CKT 1 /* 6SWAMP 230.00 - 6SUNBURY 230.00 OPEN BRANCH FROM BUS 957820 TO BUS 314648 CKT 1 /* AF2-076 TAP 230.00 - 6SUNBURY 230.00 OPEN BUS 314648 /* ISLAND: 6SUNBURY 230.00 END
DVP_P4-2: 24662	CONTINGENCY 'DVP_P4-2: 24662' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - AF2- 076 TAP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END

Contingency Name	Contingency Definition
DVP_P4-2: 246T247	CONTINGENCY 'DVP_P4-2: 246T247' /* SUFFOLK 230 KV OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314569 TO BUS 314575 CKT 1 /* 6EARLEYS 230.00 - 6NUCO TP 230.00 OPEN BRANCH FROM BUS 314575 TO BUS 314590 CKT 1 /* 6NUCO TP 230.00 - 6NUCOR 230.00 OPEN BUS 314575 /* ISLAND: 6NUCO TP 230.00 OPEN BUS 314590 /* ISLAND: 6NUCOR 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - AF2- 076 TAP 230.00 END
DVP_P1-2: LN 247-B	CONTINGENCY 'DVP_P1-2: LN 247-B' OPEN BRANCH FROM BUS 314537 TO BUS 957820 CKT 1 /* 6SUFFOLK 230.00 - AF2- 076 TAP 230.00 END
DVP_P1-2: LN 2056-A	CONTINGENCY 'DVP_P1-2: LN 2056-A' OPEN BRANCH FROM BUS 313845 TO BUS 934330 CKT 1 /* 6HATHAWAY 230.00 - AD1-057 TAP 230.00 END
AEP_P4_#11111_05J.FERR 765_B1	CONTINGENCY 'AEP_P4_#11111_05J.FERR 765_B1' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242514 TO BUS 242684 CKT 2 / 242514 05J.FERR 765 242684 05J.FERR 138 2 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
DVP_P1-2: LN 218	CONTINGENCY 'DVP_P1-2: LN 218' OPEN BRANCH FROM BUS 304451 TO BUS 314574 CKT 1 /* 6GREENVILE T230.00 - 6EVERETS 230.00 END
DVP_P4-2: 23872	CONTINGENCY 'DVP_P4-2: 23872' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2- 033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314902 CKT 1 /* 6CARSON 230.00 - 8CARSON 500.00 OPEN BUS 314455 /* 6CARSO_1 230.00 KV END

Contingency Name	Contingency Definition
DVP_P4-2: 2020T2144	CONTINGENCY 'DVP_P4-2: 2020T2144' /* WINFALL 230 KV OPEN BRANCH FROM BUS 313851 TO BUS 314638 CKT 1 /* 6ECITYDP2 230.00 - 6ELIZ CT 230.00 OPEN BRANCH FROM BUS 313851 TO BUS 314639 CKT 1 /* 6ECITYDP2 230.00 - 6TANGLEW 230.00 OPEN BRANCH FROM BUS 314639 TO BUS 314651 CKT 1 /* 6TANGLEW 230.00 - 6WINFALL 230.00 OPEN BUS 313851 /* ISLAND: 6ECITYDP2 230.00 OPEN BUS 314639 /* ISLAND: 6TANGLEW 230.00 OPEN BUS 917122 /* ISLAND: Z2-027 E 230.00 OPEN BRANCH FROM BUS 313713 TO BUS 314651 CKT 1 /* 6SWAMP 230.00 - 6WINFALL 230.00 END
AEP_P1-2_#1377	CONTINGENCY 'AEP_P1-2_#1377' OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 END
Base Case	
DVP_P4-2: 254T2141	CONTINGENCY 'DVP_P4-2: 254T2141' /* LAKEVIEW 230 KV OPEN BRANCH FROM BUS 314583 TO BUS 924510 CKT 1 /* 6LAKEVEW 230.00 - AB2- 100 TAP 230.00 OPEN BRANCH FROM BUS 314561 TO BUS 314583 CKT 1 /* 6CAROLNA 230.00 - 6LAKEVEW 230.00 END
DVP_P1-2: LN 2002	CONTINGENCY 'DVP_P1-2: LN 2002' OPEN BRANCH FROM BUS 314282 TO BUS 314331 CKT 1 /* 6CARSON 230.00 - 6POE 230.00 OPEN BRANCH FROM BUS 314329 TO BUS 314331 CKT 1 /* 3POE 115.00 - 6POE 230.00 END
DVP_P1-2: LN 2060	CONTINGENCY 'DVP_P1-2: LN 2060' OPEN BRANCH FROM BUS 314561 TO BUS 314599 CKT 1 /* 6CAROLNA 230.00 - 6ROA VAL 230.00 END
314435 6SAPONY 230 940480 AE2-033 TAP 230 1	CONTINGENCY '314435 6SAPONY 230 940480 AE2-033 TAP 230 1' OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 END

Contingency Name	Contingency Definition
DVP_P4-2: 201262	CONTINGENCY 'DVP_P4-2: 201262' /* EARLEYS 230 KV OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP 230.00 - 6EARLEYS 230.00 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 1 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END
DVP_P1-2: LN 2058	CONTINGENCY 'DVP_P1-2: LN 2058' OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 END
DVP_P1-2: LN 2092	CONTINGENCY 'DVP_P1-2: LN 2092' OPEN BRANCH FROM BUS 313714 TO BUS 314662 CKT 1 /* 6PERQUIMANS 230.00 - 6S HERTFORD 230.00 OPEN BRANCH FROM BUS 314651 TO BUS 314662 CKT 1 /* 6WINFALL 230.00 - 6S HERTFORD 230.00 OPEN BUS 314662 /* ISLAND: 6S HERTFORD 230.00 END
DVP_P1-2: LN 2012-B	CONTINGENCY 'DVP_P1-2: LN 2012-B' OPEN BRANCH FROM BUS 936400 TO BUS 314569 CKT 1 /* AD2-051 TAP230.00 - 6EARLEYS 230.00 END
DVP_P4-2: 24972-4	CONTINGENCY 'DVP_P4-2: 24972-4' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314285 CKT 1 /* 6CARSON 230.00 - 6CHRL249 230.00 OPEN BRANCH FROM BUS 314285 TO BUS 314316 CKT 1 /* 6CHRL249 230.00 - 6LOCKS 230.00 OPEN BRANCH FROM BUS 314314 TO BUS 314316 CKT 2 /* 3LOCKS 115.00 - 6LOCKS 230.00 OPEN BUS 314285 /* ISLAND: 6CHRL249 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314902 CKT 1 /* 6CARSON 230.00 - 8CARSON 500.00 OPEN BUS 314455 /* 6CARSO_1 230.00 KV END

Contingency Name	Contingency Definition
DVP_P4-2: 238T2002	CONTINGENCY 'DVP_P4-2: 238T2002' /* CARSON 230 KV OPEN BRANCH FROM BUS 314282 TO BUS 314435 CKT 1 /* 6CARSON 230.00 - 6SAPONY 230.00 OPEN BRANCH FROM BUS 314435 TO BUS 940480 CKT 1 /* 6SAPONY 230.00 - AE2- 033 TAP 230.00 OPEN BUS 314435 /* ISLAND: 6SAPONY 230.00 OPEN BUS 923852 /* ISLAND: AB2-025 E 230.00 OPEN BRANCH FROM BUS 314282 TO BUS 314331 CKT 1 /* 6CARSON 230.00 - 6POE 230.00 OPEN BRANCH FROM BUS 314329 TO BUS 314331 CKT 1 /* 3POE 115.00 - 6POE 230.00 END
AEP_P4_#11112_05J.FERR 765_A1	CONTINGENCY 'AEP_P4_#11112_05J.FERR 765_A1' OPEN BRANCH FROM BUS 242511 TO BUS 242514 CKT 1 / 242511 05BROADF 765 242514 05J.FERR 765 1 OPEN BRANCH FROM BUS 242514 TO BUS 242520 CKT 1 / 242514 05J.FERR 765 242520 05J.FERR 500 1 OPEN BRANCH FROM BUS 242520 TO BUS 306719 CKT 1 / 242520 05J.FERR 500 306719 8ANTIOCH 500 1 OPEN BRANCH FROM BUS 242566 TO BUS 242567 CKT ZB / 242566 05BROADF 138 242567 05BROADX 138 ZB END
DVP_P4-2: 2058T2167	CONTINGENCY 'DVP_P4-2: 2058T2167' /* HATHAWAY 230 KV OPEN BRANCH FROM BUS 304222 TO BUS 313845 CKT 1 /* 6ROCKYMT230T230.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313844 TO BUS 313845 CKT 2 /* 3HATHAWAY 115.00 - 6HATHAWAY 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314564 CKT 1 /* 6HATHAWAY 230.00 - 6EDGECOM 230.00 END

14 Affected Systems

None